BEFORE THE
STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 21-030

IN THE MATTER OF: UNITIL ENERGY SYSTEMS, INC.

REQUEST FOR CHANGE IN RATES

DIRECT TESTIMONY

OF

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New Hampshire Department of Energy

November 23, 2021

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I. INTRODUCTION AND QUALIFICATIONS

Q. Mr. Dudley, please state your full name and business address.

A. My name is Jay E. Dudley. My business address is 21 South Fruit Street, Suite 10, Concord, NH 03301.

Q. Please state your employer and your position.

A. I am employed by the New Hampshire Department of Energy ("DOE") as a Utility Analyst for the Regulatory Support Division.

Q. Please describe your professional background.

A. I started at the New Hampshire Public Utilities Commission ("Commission" or "PUC") in June of 2015 as a Utility Analyst in the Electric Division. Effective July 1, 2021, the Electric Division was transferred to, and became part of, the newly created New Hampshire Department of Energy and I am presently employed by that agency. Before joining the Commission, I was employed at the Vermont Public Service Board (now known as the Vermont Public Utilities Commission, "VT-PUC") for seven years as a Utility Analyst and Hearing Officer. In that position I was primarily responsible for the analysis of financing and accounting order requests filed by all Vermont utilities, including review of auditor's reports, financial projections, and securities analysis. As Hearing Officer, I managed and adjudicated cases involving a broad range of utility-related issues including rate investigations, construction projects, energy efficiency, consumer complaints, utility finance, condemnations, and telecommunications. Prior to working for the VT-PUC, I worked in the commercial banking sector in Vermont for twenty years where I held various management and administrative positions. My most recent role was as Vice President and Chief Credit Officer for Lyndon Bank in

1 Lyndonville, Vermont. In that position I was responsible for directing and administering
2 the analysis and credit risk management of the bank's loan portfolio, including internal
3 loan review, regulatory compliance, audit, and coordinating periodic bank examinations
4 by state and federal regulators. In performing those responsibilities, I also provided
5 oversight for the commercial and retail lending functions with detailed financial analysis
6 of large corporate relationships, critique of loan proposals and loan structuring,
7 consultation on business development efforts, and advised the Board of Directors on loan
8 approvals and loan portfolio quality. Prior to my role as Chief Credit Officer, I held the
9 position of Vice President of Loan Administration. In this position, I was responsible for
10 directing and administering the underwriting, processing, and funding of all commercial,
11 consumer, and residential mortgage loans. My responsibilities also included the
12 management of loan processing and loan origination staff and partnering with the
13 Compliance Officer to monitor and ensure compliance with all banking laws, regulations,
14 and the bank's lending policy.

15 **Q. Please describe your educational background?**

16 A. I received my Bachelor of Arts degree in Political Science from St. Michael's College.
17 Throughout my career in banking, I took advantage of numerous Continuing Professional
18 Education (CPE) opportunities involving college level coursework in the areas of
19 accounting, financial analysis, real estate and banking law, economics, and regulatory
20 compliance. Also, during my tenure with the VT-PUC I took advantage of various CPE
21 opportunities including the Regulatory Studies Program at Michigan State University
22 (sponsored by the National Association of Regulatory Utility Commissioners "NARUC"),
23 Utility Finance & Accounting for Financial Professionals at the Financial Accounting

Institute, Standard & Poors seminars on credit ratings for public utilities, and Scott Hempling seminars on Electric Utility Law and Public Utility Regulation.

Q. Have you previously testified before the Commission?

A. Yes. I previously submitted Staff testimony to the Commission in Docket No. DE 14-238, Public Service Company of New Hampshire Generation Assets; Docket No. DE 15-137, Energy Efficiency Resource Standard; Docket No. DE 16-383, Liberty Utilities Request for Change in Rates; Docket No. DE 17-136, 2018-2020 NH Energy Efficiency Plan; Docket No. DE 19-064, Liberty Utilities Request for Change in Rates; Docket No. DE 19-057 Public Service Company of New Hampshire for Change in Rates; and Docket No. DE 20-092, 2021-2023 Triennial Energy Efficiency Plan.

II. SUMMARY OF TESTIMONY

Q. Please describe the purpose of your testimony today.

A. The purpose of my testimony is to provide DOE's recommendation involving Unitil Energy Systems, Inc. ("Unitil" or the "Company") request filed on April 2, 2021, to implement a permanent distribution rate increase to be effective on and after May 2, 2021, as it relates to capital investments and additions to Unitil's rate base from 2017 to 2020. Based on the reports of the Company filed with the Commission, and DOE's extensive review of the Company's capital expenditures, DOE believes that a number of adjustments are warranted, as described in detail herein. The impact of these adjustments on Unitil's proposed revenue requirement has been quatified in the testimony of Donna Mullinax.

In addition, DOE recommends denial of Unitil's multi-year rate plan as proposed involving annual step increases planned for 2021, 2022, and 2023. DOE proposes one step adjustment for 2021, but under a different and more formalized review process than had been previously approved in prior rate cases, involving a prudence review of individual capital projects that comprise Unitil's 2021 step increase request.

Q. Is DOE convinced that its recommendations for disallowances in this case will provide just and reasonable results?

A. Yes. A key element of the just and reasonable standard, coupled with the Commission's requirement that a utility's capital investments must be found to have been prudently made, is that the Commission must weigh the interests of both the utility and the ratepayer in reviewing the propriety of expenditures constituting the utility's cost of service, rate base, and rate of return before finding the proposed rate is just and reasonable. In the present docket, DOE's analysis indicates that Unitil overstated its revenue requirement by $10.9 million, and to allow such a requirement into rates would be unjust for Unitil's ratepayers. In addition, the Commission's expectation that a utility's investments are prudent, also rests on the just and reasonable standard such that imprudent expenditures are inconsistent with the standard and should be disallowed. As a result, DOE has found that approximately $12.8 million in capital investments between 2017 and 2020 were not adequately explained or justified by the Company and that ratepayers should not be required to pay those costs.

III. REVIEW OF CAPITAL ADDITIONS FOR 2017 THROUGH 2020

Q. Please summarize your conclusions regarding Unitil's capital additions from 2017 through 2020.

1 A. DOE maintains that certain of Unitil's plant investments are not prudent, used and useful.
2 Specifically, DOE concludes that approximately $12.8 million in capital investments
3 between 2017 and 2020 were not adequately explained and justified by the Company and
4 that ratepayers should not be required to pay for these plant investments.

5 **Q. Why are Unitil's capital investments under review in this rate case?**

6 A. Unitil testifies that one of the primary drivers behind the need for an increase in rates is
7 the unrecovered costs associated with the amount of capital investments made by the
8 Company since its last rate case in 2016.[1] During that period, Unitil invested
9 approximately $124.79 million in capital additions and improvements.[2]
10 First, regulated electric utilities are some of the most capital-intensive businesses that
11 exist given the substantial amount of investment that is required to build and maintain
12 reliable electric infrastructure. As a result, the significant and ongoing nature of those
13 investments are frequently the primary causes for utilities to request periodic increases in
14 rates. However, unlike unregulated competitive firms, regulated utilities cannot just
15 pursue any investment strategies available that maximize shareholder value. Regulators
16 must find that such expenditures are prudent, just and reasonable, and used and useful.
17 As cited above, one of Unitil's primary justifications for the current rate increase request
18 is the downward pressure that additional capital expenditures have placed on the
19 Company's revenues and rates of return.
20 Further, during the course of DOE's review of capital additions in this rate case, DOE
21 found some disparities between budgeted amounts and actual expenditures reported by
22 the Company. DOE also discovered some instances of excessive spending for some

[1] Hevert Testimony at 17 (Bates 19).
[2] *Id*.

1 projects beyond what would be considered appropriate and necessary if least cost
2 principles had been observed. In those cases, the Company's project documentation
3 reviewed by DOE provided little in the way of specific information as to root causes or
4 how the Company decided that those expenditures were prudent and economic, thus DOE
5 was unable to conclude that Unitil took appropriate measures to control costs or that
6 Unitil's decision-making and due diligence process was reasonable or in the best interest
7 of ratepayers. As a result, DOE recommends disallowance of $12.8 million for some of
8 the plant investments reviewed. Those disallowances are discussed and outlined below.

9 **Q. As part of this rate case, did DOE's Audit Division complete a financial audit of**
10 **Unitil's books and records?**

11 **A.** Yes. DOE's Audit Division completed its final audit report on November 12, 2021. The
12 audit report was filed in this docket by Energy on November 16, 2021.

13 **Q. Did Audit encounter any issues similar to those DOE encountered in its review of**
14 **Unitil's capital investments?**

15 **A.** Yes. Audit staff reviewed only one large capital project which was the construction of
16 Unitil's new Distribution Operations Center ("DOC") in Exeter. Audit found that
17 $577,144 in additional construction costs for the DOC were unitized by the Company in
18 2021 but also included in the 2020 test year rate base for recovery in this rate case. Audit
19 has recommended, and DOE agrees, that those costs should be excluded from the 2020
20 test year rate base.[3] In addition, Audit found that Unitil had included in the 2020 test
21 year rate base an investment of $38,082 for artwork within the new DOC. Audit
22 concluded that artwork is not necessary for the delivery of electric service to ratepayers

[3] *See* Final Audit Report DE 21-030 dated November 12, 2021, Audit Issue #3 at 15 and 124.

1 and recommended that the expenditure be excluded from the test year rate base.[4] DOE
2 agrees with Audit's recommendation. Also, in relation to contracts for the construction
3 of the new DOC, Audit found that Unitil chose ProCon, Inc. as its sole source provider
4 for project management and construction and did not put the project out to bid by issuing
5 a request for proposal ("RFP"). The Company does not have a formal process for
6 procurement involving capital projects by issuing RFP's and Audit recommends that
7 Unitil formulate and adopt such a policy going forward.[5] DOE agrees with this
8 recommendation and discusses it further, along with Audit's exclusions, in DOE's
9 analysis provided below.

10 **Q. Please briefly summarize the capital budgeting process at Unitil.**

11 **A.** As described in Mr. Sprague's direct testimony, Unitil's annual planning process begins
12 with engineering studies performed by the engineering group that includes circuit studies,
13 reliability studies, load analysis, and, in some cases, joint system planning with
14 Eversource, with a focus on system improvement and reliability projects. The
15 engineering group also reviews potential capital spending over the upcoming five-year
16 period. Operations personnel then identify the need for replacements and maintenance
17 based on the information contained in the studies and from inspections and ongoing
18 maintenance programs. Budgets are then assembled using a bottom up approach
19 involving input from engineering, operations, information technology, and facilities.
20 Projects are also divided between the company's two service areas, Unitil's capital
21 location and Unitil's seacoast location, and then prioritized according to Priority 1,
22 Priority 2, or Priority 3. Priority 1 projects involve projects that are non-discretionary

[4] *Id.* Audit Issue #5 at 26 and 128-129.
[5] *Id.* Audit Issue #4 at 18 and 126.

1 and essential for maintaining safe and reliable service. Priority 2 projects involve
2 essential projects associated with regulatory or legal requirements and support
3 intercompany needs and maintenance. Priority 3 projects are projects that improve or
4 enhance existing systems and are considered to be largely discretionary. Project budgets
5 are then reviewed and approved by all applicable budget managers based on appropriate
6 categorization, priority, and completeness of documentation. The budget process then
7 concludes with review and approval by senior management and then by the Board of
8 Directors. Once approved, a construction authorization form ("CA") must be prepared,
9 submitted, and approved for each project prior to commencement of work and funding,
10 and for any subsequent revisions to the project scope and budget amounts.[6]
11 As of 2014, Unitil performs its capital planning and budgeting under the Capital Budget
12 Input and Review Operating Procedure which details the budget process summarized
13 above. In terms of requirements for CA's and project documentation, those guidelines
14 are contained in the System Policy – Preparation and Approval of
15 Authorizations/Supplemental Authorizations/Non-budget Authorizations effective 2020.
16 Both policies are attached to my testimony as Attachment JED-1.
17 **Q. What internal documentation from Unitil did DOE examine as part of its review?**
18 **A.** As part of Staff data requests DOE 3-47 and DOE 5-19 (Attachments JED-2 and JED-3
19 to my testimony), DOE sought to obtain and review the following documents involving a
20 specific sampling of projects from 2017 through 2020:
21 - Capital/Construction Authorizations
22 - Revised Budget Authorizations

[6] Sprague Testimony at 8-13 (Bates 358-363).

- Written Reviews by Management and Engineering
- Supplemental Requests or Change Orders
- Engineering Work Requests
- Capital Work Orders

Q. Did Unitil provide all of the internal documentation requested?

A. No not entirely. The Company represented at the Technical Session held on July 27, 2021, that capital work orders consist of hundreds of pages for each project and that it would be overly burdensome to produce that amount of documentation for the number of projects contained in DOE's sample group. Also, the Company explained that most of the information requested by DOE involving revised budgets and additional spending, along with any management and engineering reviews were largely contained within the CA formats that were submitted. In addition, specific engineering work requests are typically not related to capital budget projects and are limited to the distribution system and not substation or transmission projects. Although change orders were provided to Audit, that same documentation was not submitted to DOE when requested in discovery in this docket.

Q. What issues did DOE discover in its review of Unitil's capital budgeting and planning?

A. DOE found that the cost estimates contained in the capital budgets were mostly accurate, with the exception of certain large projects that are described below. For those projects, additional project enhancements and cost increases appeared to pass through the process with little scrutiny or critical review by management. In addition, most of the CA's reviewed provided only brief and basic project analysis and lacked sufficient detail in

terms of decision-making, due diligence, consideration of least cost planning, risk identification, and reasonable financial justifications for a project. It also appears that there is no clear or consistent system in place for the thorough review and tracking of over-budget items by management resulting in a lack of regular oversight in terms of imposing restrictions or cost controls if needed. Moreover, the Company's Board of Directors appear to have little or no involvement in, or knowledge of, major capital projects undertaken by Unitil.

IV. FINDINGS: REVIEW OF CAPITAL PROJECTS SAMPLE FOR 2017 TO 2020

Q. What specific projects did DOE include in its examination?

A. DOE compiled a sample list of 40 projects specified in data requests DOE 3-47 and DOE 5-19 (Attachments JED-2 and JED-3) based on a master list of approximately 671 capital projects provided by the Company for project years 2017 through 2020, totaling $147 million. Out of the master list, DOE developed its sample based on the size and complexity of the projects, as well as any significant cost over runs. This involved ten projects for 2017, nine projects for 2018, thirteen projects for 2019, and eight projects for 2020. The sampling was later refined based on Unitil's responses to follow-up data requests from the September 27, 2020, technical session. DOE reviewed all of the projects in the sample, with a total of ten projects highlighted by DOE as being representative of the Company's deficiencies in the areas of capital budgeting, planning, documentation, and management. These ten projects are represented in the tables below:

Table 1: 2017 Select Projects

Project No.	Description	Budget	Revised	Actual
DPBC02	Subtrans. Broken Ground/Hollis	$897,000	$2,750,000	$1,871,204

Table 2: 2019 Select Projects

Project No.	Description	Budget	Revised	Actual
GPBE03	Acquisition of New DOC (Land)	$1,200,000	$1,322,000	$1,405,413
GPBE02	Construction Exeter DOC	$15,931,474	$ 0	$16,251,588
SPBC02	Gulf St. 13kV Additions (Concord)	$ 2,925,000	$ 0	$ 3,164,045[7]
DPBC04	Conversion Concord Part 1	$ 250,000	$ 0	$ 194,714
DPNC05	Reconductor 1H6 Pleasant(Concord)	$ 197,798	$ 0	$ 161,963
DPNC07	Reconductor 1H6 Thomp. (Concord)	$ 128,720	$ 0	$ 137,385
DPNC12	Reconductor 1H6 S.Spring(Concord)	$ 138,870	$ 0	$ 371,975
DPNC13	374 Line Rebuild (Concord)	$ 1,066,000	$ 0	$ 787,358

Table 3: 2020 Select Projects

Project No.	Description	Budget	Revised	Actual
DPBC07	Conversion Concord Part 2	$721,847	$ 0	$447,840

All of the internal documentation obtained from Unitil was reviewed by DOE in connection with each of these projects, as well as the projects included in the larger sample.

Q. Please provide the results of DOE's review of those projects.

A. Below are the findings for the sample projects reviewed based on the Company's responses to Staff Data Request DOE 3-47 and DOE 5-19, and various follow-up data requests referenced below. All of the related project documentation has been included as attachments to my testimony.

2017 Capital Projects

1. Project #DPBC02 Subtransmission Broken Ground/Hollis

Attachment JED-4

1 **Budget: $897,000 Revised: $2,750,000 Actual: $1,871,204**

2 **Budget v. Actual: -$974,204**

3 Construction Authorization Form ("CAF"):

4 • This project involved the construction of three new subtransmission lines
5 from Broken Ground Substation to Hollis Substation to address loading
6 concerns related to the Garvins and Oak Hill Substations, PSNH system
7 supply transformers, and supply lines into Penacook and the 38 line in
8 Hollis. Unitil states that this issue was identified in conjunction with
9 PSNH as part of the Joint Planning Process.

10 • The CAF was dated September 15, 2016, and the project was designated
11 as a two-year project with completion expected in 2017. The CAF was
12 signed by all authorized signers.

13 • Revision 2 of the CAF dated January 13, 2017, states that the project was
14 updated to account for cost increases resulting from the relocation of the
15 393 crossing required by the New Hampshire Department of
16 Transportation and the raising of transmission lines by Eversource to
17 accommodate Until's crossing of their right-of-way. The amount of the
18 increase was $1,388,000. The description of the cost increases was very
19 general and an itemization or analysis of those cost increases was not
20 provided this version of the CAF.

21 • Revision 3 of the CAF dated March 23, 2017, was issued to report higher
22 than anticipated costs billed to Unitil by Eversource involving

[7] *Id.* at 21-22 (Bates 371-372) for all expenditures related to projects as part of the Concord Downtown Conversion.

Eversource's raising of its transmission lines to accommodate Until's crossing of the right-of-way. The amount of the additional increase was $465,000. Again, the additional cost increases were not described, analyzed, or and itemized in this CAF revision.

Work Orders:

- No work orders were provided by Unitil as requested in DOE 3-47.

Engineering Work Requests:

- Engineering Work Requests were not required for the project.

Change Orders

- No change orders were submitted for this project.

DOE's Review:

In response to discovery request Energy TS 1-25 (attached to my testimony as part of Attachment JED-4), Unitil states that several design iterations were considered prior to finalizing the 2016 CAF. The Company's survey data provided elevations of the existing 115 kV line conductors and Unitil's final design called for a clearance of twelve feet between the Company's lines and Eversource's P148 and M108 transmission lines. Unitil stated that this clearance met NESC guidelines. As a result, Unitil opted to install 35 ft. poles instead of 45 ft. to avoid PSNH having to raise its transmission lines. Unitil's engineers assumed that this would be sufficient and budgeted only $50,000 for minor modifications to Eversource's 318 line, and, no costs were budgeted for the raising of the 318, P148, or M108 lines. Upon submission of Until's design to Eversource, Eversource decided, based on its line-sag criteria, that it would be necessary to raise the P148 and M108 lines in addition to the 318 line. The permitting and make-ready work was

1 performed jointly between the two companies at project initiation, but all additional work
2 was managed as two separate projects with Eversource managing the transmission side
3 and Unitil managing the under-build aspects of the project. Eversource's estimate for the
4 line raising came in at $475,970, but once work was completed the final cost was
5 $526,488, a difference of $50,518. Unitil estimated total costs for their portion of the
6 work to be $897,000 with the final cost coming in at $1,871,204 (including Eversource's
7 cost), a variance of $974,204. At the Technical Session held on September 27, 2021,
8 Until represented that Eversource's design changes and related costs to Until came as a
9 surprise but apparently the Company never questioned or challenged Eversource
10 involving those cost increases. In addition, Unitil was not fully responsive to Energy TS
11 1-25 in that the requested detailed cost breakouts for Unitil's portion of the project and
12 Eversource's portion were not provided. As a result, DOE was unable to examine all of
13 the essential cost components in terms of the economy or extent of Eversource's cost
14 increases or those related to Unitil.

15 **DOE's Conclusions & Recommendations:**

16 DOE found the initial justification for the project reasonable and supportable in terms of
17 the loading concerns associated with the Garvins and Oak Hill transformers and the need
18 to construct the Broken Ground substation. However, Unitil failed to provide an
19 adequate explanation of, and support for, the significant cost escalations that took place
20 over the course of this project. DOE understands that much of the additional costs
21 experienced in 2017 were the result of Eversource's design changes related to its
22 imposition of more stringent clearance requirements, despite the fact that Unitil stated
23 that its original design was in compliance with accepted NESC guidelines. DOE

presumes that a utility like Unitil utilizes a rigorous project monitoring process that would question and reasonably mitigate these types of cost increases. However, as the evidence shows, the Company's project managers apparently failed to provide Eversource with any challenges or push back involving the increased costs or insist on implementing any type of cost control. In addition, DOE was unable to find any reasonable economic justification for either Unitil's own cost increases or those of Eversource, such as root cause analysis, in any of the documents or responses provided by the Company. As noted above, Unitil did not provide a detailed cost breakout of the work performed by either the Company or Eversource as requested by DOE. As a result, DOE was unable to examine the nature of the modifications required by Eversource or to confirm whether or not those changes were actually necessary for the project and its completion. Also unknown is the extent to which Eversource's requirements actually impacted the design and costs for Unitil's portion of the project. Consequently, DOE finds that management's review and oversight of the project was flawed, and that the Company has failed to meet its burden of demonstrating that its decision making, and resultant cost increases, were prudent. Therefore, DOE recommends that the Commission disallow all of the costs over and above the Company's original estimate in the amount of $974,204.

<u>2019 Capital Projects</u>

1. Project #GPBE03 Acquisition of New DOC (Land Purchase)

Attachment JED-5

Budget: $1,200,000 Revised: $1,322,000 Actual: $1,405,413

Budget v. Actual: -$205,413

1 Construction Authorization Form:

2 • This project involved the purchase of land for the construction of a new Seacoast
3 Distribution Operations Center ("Seacoast DOC") to replace the existing DOC
4 located at Drinkwater Road in Kensington, NH ("Kensington DOC"). The
5 Kensington facility was built in 1954 and it was determined by Unitil that the
6 facility could no longer support the Company's operational needs due to the age
7 of the existing structure and the obsolescence of the layout.

8 • Revision 1 of the CAF dated February 8, 2019, sets the budget amount for a
9 potential purchase at $1.2 million (includes $200,000 for legal and transaction
10 fees) and discusses the need to conduct a property search of nearby markets to
11 find a desirable location for the new DOC and to prep the Kensington DOC for
12 future sale. However, the document also discloses that a purchase and sale
13 agreement was entered into by the Company the year before in June of 2018 for
14 the purchase of a new parcel located at 20 Continental Drive, Exeter, NH for $1.0
15 million.[8] **Note:** The street address for the Exeter DOC was changed to 30
16 Energy Way at or about the time of construction of the new facility.

17 • Revision 2 of the CAF dated April 22, 2021, requests increasing the budget
18 amount by $122,000 to cover the cost of a Phase II environmental site assessment
19 of the Kensington DOC and legal fees associated with selling the property. Both
20 CAF revisions appeared to have the necessary approvals.

21 Work Orders:

22 • No work orders were provided by Unitil as requested in DOE 3-47.

[8] *See* Testimony of John F. Closson, Exhibit JFC-2 at Bates 310-327.

1 Engineering Work Requests:

2 • Engineering Work Requests were not required for the project.

3 Change Orders

4 • No change orders were submitted for this project.

5 **DOE's Review & Analysis:**

6 As a part of discovery sets 4, 5, and 6, and at the Technical Sessions held on September
7 27, 2021, October 1 and October 27, 2021, and November 1, 2021, DOE made a number
8 of inquiries related to the Exeter land purchase. Unitil's responses to the written data
9 requests and from the technical session follow-up requests are attached to my testimony
10 as part of Attachment JED-6. From the Company's responses, and direct testimony,
11 DOE notes the following facts:

12 1) Unitil did not request a professional appraisal, nor an opinion of value from its
13 realtor, to support the purchase price of $1.2 million for the Exeter parcel.
14 Instead, the Company relied on market data provided by the realtor and historical
15 property transactions in the region and the immediate vicinity. According to
16 Exhibit JFC-3 of Mr. Closson's testimony at Bates 343-344, a matrix comprising
17 a total of fifteen potential properties was provided to the Company by its realtor in
18 April of 2017. Unitil claims that most of the properties were not suitable because
19 they did not provide a "central" location within the Company's service territory;
20 however, it is important to note that Kensington is considered by the Company to
21 be a central location. Unitil also represents that purchase price was a factor,
22 however, many of the properties listed, in particular site #'s 10, 14, 15, and 17,
23 ranged in price from $450,000 to $995,000, significantly less than what was

1 ultimately paid for the Exeter location. Also, out of all of the properties listed,
2 Company representatives visited only two of the sites including the Exeter parcel
3 that was eventually purchased in 2018.
4 2) Although the decision to move ahead with the land purchase, and the eventual
5 construction of the new Seacoast DOC was made in 2017, the only documentation
6 informing those decisions were dated well after the fact in 2019, as represented in
7 Mr. Closson's testimony Exhibits JFC-2 through JFC-6 and the CAF's dated 2019
8 and 2021.[9] Indeed, the purchase of the Exeter property and planning for
9 construction on the new DOC had already started by the time the first CAF was
10 issued on February 9, 2019 or the production of the ProCon Study on March 26,
11 2019. In addition, Unitil was unable to provide DOE with any documentation
12 evidencing the genesis of the Company's decision making process prior to that
13 time, including any economic analysis, alternatives analysis, initial plans,
14 proposals, presentations, or internal correspondence between decision makers. As
15 noted below for Project No. GPBE02 New DOC, the Decision Document and the
16 ProCon feasibility study were not produced or available to management until
17 2019. In addition, when asked to provide relevant records of the minutes from the
18 Board of Directors meetings, Unitil provided only an excerpt from a single
19 meeting held on July 25, 2018, at which the Board authorized certain corporate
20 officers to purchase land for the new Seacoast DOC. Surprisingly, what the
21 minutes indicate is that this was apparently the first and only time the Board was
22 officially made aware of management's plans for the new DOC and the purchase

[9] *Id.* Exhibit JFC-2 at page 1 (Bates 287).

1 of property. According to the minutes,[10] Unitil President Thomas Meissner made
2 a brief presentation to the Board outlining the need for a replacement of the
3 Kensington DOC and that a property search had been completed and that the
4 Exeter property had been selected as the new location. What remains unclear is
5 whether or not Mr. Meissner informed the Board that he had already signed a
6 purchase and sale agreement for the property on June 15, 2018, a month before
7 having the requisite authority to do so. Also of interest was the Company's
8 representations at the Technical Session held on October 27, 2021, that there are
9 typically no discussions or communications between corporate officers and Board
10 members involving major capital investment decisions and that the Board only
11 reviews and approves the annual capital budgets at a very high level.

12 **DOE's Conclusions & Recommendations:**

13 DOE does not support recovery by the Company of the costs associated with the purchase
14 of the Exeter location or the inclusion of the property in rate base. As discussed in detail
15 below for Project No. GPBE02, DOE concludes that the initial justification for a new
16 DOC was reasonable and supportable in terms of known obsolescence involving the
17 existing condition of the Kensington DOC. However, after reviewing all of the
18 documentation and materials submitted by the Company for both projects, it became
19 clear that Unitil did not exercise reasonable due diligence in weighing all possible options
20 until after the key decisions to move ahead with the projects had been made. DOE
21 maintains that the purchase of Exeter could have been avoided given that renovations and
22 additions to the Kensington location constituted the least cost option for Unitil (see
23 DOE's Analysis of Option 2 below). In terms of initiating the land purchase, DOE is

[10] *See* Attachment JED-5, Request No. Energy 6-29, Attachment 1.

1 concerned by the fact that the decision to acquire a new site was made well in advance of
2 the Company performing any analysis of all possible options for re-using the Kensington
3 location. In response to discovery, Unitil states that it was important to acquire the land
4 in advance given market conditions and the availability of suitable locations at that
5 time.[11] This leads DOE to conclude that the decision to construct a new DOC was a
6 forgone conclusion made well before all the essential facts were known to management.
7 In addition, it appears that the property search in 2017 was only cursory in nature instead
8 of in earnest given that only two sites were actually visited by representatives from the
9 Company and that the Company ultimately chose one of the more expensive properties
10 without verifying the reasonableness of the purchase through a commercial appraisal.
11 DOE's conclusion is based in part on the fact that Unitil's Board of Directors apparently
12 had little or no advance knowledge of the land transaction or the need for the new DOC
13 at that time. The fact that Board permission was required to make a land purchase priced
14 at $1.0 million, but not for the construction of a new DOC for $15 million, is very
15 perplexing to DOE because we are of the belief that the Board of any public utility has a
16 responsibility to oversee management's actions, and to assure that corporate actions will
17 be guided by the public interest, as reviewed by the Commission.
18 DOE believes that all of these factors, taken together, demonstrates a lack of sound
19 business judgement on the part of Unitil since no reasonable effort was made to weigh all
20 of the factors involved with the purchase and construction of the new DOC until after the
21 land purchase was initiated. DOE presumes that Unitil's management possesses a high
22 level of expertise and experience in the scoping and planning of substantial capital
23 investments and believes that an efficient project management process would have been

[11] *See* Attachment JED-5, Request No. Energy TS 2-9.

more diligent and forward-looking in considering all viable options and possible alternatives before such a large investment was authorized. Because the Company has failed to meet its burden of demonstrating that its decision making was prudent, DOE recommends that the Commission disallow the total costs associated with the land purchase in Exeter in the total amount of $1,405,013.

2. Project #GPBE02 Construction – New DOC facility

Attachment JED-7

2019 Budget: $15,931,474 Revised: $0 Actual: $16,251,588

Budget v. Actual: -$320,114

<u>Construction Authorization Form:</u>

- This project involved the construction of the new Seacoast DOC in Exeter. The scope of work included preconstruction site work and utilities, engineering and design, environmental survey, permitting and legal work, construction phase administration, and furniture and equipment fit-up. The new facility provides space for the following business functions: Seacoast Electric Distribution Operations, Business Continuity for Gas Control and Field Services, System Emergency Operations, Central Electric Dispatch, Testing and Training, and the Electric Engineering Department including lab facilities. The CAF was dated August 22, 2019.
- The proposed construction schedule was: i) finalize the land purchase by fourth quarter 2018 or first quarter 2019, ii) break ground and start construction first quarter 2019, and complete construction and commissioning first quarter 2020. The construction start date was later moved to third quarter 2019.

- Justifications for the new DOC were primarily related to the age and functionality of the existing Kensington DOC. The Kensington facility is approximately sixty years old and no longer supports the modern operations of Unitil's seacoast region. Unitil's need to stock more materials such as poles and transformers has grown in recent years in conjunction with growth in its customer base. Modern-day line trucks are larger than previous models and barely fit in the existing garage. In addition, Unitil has experienced space constraints at other seacoast offices and wishes to add efficiency by consolidating the Company's central dispatch, gas control, field service, and electric engineering functions at one location.

Work Orders:

- No work orders were provided by Unitil as requested in DOE 3-47.

Engineering Work Requests:

- Engineering Work Requests were not required for the project.

Change Orders: No change orders were submitted for this project.

DOE's Review:

Unitil's project documentation provided only basic details about this project and the decision making process that lead up to the construction of the new DOC in Exeter. Mr. Closson's testimony provided an overview of the construction project itself and additional details on the Company's decision making in terms of the options that were considered and weighed, but DOE believes the analysis to be perfunctory leaving many important factors and questions unexplored and unaddressed by Unitil. Therefore, as a part of discovery sets 4, 5, and 6, and at the Technical Sessions held on September 27,

2021, October 1 and October 27, 2021, and November 3, 2021, DOE made a number of inquiries related to the Exeter Construction project and the status of the Kensington DOC. Unitil's responses to the written data requests and technical session follow-up requests are attached to my testimony as a part of Attachment JED-7. From the Company's responses, and direct testimony, DOE notes the following facts:

1) Mr. Closson's testimony outlines the existing conditions at the Kensington DOC and the different options considered by the Company.[12] A more detailed review is provided in Exhibit JFC-2 which includes the Company's "Decision Document" and a study performed by Unitil's engineering consultant ProCon, Inc. The Decision Document is dated June 17, 2019, and largely relies on the analysis contained in the ProCon report which is dated March 26, 2019.[13]
2) As noted above for the Exeter land purchase, Unitil made the decision to build a new DOC and decommission the Kensington facility in 2017, approximately two years prior to officially vetting cost estimates and all possible options for the continued use of Kensington. In 2018, the Company's Board of Directors officially committed to the construction of the new DOC in Exeter with the approval of execution of a purchase and sale agreement for the new location.
3) According to the Decision Document, Unitil considered four options to address its needs for additional space, consolidation of functions, and more efficient and modern accommodations. The four options were:

   <u>Option 1</u>: Renovate the existing Kensington DOC and construct a 10,500 square foot addition to the Hampton office building. ProCon estimated a cost

[12] Testimony of John Closson at 5-12 (Bates 273-280).
[13] *Id.* Exhibit JFC-2 at Bates 285-301.

range of between $5.6 and 6.0 million for this option. Unitil's revised cost estimate was $12.4 million.

Option 2: Renovate the existing Kensington DOC and construct a 10,500 square foot addition to the existing Kensington building. ProCon's estimated cost range for this option was between $8.5 and $9.0 million. Unitil's revised cost estimate was 11.9 million.

Option 3: Demolish and remove the existing Kensington building and reuse the existing location to construct the new Seacoast facility. ProCon's estimated cost range for this option was between $12.8 and $13.8 million. Unitil's revised cost estimate was $17.2 million.

Option 4: Purchase land and construct the new Seacoast facility. Although ProCon generally recommended this option in its report, ProCon did not analyze it or provide a cost range estimate. Unitil's initial cost estimate was $15.4 million, however, the Company provided no basis for how that amount was calculated in either in the Decision Document or the CAF.

4) The Decision Document outlines several key risk areas for each of the four options based in part on the results of the ProCon study. Although some of the risks listed were unique to individual options, DOE focused on eight of those risk areas as they related to Option 2 and Unitil's decision to dismiss that option since DOE's conclusion discussed below is that only Option 2 constituted a viable least cost option. As a result, DOE assessed each risk factor based on the discovery responses provided by the Company and in terms of relevance and credibility to support the Company's actions. Those risk factors and DOE's analysis are provided below:

1 i. Zoning: Unitil asserts that the Town of Kensington's zoning regulations
2 would not support any additions to or expansions of the existing building.
3 ProCon reported that the existing use of the facility is prohibited under
4 Kensington's current zoning ordinance but is allowed to continue unchanged
5 as a pre-existing, non-conforming use. As a result, any changes or expansion
6 of the Kensington DOC would require a zoning variance from the Town and
7 Unitil presumed that the approval process would be both lengthy and costly
8 with little assurance that approvals could be obtained.
9 DOE Analysis: In discovery, Unitil stated that it never contacted nor met
10 with Town officials to explore and weigh the Company's chances of
11 obtaining a special zoning exemption for Option 2 (or Options 1 and 3).
12 Also, Unitil never investigated potential design options or sizing to determine
13 how any additions or expansions of the Kensington facility could be
14 configured to best fit with any zoning requirements.[14] As a result, the
15 Company never knew with any degree of certainty whether or not Option 2,
16 or any other option, would have passed muster with Kensington's zoning
17 process. Also, it is interesting to note that in relation to the Exeter
18 construction project, Unitil requested and received several waivers from the
19 Exeter Planning Board involving Exeter's Site Plan Review and Subdivision
20 Regulations and reported little or no difficulty in obtaining those waivers.[15]
21 ii. Building Footprint: Unitil asserts that the existing building footprint at
22 Kensington would not change and therefore could not accommodate the need

[14] *See* Attachment JED-6, data response Energy TS 2-10.
[15] *Id.* data response Energy 6-30 Attachment 2.

for additional space for current-day operations at the DOC. The Company also claims that the amount of available space in the rear yard storage area is also limited and not conducive to expansion.

DOE Analysis: The basis for this risk factor is that the building footprint could not expand and that the size of the proposed addition was fixed at 10,500 square feet presumably due to zoning requirements and the proximity to wetlands. However, as noted above, the Company made no attempt to contact local zoning officials about the possibility for zoning approval and made no effort to examine and evaluate potential design configurations for the facility and the proposed expansion. The same is true for the Company's failure to research the viability of wetland permitting with the New Hampshire Department of Environmental Services ("NH DES") and the U.S. Army Corps of Engineers ("Army Corps"). Interestingly, Unitil also encountered similar wetlands limitations at the new Exeter site and received permitting to fill-in approximately 1/3 of an acre of forested wetlands for the new DOC. Unitil reported no significant delays in receiving those approvals. Also, as can be seen from the wetlands map of the Exeter site, the encroachment of wetlands appears to be as acute as what was experienced by Unitil in Kensington.[16]

In addition, at a site visit attended by DOE on October 21, 2021, DOE noticed what appeared to be additional available land area in a field located on the northerly side of the Kensington facility. This space can also be seen on the site map provided in data response DOE 4-68, Attachment 2, attached

1 to my testimony as JED-7. DOE learned from Company representatives at
2 the site visit that this field was made available for use from time to time as a
3 staging area for additional line crews and trucks during major storm events.
4 During the tour of the facility itself, DOE confirmed the size limitations of
5 the garage bays to accommodate the larger line trucks, however, DOE also
6 observed on the rear half of the building used for warehousing a much larger
7 space that appeared to have the capacity to house the line trucks if the two
8 layouts were to be reversed and re-purposed by Unitil. In addition, the rear
9 storage yard appeared to be expandable to the north to provide additional
10 space for poles and transformers.

11 iii. Abatement of Asbestos: Unitil states that asbestos is present in the
12 Kensington facility and that the extent of the contamination is unknown and
13 that any attempts at abatement and remediation would add materially to the
14 construction costs.

15 DOE Analysis: According to the Company's response to data request DOE
16 6-31, attached to my testimony as part of Attachment JED-7, "extensive"
17 asbestos abatement was performed and completed at the site during an office
18 renovation project in 1998. The report by Unitil's contractor at the time,
19 Hygienetics Environmental Services, states that most but not all of the
20 asbestos was removed except for some panels, tiles, and pipe insulation that
21 remained. This indicates that the reduced presence of asbestos, although still
22 potentially hazardous, should not constitute as big of an impediment to
23 renovation as originally represented by the Company. Moreover, despite the

[16] *Id.* Data response DOE 4-68, Attachments 2 and 3.

presence of remnant materials, the Company represents that it will market the property by disclosing the existence of asbestos to potential buyers, leaving it to the buyers to perform any additional remediation. Unitil also represents that to date potential buyers have shown a willingness to purchase the property despite the existence of some asbestos still remaining at the facility.

iv. Availability of Municipal Water & Sewer: Unitil states that municipal water and sewer services are not available at the Kensington location. Kensington is currently served by an existing onsite water well and septic system. The Company argues that the existing system is inadequate to handle the increased needs posed by additional personnel and to support a new fire suppression sprinkler system which will be required under the building code. The ProCon study recommended installation of a new leach field, an additional water well, and storm water retention to comply with current regulations. ProCon also highlighted the need for either a pond or an underground storage tank to ensure an adequate water supply for the new fire suppression system that would be required as part of any renovation. The presence of wetlands at the site, and the need for additional permitting, was also mentioned as a limiting factor that could impact the scope of the improvements. Taken together, Unitil asserts that these factors would substantially increase the costs of any type of expansion at Kensington.

DOE Analysis: DOE agrees that the lack of available municipal services would complicate any expansion to the existing Kensington facility. However, ProCon never stated that the recommended improvements could

not be accomplished, only that the existence of the water and sewer issues could complicate the project and would likely involve additional costs. Although ProCon points out what these additional costs may entail, e.g. legal costs, wetlands mitigation, engineering costs, they did not provide a cost range or cost analysis for Company management to determine the extent of those expenditures. As a result, whether or not those costs would have made renovating the Kensington facility uneconomic is not known.

As mentioned above, DOE employees attended site visits of both the Kensington and Exeter facilities on October 21, 2021. As part of the viewing of the Kensington property, DOE observed a large pond on the very north end of property which is apparently jointly owned by Unitil and an abutting landowner. This body of water is also depicted on the wetlands site map at JED-6, data response DOE 4-68, Attachments 2 and 3. In discovery, DOE inquired as to the possibility of the Company utilizing the pond as a water source for its fire suppression system or for potentially other water needs as an alternative to installing an underground storage tank or constructing a new pond as recommended by ProCon.[17] In response, Unitil stated that the pond is currently used to supply a local onsite community water system (supervised by NH DES) and also as a dry hydrant site for the Town of Kensington Volunteer Fire Department. The Company asserts that permitting from NH DES, along with permission from the abutting property owner and coordination with the fire department and the Town would be needed, all creating additional costs for the project. However, similar to the zoning and

wetlands issues discussed above, the Company never explored the potential for using the existing pond as a viable water source. Also, the costs and the cost differentials between building an onsite water source or working with other parties to establish extraction rights and piping from the existing pond were never considered by Unitil. In terms of the actual additional amounts of water that a newly expanded Kensington facility would need for both office use and fire suppression, that need was never studied or quantified by either ProCon or Unitil.

v. Relocation of Operations During Construction: The Company states that any construction at the Kensington site would require the relocation of existing personnel, crews, and equipment until renovations were completed. Unitil also claims that the availability of leasing commercial space as a temporary location for those operations was extremely limited in the seacoast region. This was based on the market research provided by the Company's realtor in March of 2019.

DOE Analysis: DOE agrees that dislocation and relocation of operations and personnel would have been problematic for the Company but not impossible. Unitil's realtor provided leasing information for only a period of time up to March of 2019. It is not known whether the realtor provided any subsequent research to report on changing market conditions and new prospects. DOE assumes that the real estate market is not a static environment and that it is subject to constant change especially when the market is robust. Moreover, Unitil has not asserted that time was of the essence in beginning construction

[17] *See* Attachment JED-6, data response Energy 6-30.

of the new DOC. In fact construction was delayed in 2019 due to issues involving COVID-19. In addition, DOE believes that this risk factor actually constitutes a known and expected project expense rather than a unique risk since the potential for relocation would be present regardless of whether or not Options 1, 2, or 3 were chosen.

vi. Costs of a Temporary Triple Net Lease: Related to relocation of operations discussed above, Unitil states that an additional risk factor involves the costs of a triple net lease that includes monthly rent, property taxes, and utilities. Again, DOE's view is that this is more of a known project expense rather than an actual risk and would also be applicable to all Options 1-3.

vii. Costs of Fit-up, Furniture and Furnishings: The Company provided no details for this risk factor. DOE's assumption is that much of Unitil's existing furniture and equipment at the Kensington facility could have been moved to and re-used at the new temporary location. Thus this seems to be more of an inconvenience than a major risk factor.

viii. Costs of Business Disruption: Unitil states that disruptions of operations will occur in the form of time commitment on the part of DOC staff, IT staff, and facilities staff to move to the new space and complete fit-up. Again, DOE views this as an expected project expense and not a risk. Any time commitment required from Unitil staff would likely be of short duration and thus temporary.

5) Unitil did not engage in a formal bidding process for the management of the Exeter construction project. Instead of issuing a request for proposal to obtain a variety of

cost estimates, the Company chose ProCon as its sole provider of those services. Therefore, the Company has no way of knowing whether those services could have been provided more efficiently and at a lower cost. The ProCon contract constituted the single largest budget item for the Exeter construction project at $13.2 million.[18]

6) Unitil claims that Drinkwater Road itself is an impediment to operations since the road is prone to flooding during large storm events and that personnel and line crews have had to use an alternate route to leave the Kensington facility as a result. However, in response to discovery, the Company stated that it does not track or know the exact number of times Drinkwater Road has been impassable due to flooding on an annual basis. In addition, at the technical session held on September 27, 2021, Unitil stated that although line crews and personnel at the Kensington facility have at times had to use an alternate route, this diversion only adds approximately five minutes in additional travel time to the main highway. DOE understands that the Company has conducted operations from Kensington and has had to deal with the inconvenience of flooding for a number of years, but has never explored flood mitigation measures with the Town to determine if the problem can be alleviated through improved drainage or elevation of the road.[19]

7) As part of the investments to be included the 2020 test year rate base, Unitil has added investments in artwork for the new DOC totaling $34,082.[20] These costs involved the design, production, and installation of photographs obtained from the Company's archives plus other artistic elements. Audit Staff found that these costs

[18] *See* Final Audit Report DE 21-030 dated November 12, 2021 at 18-19.
[19] *See* Attachment JED-6, data response DOE 4-68.

1 are not necessary capital expenditures and that they should be recorded below the line
2 and paid for by Unitil shareholders.[21] DOE agrees with and adopts Audit's
3 conclusion.

4 8) The Company included in its proposed test year rate base additional expenditures for
5 the Exeter DOC in the amount of $577,144 which were occurred in 2021. Since these
6 additions were placed in service in 2021 (after the 2020 test year), Audit Staff
7 recommends that those expenditures not be included for recovery in Unitil's proposed
8 rate base.[22] DOE agrees with and adopts Audit's recommendation.

9 9) At the site visit attended by DOE on October 21, 2021, Unitil represented that there
10 are several areas within the Company's operations that gained significant
11 improvements in efficiency because of the new Exeter DOC as compared with
12 continuing operations at Kensington. Those areas included Electrical Engineering,
13 Central Electric Dispatch, and consolidation of staff among other functions.
14 However, when asked in discovery to quantify those efficiencies in terms of dollars
15 saved the Company was unable to do so.[23] DOE believes that any gains in efficiency
16 currently experienced by Unitil in Exeter could have also been replicated with the
17 renovation of Kensington under Option 2.

18 **DOE's Conclusions & Recommendations:**

19 As noted above for the Exeter land purchase, DOE believes that the initial justification
20 for the new DOC to be reasonable and supportable in terms of known obsolescence, asset

[20] *See* Attachment JED-6, data response Energy TS 1-24. Unitil made a correction to this expense in the amount of $3,110 due to a misallocation of AFUDC reducing the amount previously reported to Audit from $38,082 to $34,973.
[21] *Id.* Audit Issue No. 5 at 128.
[22] *Id.* Audit Issue No. 3 at 15 and 124.
[23] *See* Attachment JED-6, data response Energy TS 2-12.

1 conditions, and layout associated with the Kensington facility. However, after reviewing
2 all of the essential cost components and risk assessments contained in the Decision
3 Document and the ProCon Study, and the extensive discovery, DOE has concerns about
4 the timing of the Company's decision making and its failure to perform adequate due
5 diligence for this project. Although the Decision Document and the ProCon report give
6 the appearance that Unitil performed all of the necessary steps for prudent decision
7 making, that process fails the test of credibility in that the analysis was performed
8 approximately two years after the final decisions to move forward with the both the land
9 purchase and the construction project were made. Part of a prudence review is whether
10 the process leading to a utility's decision was a logical one based on all conditions and
11 circumstances which were known or which reasonably should have been known at the
12 time the decision was made. As the evidence shows, not only did Unitil not perform the
13 requisite research at the time the decisions were made, but even if the analysis had been
14 performed at project inception, it was not sufficiently in-depth or extensive to provide
15 Unitil's management with all of the necessary details to make an informed economic
16 decision. In short, the Company's analysis was not only late, it was woefully incomplete
17 and inadequate.
18 DOE agrees that there was the potential for additional costs associated with the
19 Kensington renovation, i.e. fire suppression, storm water, septic, and sufficient water
20 capacity. However, those improvements and the extent of the related costs were never
21 explored or estimated by Unitil or by its consultants as part of the Company's due
22 diligence, thus the Company has not shown that such costs would have precluded the
23 potential renovation and expansion of the Kensington facility. Likewise, the zoning and

1 wetland permitting issues were equally significant in that no inquiries or engagement
2 with the regulatory authorities were attempted by Unitil. Thus Unitil was unable show
3 whether matters concerning zoning and wetlands would have posed definite impediments
4 to, or even prevented construction. Additionally, the Company failed to put the
5 management of the construction project out for competitive bid potentially adding to
6 project costs since the ProCon contract as sole provider was the largest cost center for the
7 project.
8 In its totality, DOE can only conclude that the Company's decision making process was a
9 top down instead of a bottom up approach. That is, it appears that the Company's
10 decisions to purchase land in Exeter and to build the new Seacoast DOC at that location
11 were predetermined as early as 2017, and that Unitil's due diligence, which occurred very
12 late in the process, was framed in such a way as to support the Company's predetermined
13 outcome by attempting to show that any option to renovate and re-use the Kensington
14 location was the least viable option.
15 Based on its review, DOE concludes that Option 2 out of the four options provided by
16 Unitil constituted the least cost option available to the Company and its ratepayers. The
17 ProCon estimate for Option 2 came in at $9 million (on the high side) and Unitil
18 estimated $11.9 million but provided no basis for that estimate. Depending on which
19 estimate is used as a basis for comparison, the cost savings compared with the final cost
20 of the Exeter DOC ($17.7 million including property acquisition costs), ranges from
21 $5.75 million to $8.65 million. DOE did not consider Option 1 as a viable or least cost
22 alternative because we agree with the Company that it did not fulfill the desired goals for
23 business continuity and efficiency. DOE also did not consider Option 3 as a least cost

1 alternative due primarily to the added costs involved with the total demolition of the
2 Kensington facility. As a result, DOE recommends that the Commission disallow all of
3 the costs over and above the average of the Company's estimate and the ProCon
4 estimates for Option 2, calculated in the amount of $9.8 million, and the total amount
5 spent on the Exeter project of $17.6 million (including costs of land acquisition),
6 resulting in a total disallowance of $7.8 million. DOE chose the average of $9.8 million
7 because Unitil did not quantify or provide a basis for its gross-up of the ProCon estimate
8 to $11.9 million.
9 DOE understands that the average of $9.8 million would impact the property tax amount
10 for Kensington. Currently as of 2020, the annual property tax for the Kensington DOC is
11 $184,090 and the 2020 property tax for the Exeter DOC is $531,439 for a difference of
12 $347,349. Given that the Town of Kensington values the Kensington DOC at
13 $9,891,984, a rough estimate of the tax impact for a 9.8 million renovation, under the
14 current tax rates, would essentially double the amount of the property tax to
15 approximately $368,180.[24] Because Unitil never inquired with the Town of Kensington
16 about the viability of any renovations to the Kensington facility, the true impact of any
17 property tax increase is currently unknown.
18 In addition, in relation to property taxes, DOE also recommends disallowance from
19 Unitil's cost of service of all property taxes paid to the Town of Exeter in 2019 and 2020
20 for the new DOC location in the amount of $540,438. An itemization of all of the
21 proposed disallowances is provided below:
22
23

Exeter DOC

Delta between Option 4 and Option 2:	$5,839,471[25]
Cost of Exeter Land Purchase	1,405,413
Additional Fit-up Costs 2021	577,144
Artwork – Exeter	34,973
Total Disallowance	$7,857,001

Property Taxes for 30 Energy Way, Exeter, NH [26]

Total 2020 Property Tax	$531,439
Total 2019 Property Tax	8,999
Total Disallowance (COS)	$540,438

3. Concord Downtown Conversion Projects:

Project #	Description	Budget	Actual
SPBC02	Gulf St. 13kV Additions	$ 2,925,000	$ 3,164,045
DPBC04	Conversion Concord Part 1	$ 250,000	$ 194,714
DPNC05	Reconductor 1H6 Pleasant	$ 197,798	$ 161,963
DPNC07	Reconductor 1H6 Thomp.	$ 128,720	$ 137,385
DPNC12	Reconductor 1H6 S.Spring	$ 138,870	$ 371,975
DPNC13	374 Line Rebuild	$ 1,066,000	$ 787,358
DPBC07	Conversion Concord Part 2	$ 721,847	$ 447,840
	Total	$ 5,428,235	$ 5,265,280

Overall Budget v. Actual: $162,955

Attachment JED-7

Construction Authorization Form:

- The Concord Downtown Conversion project is characterized as a significant project by Unitil at $5.2 million and involved seven individual projects listed above. DOE reviewed of the related and CAF's and they are attached to my testimony as part of Attachment JED-7.

[24] *See* Attachment JED-6, data response Energy TS 2-4, Attachment 2.
[25] Final 2020 cost for Exeter (not including land purchase, artwork, 2021 expenditures) of $15,639,471 less $9,800,000 equals $5,839,471.

- The project as a whole was intended to accommodate actual and projected load growth in the Concord Downtown area over the next five to eight years. The additional growth is projected by Unitil to be up to 10 MVA.
- Development in the Concord Downtown area has included or will include a mix of apartments, retail stores, offices, restaurants, and a bank.
- In order to meet the new load growth, the Company considered five options to connect with the new load and initiate the conversion:
    1) Upgrade Gulf Street Substation to 13kV.
    2) Create a 13.8 kV transformer grid.
    3) Upgrade and replace Bridge Street Substation.
    4) Install second transformer at Iron Works Substation.

  Unitil ultimately chose Option 1, upgrade and expand the Gulf Street Substation, since the other options were not considered viable due to space limitations at existing substations or were not within the Company's design guidelines.[27]
- Aside from the Gulf Street Substation project, the other conversion projects involved reconductoring and undergrounding of existing lines, padmount transformer replacements and new switch installations.
- The Company based its buildout for the various construction projects on the five-year load forecast and conditions assessment contained in the Concord Downtown Area Study 2018.[28]
- The project was completed in 2020.

[26] *See* Attachment JED-6, data response Energy TS 2-4, Attachment 3 at 1-3.

1 Work Orders:

2 • No work orders were provided by Unitil as requested in DOE 3-47.

3 Engineering Work Requests:

4 • Engineering Work Requests were not required for the project.

5 Change Orders: No change orders were submitted for this project.

6 **DOE's Review:**

7 In discovery, Unitil represents that the projected load growth for the Concord Downtown
8 area has not materialized and that many projects have been either delayed, put on hold, or
9 cancelled.[29] As justification for this project, the Company relied exclusively on its own
10 internal study, the Concord Downtown Area Study 2018. The only other studies
11 considered by Unitil were system impact studies performed for specific interconnection
12 requests. The focus of the study was limited to projected loads and needed systems
13 improvements to meet those loads. The study does not specifically mention or review
14 known and verified load increases nor does it address the potential of some new loads not
15 materializing. Unitil's most recent load projection reports a total projected load of 5380
16 kVA and a current realized load of 1310 kVA, leaving 4070 kVA or 75% of projected
17 load unrealized.[30]

18 **DOE's Conclusions & Recommendations:**

19 Like many of the projects reviewed in the sample, DOE found the initial justification for
20 the project reasonable in terms of the upgrades and additions that were driven by
21 increasing development in the Concord Downtown area and the insufficient capacity of

[27] Testimony of Kevin E. Sprague at 21-24 (Bates 371-374).
[28] *See* Attachment JED-7.
[29] *See* Attachment JED-7, Staff Data Request 1-2 (Docket DE 20-002), and DOE Request 4-71.
[30] *Id.* DOE Request 4-71.

existing substations and conductors. However, DOE is becoming increasingly concerned with projects built to serve highly speculative loads without the necessary background research to critically examine whether those load projections are reasonable and credible, and without considering different scenarios under which those loads may or may not occur. In this instance, the Company's Concord Downtown Area Study 2018 does not address those critical issues but relies exclusively on its own load projections. Given that only 25% of the predicted load increase has materialized service, DOE concludes that only 25% of the installed capacity is used and useful at this time. In addition, there is no certainty as to when the entire load, or a portion thereof, will come online in the near term given the number development projects that are currently on hold, and Unitil has provided no such assurances in its filings. Despite the fact that 100% of the new capacity for the Concord Downtown project has been constructed and is now in place, it has long been held that utilities are entitled to a return only upon that portion of an investment that is used and useful during the test year. Accordingly, in applying a needs based test, DOE finds that only 25% of the installed plant is used and useful as of the 2020 test year and that the remaining 75% constitutes excess capacity at this time. As a result, DOE recommends disallowance of the excess capacity portion which is equivalent to $3,948,960 (75% x $5,265,280) for purposes of this case. The DOE proposes to review the plant additions in Unitil's next rate case to see if the load has materialized and the remaining plant has become used and useful.

V. STEP ADJUSTMENTS AND PROPOSED RATE PLAN

Q. Did Unitil propose any step adjustment increases as part of its overall rate request?

1 **A.** Yes. Similar to Unitil's previous request in Docket DE 16-384, the Company proposed
2 an initial step adjustment increase for 2021 in the amount of $4.6 million.[31] This increase
3 incorporates costs associated with Unitil's capital spending for 2021 totaling
4 approximately $31 million and is proposed to take effect concurrently with the
5 Commission's approval of the permanent rate increase.[32]

6 **Q. In Docket DE 16-384 the parties agreed through Settlement that the first step**
7 **increase, along with subsequent step increases, should be approved by the**
8 **Commission. Does DOE support approval of Unitil's step increases proposed in the**
9 **present docket?**

10 **A.** No. As the question indicates, in Unitil's last rate case the first step adjustment (in 2017),
11 along with additional annual step increases in 2018 and 2019, were ultimately
12 incorporated, along with other negotiated issues, into a broad-based Settlement
13 Agreement resolving the multiple issues between the parties. Unfortunately, due to the
14 schedule in that case, and the timing of the Settlement discussions, there was not an
15 adequate opportunity for Staff (at that time Commission Staff) to conduct a thorough
16 review of Unitil's 2017 capital budget, nor did the Audit Division have time to perform
17 an audit. Moreover, by the time the final capital spending numbers for 2017 (i.e. actual
18 expenditures as compared with the budgeted amounts) were available from Unitil (after
19 the year-end closure of Unitil's books), the time for discovery and testimony involving
20 individual projects had passed in that case.

21 In the present rate case, a similar situation is proposed by the Company whereby Unitil's
22 capital spending for 2021, and subsequent capital budgets for 2022 through 2024,

[31] Testimony of Christopher J. Goulding and Daniel T. Nawazelski, Schedule CGDN-2 at Bates 204.
[32] *Id.* at 37 (Bates 107).

1 comprise the proposed step increases. In terms of the first step increase, like the prior
2 rate case, the final expenditure amounts for the 2021 plant additions are not available for
3 DOE or Audit to review at this time (not to mention projects that may have been
4 postponed or cancelled in the interim). Unitil has represented that those figures will be
5 made available in January of 2022, however, settlement negotiations and hearings in this
6 docket are scheduled to begin at about that time according to the current procedural
7 schedule. As a result, the time for serving discovery and submitting testimony related to
8 the 2021 capital projects will have passed before the actual plant investment amounts and
9 supporting documentation are available for review. Consequently, DOE is
10 recommending that the Commission not approve the 2021 step increase concurrently with
11 the permanent rates as requested by Unitil. Instead, DOE recommends that the
12 Commission deny Unitil's request for a step increase coincident with the permanent rates
13 and order a separate schedule for review of these 2021 plant investments in 2022. This
14 would allow sufficient time for a complete review of the 2021 capital expenditures by
15 both DOE and Audit. The DOE requests that the Commission require Unitil to provide
16 all relevant project documents (Construction Authorization Forms, Work Orders, Change
17 Orders, etc.) for these 2021 investments with its initial filing for the step adjustment.
18 This approach is consistent with what Commission Staff (now DOE) proposed, and the
19 Commission approved, as part of the settlements in both of the most recent rate cases for
20 Liberty Utilities (Granite State Electric) and Eversource in Dockets DE 19-064 and DE
21 19-057. Further, the examples of deficiencies in Unitil's capital planning, analysis, and
22 approvals discussed above justify the need for a comprehensive review of any future step
23 increases.

1 **Q. Does DOE have any concerns involving the future step increases requested by**
2 **Unitil?**
3 **A.** Yes. The Company forecasts total changes to gross plant of $31 million in 2021, $37.5
4 million in 2022, and $36.9 million in 2023.[33] Unitil proposes to make annual compliance
5 filings with the Commission on or before the last of January of each year to document the
6 prior year's expenses and to confirm that all plant additions are in service.[34] Unitil did not
7 provide specifics on the type of projects that would be undertaken except that those
8 project would be "non-growth" related projects. Thus far, DOE has only been provided
9 with the spreadsheets of future investments attached to Mr. Sprague's testimony as
10 Exhibit KES-2, but the information contained therein is mostly based on broad project
11 categories. Unitil provides only budget estimates for numerous future investments but
12 provides no known or knowable benefits to ratepayers, and these budget estimates are
13 subject to modification in future years.
14 **Q. What is DOE's recommendation for the step increases as proposed by Unitil that**
15 **are beyond the 2021 plant investments as discussed earlier?**
16 **A.** DOE does not support the Company's proposal and instead recommends that the
17 Commission retain its traditional rate-making role whereby plant additions, along with
18 other expenses, are reviewed comprehensively in periodic rate cases, in order to ensure
19 prudent investment and just and reasonable rates. DOE in particular recommends base
20 rate case review of the Company's plant investments, based on the fact that those
21 investments are numerous, significant in size and complexity, and potentially
22 unnecessary given the Company's relatively flat load growth and satisfactory reliability.

[33] *Id.* at Schedule CGDN-2 at Bates 204.
[34] *Id.* at 97 (Bates 158).

For those reasons, DOE recommends that the Commission deny the Company's proposal involving future step increases and consider only the first step adjustment under the review process proposed by DOE, which will allow for review of actual investment amounts in 2022, after the Company's books are closed and the project documents are provided for review.

VI. CONCLUSIONS AND RECOMMENDATIONS

Q. Please summarize DOE's findings.

A. In summary, based on the extensive review outlined above, DOE is unable to find that Unitil provided sufficient economic justification and analysis to support some of the major capital projects reviewed, for the following reasons:

- DOE found little evidence that Unitil is consistently observed of least cost planning, performed sufficient financial analysis, due diligence, or management oversight for the projects reviewed.
- DOE found little evidence that Unitil's project planning and management is consistent in terms of an efficient or organized process or that proper processes and controls are in place for reasonable and prudent decision making.
- Unitil provided little evidence that its project management employed appropriate cost control methodologies or techniques, or that it reasonably responded to changing circumstances or new challenges as some projects progressed.
- Unitil's approach to capital budgeting and planning directly impacts rates given that this rate case was filed primarily because of $125 million in capital

expenditures invested by the Company in its distribution system since the last rate case.

Q. What recommendations does DOE propose as a result of its analysis of Unitil's capital investments and proposed step adjustments?

A. Based on our review of capital projects for 2017 through 2020 outlined above, DOE recommends a total plant investment disallowance of $12,780,165. DOE also recommends that the Commission reject the proposed step increase for 2021 and all future step increases, given DOE's overall determination that a comprehensive review needs to be performed and Unitil has exhibited substandard capital planning, management, diligence, and oversight based on the evidence provided above.

Q. Does that conclude your testimony?

A. Yes, it does.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
NHPUC Staff Data Requests – Set 2

Date Request Received: 06/02/2021 Date of Response: 06/16/2021
Request No. Staff 2-44 Witness: Kevin E. Sprague

REQUEST:

Reference Kevin E. Sprague testimony, Bates pp. 356-362. Please provide a complete and current copy of the Company's policy and procedures document(s) governing and describing the categorization, budgeting, design, justification, criteria, tolerances, approval levels, and required documentation for all capital projects. If no such document(s) exists please explain why. Please provide a list of all required project documentation types.

RESPONSE:

Please reference Staff 2-44 Attachment 1 for the Capital Budget Procedure and Staff 2-44 Attachment 2 for the Authorization Policy.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
NHPUC Staff Data Requests – Set 3

Date Request Received: 07/07/2021 Date of Response: 07/21/2021
Request No. DOE 3-47 Witness: Kevin E. Sprague

REQUEST:

Reference: Testimony of Kevin E. Sprague, Exhibit KES-2 at Bates 453-482, and Staff Data Response 2-46b Attachment 1, and Staff Data Response 2-44 Attachment 1. For each of the projects and plant additions listed below for 2017 through 2020, please provide all copies of all project documentation related to these projects as required under the Unitil Operating Procedure – Engineering, Capital Budget Input and Review, and the System Policy – Preparation and Approval, including project authorizations, construction authorizations, revised budget authorizations, supplemental authorizations, and non-budget authorizations; all written reviews by managers and engineering staff of annual capital budget items and annual capital budgets involving these projects; annual "functional reviews," annual "capital budget item inputs" including prioritization, project justifications, project costs, safety, reliability, customer driven, government mandated, regulatory, load, voltage, protection, power quality, power factor, economics, and repairs/replacements (as applicable); capital work orders, work requests, engineering work requests, and work order approvals (including all levels):

Authorization	Description
C-140144	Broken Ground-Site Evaluation
C-150104	2015 Billable Work
C-160101	New Customer Additions
C-160158	New Substation Lines – Broken Ground to Hollis
C-160159	Hollis S/s- Upgrades to Accommodate Broken Ground
C-170106	2017 Transformer Purchases – Customer
C-170177	Meter Data Management
C-180100	Electric T&D Improvements
C-180106	Transformer Purchases – Customer Requirements
C-180113	Condemned Poles Distribution
C-180122	Office & Systems Furniture Reconfiguration
C-190106	Transformer Purchase – Customer
C-190112	Condemned Poles Distribution
C-190118	Gulf Street – Outside Services
C-190148	Install three phase Hendrix

Unitil Energy Systems, Inc.
Docket No. DE 21-030
NHPUC Staff Data Requests – Set 3

Date Request Received: 07/07/2021 Date of Response: 07/21/2021
Request No. DOE 3-47 Witness: Kevin E. Sprague

C-190152	2019 Customer Facing Enhancements
C-200100	Electric T&D Improvements
C-200106	Transformer Purchases Customer
C-200113	UES – Software Licenses
E-141047	3353 Line Relocation State Rt. 101 Hampton
E-161053 PEA	Replace Overhead Pole Line w/Underground Facilities for
E-181047	Hampton Beach – 13kV Additions and other modifications
E-181050	Circuits SH1/SH2 – Transfer to 5X3 Witch Lane Plaistow
E-181052	Circuit 3H1 – Convert to 13.8kV Ocean Blvd Hampton
E-181059	Three Phase URD Line Ext. 183 Epping Rd. Exeter
E-191006	Transformer Purchases – Customer
E-191010	Distribution Pole Replacements
E-191035	Acquisition of New DOC & Sale of Existing DOC
E-191060	Legal, Insurance, Permitting & Misc.
E-201001	New Customer Additions
E-201009	Distribution Pole Replacements
E-201032 Kensington	Transfer Circuit 19H1 to Circuit 27X1 Drinkwater Road
E-211010	Distribution Pole Replacements

RESPONSE:

Please refer to DOE 3-47 Attachment 1.

SUPPLEMENTAL RESPONSE (September 29, 2021):

Please refer to DOE 3-47 Attachment 1 which includes the capital budget input form (which includes the raw estimated inputs, scope, justification and prioritization) and the construction authorization forms for each project.

Engineering Work Requests (EWRs) are initiated to describe requested work for the operations departments. There is not a 1:1 relationship between capital budget projects

Unitil Energy Systems, Inc.
Docket No. DE 21-030
NHPUC Staff Data Requests – Set 3

Date Request Received: 07/07/2021 Date of Response: 07/21/2021
Request No. DOE 3-47 Witness: Kevin E. Sprague

and EWRs. Some EWRs request work that is not related to a capital budget project and not all capital budget projects (authorizations) will have an Engineering Work Request associated with them. In addition, some authorizations may have multiple EWRs. Most of the work scope requested in EWRs is associated with the distribution system and not related to substations or subtransmission system. The EWRs associated with this list of projects are provided in DOE 3-47 Supplemental Attachment 1 through DOE 3-47 Supplemental Attachment 6.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 5

Date Request Received: 09/02/2021 Date of Response: 09/17/2021
Request No. DOE 5-19 Witness: Kevin E. Sprague

REQUEST:

Reference: Staff Data Response 2-46b Attachment 1. For each of the projects and plant additions listed below for 2018 through 2020, please provide all copies of all project documentation related to these projects as required under the Unitil Operating Procedure – Engineering, Capital Budget Input and Review, and the System Policy – Preparation and Approval, including project authorizations, construction authorizations, revised budget authorizations, supplemental authorizations, and non-budget authorizations; all written reviews by managers and engineering staff of annual capital budget items and annual capital budgets involving these projects; annual "functional reviews," annual "capital budget item inputs" including prioritization, project justifications, project costs, safety, reliability, customer driven, government mandated, regulatory, load, voltage, protection, power quality, power factor, economics, and repairs/replacements (as applicable); and all change order requests with approvals:

Budget Number	Description
SPCC01	Bridge Street – Replace 35kV Line Relaying & Modify RTU
DPBC04	Re-conductor and reinsulate circuit 1H6
DPNC05	Re-conductor 1H6 – Pleasant and Green Street, Concord
DPNC07	Re-conductor/Convert Circuit 1H6 – Thompson Street, Concord
DPNC12	Re-conductor/Convert Circuit 1H6 – Spring Street, Concord
DPOC18	374 Line Rebuild with 15kV Underbuild
DPBC07	Conversion in Downtown Concord – Part 2
DPCE02	Distribution Upgrades to Accommodate Foss Manufacturing

RESPONSE:

Please reference DOE 5-19 Attachment 1 for the documents related to the above projects.

Please note that non-budget projects do not have a capital budget input form.

Capital Budget 2016 UES Capital

Project Description

Year:	2016
Company:	UES Capital
Status:	[A] Accepted
Priority:	1
Budget Category:	DPBC02 Distribution Projects
Project Name:	New Subtransmission Lines - Broken Ground to Hollis
Submitted By:	J. Dusling

Project Categorizations

Load, Voltage, Reliability

Project Estimates

Labor Time to Install (Man Hours):	
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	
Other Specific Charges ($):	375000
Overhead on Specific Charges (%):	30
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	
Salvage:	

Description/Scope

Construct new system supply lines out of Broken Ground S/S. This project will include the construction of three 34.5 kV lines from Broken Ground substation the vicinicty of Hollis substation.

This project is one of three seperately budgeted projects to construct a new system suplly in UES-Capital. (1) Broken Ground (2) Hollis - Upgrade to Accomodate Broken Ground and (3) New Subtransmission Lines - Broken Ground to Hollis.

This is the first year of a two year project to construct new lines between Broken Ground and Hollis

Justification

Additional system supply capacity is needed in order to meet planning guidelines prior to the summer of 2017.

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Capital Budget 2017 UES Capital

Project Description

Year:	2017
Company:	UES Capital
Status:	[A] Accepted
Priority:	1
Budget Category:	DPCC01 Distribution Projects, Carryover
Project Name:	New Subtransmission Lines - Broken Ground to Hollis
Submitted By:	J. Dusling

Project Categorizations

Load, Voltage, Reliability

Project Estimates

Labor Time to Install (Man Hours):	
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	
Other Specific Charges ($):	650000
Overhead on Specific Charges (%):	30
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	
Salvage:	

Description/Scope

Construct new system supply lines out of Broken Ground S/S. This project will include the construction of three 34.5 kV lines from Broken Ground substation the vicinicty of Hollis substation.

This project is one of three seperately budgeted projects to construct a new system suplly in UES-Capital. (1) Broken Ground (2) Hollis - Upgrade to Accomodate Broken Ground and (3) New Subtransmission Lines - Broken Ground to Hollis.

This is the final year of a two year project to construct new lines between Broken Ground and Hollis.

Justification

Additional system supply capacity is needed in order to meet planning guidelines prior to the summer of 2017.

UES Capital
Construction Authorization

AUTH: **160158**
Date: **9/15/2016**
Budgeted Amount: **$487,500.00**

Budget Item No: **DPBC02**
Budget Year: **2016**
Description: **New Subtransmission Lines - Broken Ground to Hollis**
Project Supervisor: **Dusling, Jacob**
Crew Days: **90**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **9/15/2016 10:43:26 AM**
Initiated By: **Dusling, Jacob**
Finalized Date: **10/11/2016 3:39:50 PM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
9/16/2016	YES	**Lydon, Lisa** *Associate Plant Accountant*
9/16/2016	YES	**Northrup, Tressa** *Utility Acctng And Budgeting Mgr*
9/21/2016	YES	**Dube, Christopher** *Manager Technical Sys. DOC*
9/28/2016	YES	**Eisfeller, Justin** *Director, Energy Measurement & Control*
10/4/2016	YES	**Krell, Paul** *Manager Energy Sys. Engineer.*
10/6/2016	YES	**Bonazoli, John** *Manager Distribution Engineer*
10/6/2016	YES	**Sprague, Kevin** *Director Engineering*
10/6/2016	YES	**Main, Dan** *Assistant Controller*
10/6/2016	YES	**Brock, Laurence** *Controller & CAO*
10/11/2016	YES	**Meissner, Thomas** *SVP And COO*
10/11/2016	YES	**Collin, Mark** *SVP And Chief Financial Officer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$897,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$897,000.00
Retirement:	$0.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$897,000.00

DESCRIPTION/SCOPE

Construct three new system supply lines out of Broken Ground S/S. Two of the new lines will normally supply Hollis substation. The third line will normally supply the existing 38 Line.

This is a two year project station in 2016 with an expected completion date of May 2017.

This project is one of three separately budgeted projects to construct a new system supply in UES-Capital. (1) Broken Ground Substation (2) Hollis - Upgrade to Accommodate Broken Ground and (3) New Subtransmission Lines - Broken Ground to Hollis. Separate authorizations will be routed in future years for the Hollis substation upgrades and the line construction.

JUSTIFICATION

This project will address loading concerns associated with the Garvins and Oak Hill transformers as well as other contingencies that will leave Unitil load isolated due to loading constraints until repairs are made.

In 2017, load flow analysis indicates that the TB15 transformer at Oak Hill will be loaded above 95% of its thermal rating during summer Extreme Peak conditions. Additionally, during summer Design Peak conditions in 2017, several contingencies result in loading of PSNH system supply transformers above their thermal rating. These contingencies include the loss of any UES Capital system supply transformer, loss of the 317 or 3122 supply lines into Penacook, and the loss of the 38 Line at Hollis. This project also resolves contingencies that require Unitil load to remain out of service until repairs are made due to loading above LTE limits at 2014 Design Peak conditions including the loss of the 318 Line Tap to Hollis, loss of PSNH 318 line from Garvins to Hollis, and the loss of the 38 Line at Horse Shoe Pond.

This project was identified with PSNH through the Joint Planning Process as the most cost effective project for the area.

NOTES

Straight 30% overhead on all costs

AUTHORIZATION COMMENTS

This is multi-year authorization. Construction is scheduled to be be complete in 2017.

CWO Summary

CWO	Description	Amount
20162524	New Subtransmission Lines - Broken Ground to Hollis	$897,000.00
	Total	$897,000.00

UES Capital
Construction Authorization

AUTH: **160158**
Date: **1/13/2017**
Budgeted Amount: **$487,500.00**

Budget Item No:	**DPBC02**	Type:	**Revision**
Budget Year:	**2016**	Sequence:	**2**
Description:	**New Subtransmission Lines - Broken Ground to Hollis**	Status:	**Completed**
Project Supervisor:	**Dusling, Jacob**	Initiated Date:	**1/13/2017 11:23:04 AM**
Crew Days:	**90**	Initiated By:	**Dusling, Jacob**
Start Date:		Finalized Date:	**2/20/2017 3:36:59 PM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
2/8/2017	YES	**Lydon, Lisa** *Associate Plant Accountant*
2/8/2017	YES	**Northrup, Tressa** *Utility Acctng And Budgeting Mgr*
2/13/2017	YES	**Dube, Christopher** *Manager, Metering & Field Services*
2/13/2017	YES	**Letourneau, Raymond** *VP, Electric Operations*
2/13/2017	YES	**Krell, Paul** *Manager Energy Sys. Engineer.*
2/16/2017	YES	**Bonazoli, John** *Manager Distribution Engineer*
2/16/2017	YES	**Sprague, Kevin** *Director Engineering*
2/16/2017	YES	**Main, Dan** *Assistant Controller*
2/20/2017	YES	**Meissner, Thomas** *SVP And COO*
2/20/2017	YES	**Brock, Laurence** *Controller & CAO*
2/20/2017	YES	**Collin, Mark** *SVP And Chief Financial Officer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$2,285,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$2,285,000.00
Retirement:	$0.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$2,285,000.00

DESCRIPTION/SCOPE

Construct three new system supply lines out of Broken Ground S/S. Two of the new lines will normally supply Hollis substation. The third line will normally supply the existing 38 Line.

This is a two year project station in 2016 with an expected completion date of May 2017.

This project is one of three separately budgeted projects to construct a new system supply in UES-Capital. (1) Broken Ground Substation (2) Hollis - Upgrade to Accommodate Broken Ground and (3) New Subtransmission Lines - Broken Ground to Hollis. Separate authorizations will be routed in future years for the Hollis substation upgrades and the line construction.

JUSTIFICATION

This project will address loading concerns associated with the Garvins and Oak Hill transformers as well as other contingencies that will leave Unitil load isolated due to loading constraints until repairs are made.

In 2017, load flow analysis indicates that the TB15 transformer at Oak Hill will be loaded above 95% of its thermal rating during summer Extreme Peak conditions. Additionally, during summer Design Peak conditions in 2017, several contingencies result in loading of PSNH system supply transformers above their thermal rating. These contingencies include the loss of any UES Capital system supply transformer, loss of the 317 or 3122 supply lines into Penacook, and the loss of the 38 Line at Hollis. This project also resolves contingencies that require Unitil load to remain out of service until repairs are made due to loading above LTE limits at 2014 Design Peak conditions including the loss of the 318 Line Tap to Hollis, loss of PSNH 318 line from Garvins to Hollis, and the loss of the 38 Line at Horse Shoe Pond.

This project was identified with PSNH through the Joint Planning Process as the most cost effective project for the area.

1/16/17 Revision Notes: Authorization was revised to account for the additional costs associated with the relocation of the proposed 393 crossing as required by the NHDOT including surveying, permitting, easement acquisition, construction costs due to a compressed schedule and performing construction in unfrozen conditions.
Additionally, this revision includes the cost to Unitil for Eversource to raise three lines (two 115 kV lines and one 34.5 kV line) to accommodate Unitil crossing their right-of-way.

NOTES

Straight 30% overhead on all costs

AUTHORIZATION COMMENTS

This is multi-year authorization. Construction is scheduled to be be complete in 2017.

1/16/17 Revision Notes:

Original Authorization Cost: $897,000

Additional Cost This Revision: $1,388,000
Total Revised Cost: $2,285,000

CWO Summary

CWO	Description	Amount
20162524	New Subtransmission Lines - Broken Ground to Hollis	$2,285,000.00
	Total	$2,285,000.00

UES Capital
Construction Authorization

AUTH: **160158**
Date: **3/23/2017**
Budgeted Amount: **$487,500.00**

Budget Item No:	**DPBC02**	Type:	**Revision**
Budget Year:	**2016**	Sequence:	**3**
Description:	**New Subtransmission Lines - Broken Ground to Hollis**	Status:	**Completed**
Project Supervisor:	**Dusling, Jacob**	Initiated Date:	**3/23/2017 3:04:55 PM**
Crew Days:	**90**	Initiated By:	**Dusling, Jacob**
Start Date:		Finalized Date:	**4/12/2017 8:01:16 AM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
3/23/2017	YES	**Lydon, Lisa** *Associate Plant Accountant*
3/23/2017	YES	**Northrup, Tressa** *Utility Acctng And Budgeting Mgr*
3/24/2017	YES	**Dube, Christopher** *Manager, Metering & Field Services*
3/29/2017	YES	**Letourneau, Raymond** *VP, Electric Operations*
3/29/2017	YES	**Krell, Paul** *Manager Energy Sys. Engineer.*
3/30/2017	YES	**Bonazoli, John** *Manager Distribution Engineer*
4/3/2017	YES	**Sprague, Kevin** *Director Engineering*
4/3/2017	YES	**Main, Dan** *Assistant Controller*
4/3/2017	YES	**Brock, Laurence** *Controller & CAO*
4/3/2017	YES	**Meissner, Thomas** *SVP And COO*
4/11/2017	YES	**Collin, Mark** *SVP And Chief Financial Officer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$2,750,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$2,750,000.00
Retirement:	$0.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$2,750,000.00

DESCRIPTION/SCOPE

Construct three new system supply lines out of Broken Ground S/S. Two of the new lines will normally supply Hollis substation. The third line will normally supply the existing 38 Line.

This is a two year project station in 2016 with an expected completion date of May 2017.

This project is one of three separately budgeted projects to construct a new system supply in UES-Capital. (1) Broken Ground Substation (2) Hollis - Upgrade to Accommodate Broken Ground and (3) New Subtransmission Lines - Broken Ground to Hollis. Separate authorizations will be routed in future years for the Hollis substation upgrades and the line construction.

JUSTIFICATION

This project will address loading concerns associated with the Garvins and Oak Hill transformers as well as other contingencies that will leave Unitil load isolated due to loading constraints until repairs are made.

In 2017, load flow analysis indicates that the TB15 transformer at Oak Hill will be loaded above 95% of its thermal rating during summer Extreme Peak conditions. Additionally, during summer Design Peak conditions in 2017, several contingencies result in loading of PSNH system supply transformers above their thermal rating. These contingencies include the loss of any UES Capital system supply transformer, loss of the 317 or 3122 supply lines into Penacook, and the loss of the 38 Line at Hollis. This project also resolves contingencies that require Unitil load to remain out of service until repairs are made due to loading above LTE limits at 2014 Design Peak conditions including the loss of the 318 Line Tap to Hollis, loss of PSNH 318 line from Garvins to Hollis, and the loss of the 38 Line at Horse Shoe Pond.

This project was identified with PSNH through the Joint Planning Process as the most cost effective project for the area.

1/16/17 Revision Notes: Authorization was revised to account for the additional costs associated with the relocation of the proposed 393 crossing as required by the NHDOT including surveying, permitting, easement acquisition, construction costs due to a compressed schedule and performing construction in unfrozen conditions.
Additionally, this revision includes the cost to Unitil for Eversource to raise three lines (two 115 kV lines and one 34.5 kV line) to accommodate Unitil crossing their right-of-way.

3/23/17: Revision Notes: this authorization was revised due to higher than anticipated costs to Unitil for Eversource to raise three lines (two 115 kV lines and one 34.5 kV line) to accommodate Unitil crossing their right-of-way.

NOTES

Straight 30% overhead on all costs

AUTHORIZATION COMMENTS

This is multi-year authorization. Construction is scheduled to be be complete in 2017.

1/16/17 Revision Notes:

Original Authorization Cost: $897,000
Additional Cost This Revision: $1,388,000
Total Revised Cost: $2,285,000

3/23/17 Revsion Notes:

Increased total autorized cost by $465,000 to account for actual costs to Unitil for Eversource to raise lines in their right-of-way to accomodate the unitil line crossings.

CWO Summary

CWO	Description	Amount
20162524	New Subtransmission Lines - Broken Ground to Hollis	$2,750,000.00
	Total	$2,750,000.00

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 5

Date Request Received: 09/02/2021 Date of Response: 09/17/2021
Request No. DOE 5-20 Witness: Kevin E. Sprague

REQUEST:

Reference: DOE Data Response 3-47, Attachment 1, at 22-28, New Sub-transmission Lines – Broken Ground to Hollis. At page 25, under "Justification," this project is identified as a "Joint Planning Process" project with Eversource.

a. Please explain why this project was not reported in the Company's response to DOE 2-43.
b. At pages 27-28, Unitil's comments reference an unanticipated increase in total costs of $465,000 related to the raising of Eversource's lines over the right-of-way. Please explain why these costs could not have been anticipated by Unitil and what were the major cost drivers leading to the increase.

RESPONSE:

Part a:

The New Sub-transmission Lines – Broken Ground to Hollis were needed to connect Broken Ground substation to Hollis substation. The preliminary design and permitting of the lines began in 2014 as part of the Broken Ground substation permitting effort. Construction on the new lines began in 2016 and along with Broken Ground substation were placed into service in 2017. The planning process typically assumes that all projects that have begun construction are in-service in the anticipated year of completion. This being the case, the need and justification for the New Sub-transmission Lines - Broken Ground to Hollis were not part of the 2017 Joint Planning Process and Broken Ground substation and the Line were considered to be in service and were not listed as projects resulting from the 2017 through 2020 Joint Planning Processes.

Part b:

When designing the New Sub-transmission Lines between Broken Ground and Hollis Unitil made the assumption that the lines would be able to cross under Eversource's transmission lines in the area. Approximately $50,000 was included in the original authorization for minor modifications to Eversource's 34.5 kV 318 line, but no costs were included for the raising of the 318, P145 or M108 lines to accommodate Unitil's sub-transmission crossing.

In an effort to reduce the impact on the lines on the Eversource right-of-way Unitil designed the Eversource right-of-way crossing utilizing 35' poles opposed to pole heights of 45' or more that were used throughout the rest of the lines. Unitil's design

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was the lowest the conductors could be installed and still meet NESC clearance requirements.

Upon completing Unitil's design and submitting a crossing application to Eversource for review, Eversource determined that the P148 and M108 115kV lines as well as the 35kV 318 line would all need to be raised to accommodate the crossings. The line raisings were required to maintain the necessary clearances between the Eversource lines and the new Unitil lines.

EVERSOURCE

AMOUNT PAID

AMOUNT NOW DUE
$526,488.00

081617 6T 0 1 4 3 07

29530191636 0526488003 0526488003

UNITIL CORPORATION SB
JACOB DUSLING
6 LIBERTY LANE WEST
HAMPTON NH 03842

EVERSOURCE
PO BOX 650031
DALLAS TX 75265-0031

Please make checks payable to:
EVERSOURCE

Please Return This Portion With Your Payment

295301916	AUG 16, 2017
Account Number	Statement Date

COST FOR LINE RAISING OF M108, P145 AND 318 LINES PER UNITIL AGREEMENT.

TOTAL AMOUNT DUE $526,488.00

ANY QUESTIONS, PLEASE EMAIL COBILLING@EVERSOURCE.COM OR CALL (603)634-3450. FOR TOLL FREE, CALL (888)628-5588, STATE "BILLING SERVICES" WHEN PROMPTED FOR FIRST AND LAST NAME.

S1BILL170816PROD.csv-74 31095-P-0014

EVERSOURCE

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 1

Date Request Received: 09/28/2021 Date of Response: 10/12/2021
Request No. Energy TS 1-25 Witness: Kevin E. Sprague

REQUEST:

Reference DOE 5-20: New Sub-transmission Lines – Broken Ground to Hollis. Please respond to the following:

a. Witness Sprague referenced a joint planning meeting with Eversource in advance of the construction of this project. Construction Authorizations dated 9/15/16 and 1/13/17 also make reference to a "Joint Planning Process" with "PSNH." Please provide details as to what elements of the project were discussed with Eversource including projected costs, cost sharing, and delineation of project management responsibilities between the Company and Eversource.
    i. At what point in this planning process did Eversource make its determination that the P148 and M108 lines needed to be raised in addition to the 35kV 318 line?
    ii. Was Unitil initially in agreement with that determination? If the Company raised objections please specify.
    iii. Did Unitil conduct a site visit prior to construction as part of the scoping and design of this project? If not, why not?
    iv. Why was the raising of the P148 and M108 lines not captured in the Company's original scoping and design of this project?
b. Please provide a detailed breakout of the work performed by Unitil and the work performed by Eversource including the costs for each utility.
c. How much control or supervisory authority did Unitil have over the management of this project?
d. Please provide a copy of the final invoice given to Unitil by Eversource.

RESPONSE:

a. The Joint Planning Process with Eversource (PSNH) is between the Company's distribution planning group and the Eversource distribution planning group. These groups are responsible for conducting joint analysis and planning studies to identify projects designed to address capacity and voltage concerns. The joint planning process identified the construction of Broken Ground (substations and lines) as the recommended project to address loading concerns associated with the Garvins and Oak Hill substation transformers as well as several identified planning violations associated with subtransmission line contingencies.

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Docket No. DE 21-030
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Date Request Received: 09/28/2021 Date of Response: 10/12/2021
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The decision to construct Broken Ground dates back more than decade. In 2008 the Company acquired the land and easements to construct the necessary substation(s) and line(s). The need for the project was then reviewed each year to determine when the project would need to be completed. In 2013 it was determined that Broken Ground would need to be placed in service by the summer of 2017. At that time the need for Broken Ground stopped being discussed during the Joint Planning Process because the study group assumes that projects that have been approved will be completed and placed into service. The need and scope of this project was reviewed and determined justified as part of the PUC Engineering and Operation Audit completed in 2013.

Also, in 2013 a Unitil project team was created that was responsible for the design, permitting, and construction of Broken Ground substation and the associated lines. The Company's project manager routinely met with the Eversource Transmission project team to review and discuss the status of the Eversource and Unitil substation projects.

Due to the nature of the site it was determined that the permitting and "make-ready" site work would be performed jointly between the Company and Eversource. With the project taking place in the Company's service territory and on the Company's land rights it was determined that the Company's project team would manage the permitting and "make-ready" site work. The Company billed Eversource ($504,274.29) for their share (50%) of this effort.

The rest of the project was managed as two separate projects with Eversource Transmission managing the Eversource Transmission components of the project as well as the Eversource 318 line modifications and the Company managing the Unitil aspects of the project.

i. The Company and Eversource decided early in the project that the Company would take the lead on the permitting and "make-ready" construction efforts on the substation site. This was designed to minimize confusion and maintain the project schedule.

ii. The Company conducted several site visits prior to construction and also had the area surveyed. Several design iterations were completed prior to finalizing on a line design and writing the initial authorization in 2016.

iii. The Company's surveyed data of the area also included the elevations of the existing 115kV line conductors (heights at the time

Unitil Energy Systems, Inc.
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of survey). Unitil's final design in the area provided twelve feet or more of clearance between the Company's lines and the Eversource P148 and M108 transmission lines at the time of survey. This being the case the Company made the assumption when writing the initial authorization that the lines would not need to be raised.

The Company submitted its crossing proposal to Eversource. As part of Eversource's review and based on maximum design sag conditions of the lines the Eversource transmission design determined that the P148 and M108 would need to be raised to allow additional clearance.

The Company's initial project estimate included a $50,000 estimate for alterations to the Eversource 318 (34.5kV) Line. Upon learning that the 115kV lines would need to be raised the Company developed an estimate for placing the lines across the Eversource right-of-way underground. Based on the Company's estimating models, similar projects and discussions with contractors, the underground option was determined to be approximately $725,000 without construction overheads.

With the Eversource estimate for raising the lines being less than the underground option the Company revised the authorization to include the line raising. The estimate for the line raising and the 318 work is detailed below.

318 Line Raise-Construction	$55,000	Materials	$5000
P145 Line Raise-Construction	$140,000	Materials	$57,000
M108 Line Raise-Construction	$110,000	Materials	$57,000
Engineering			$60,000
Total (Direct Costs)			$432,700

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Total (with Indirect Costs Assumed 10%) $475,970

b. The Company performed all work associated with the construction of the new Unitil 38, 3376 and 3387 distribution lines. Eversource performed all work associated with the raising of the Eversource P148 and M108 transmission lines and modifications to the 318 distribution line. Eversource's cost for this work was $526,488 which was billed to the Company. The Company's cost for this work including construction overheads and excluding the Eversource work billed to the Company was $1,344,715.60 for a total cost of $1,871,203.60 including the cost billed to the Company from Eversource.

c. The Company fully managed the construction of the Unitil 38, 3376 and 3387 distribution lines. Eversource managed the raising work associated with their lines. The Company was also in regular communications with Eversource regarding the status of the Eversource work on the 318, P148 and M108 lines. Additionally, the Company identified clearance concerns associated with the completed 318 line modifications that Eversource had to address prior to the Company energizing the new lines from Broken Ground to Hollis.

d. Energy TS 1-25 Attachment 1 is the final invoice given to the Company by Eversource for the P148 and M108 line work as well as the 318 line modifications.

Capital Budget 2019 UES Seacoast

Project Description

Year:	2019
Company:	UES Seacoast
Status:	[A] Accepted
Priority:	3
Budget Category:	GPBE03 Structures
Project Name:	Acquisition of New DOC & Sale of Existing DOC
Submitted By:	Jacquie Agel

Project Categorizations

Other

Project Estimates

Labor Time to Install (Man Hours):	
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	
Other Specific Charges ($):	1200000
Overhead on Specific Charges (%):	
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	900000
Salvage:	1000000

Description/Scope

Purchase a land or building for a new Seacoast DOC facility.

Sale of existing DOC Seacoast facility @ 114 Drinkwater Road, Kensington, NH

Includes preliminary survey and due diligence costs to vet existing building and land acquisition opportunities, as well as, the sale of 114 DWR.

This process started in 2017.

A P&S agreement for the purchase of a parcel of land in Exeter, NH was entered into in June 2018 with approx. 12 months of due diligence prior to closing on the transaction. $1.2M (includes land purchase $1M, closing costs, broker's fee, current use tax, PSI costs)

Justification

The current facility is nearing 70+ years old, windows are original and need to be replaced and the garage height does not allow adequate clearance for new and taller bucket trucks.

Note:
This budget item is set up the same as the 2014 Non-Budget Auth (004075) for the acquisition of the new Portland DOC and the sale of 1075 Forest Ave. Two CWO s were used. One for acquisition and one for sale. That Auth included values for Retirement and Salvage (the proceeds of the sale of Forest Ave). The values for both in this 2019 Budget Item are estimates at this time.

UES Seacoast
Construction Authorization

AUTH: **191035**
Date: **2/8/2019**
Budgeted Amount: **$1,200,000.00**

Budget Item No: **GPBE03**
Budget Year: **2019**
Description: **Acquisition of New DOC & Sale of Existing DOC**
Project Supervisor: **Agel, Jacquie**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **2/8/2019 2:59:19 PM**
Initiated By: **Doucette, George**
Finalized Date: **3/28/2019 8:34:19 AM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
3/1/2019	YES	**Lydon, Lisa** *Plant Accountant*
3/1/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
3/21/2019	YES	**Agel, Jacquie** *Manager, Fleet & Facilities*
3/22/2019	YES	**Closson, John** *VP, People, Shared Services & Org. Effectiveness*
3/28/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
3/12/2019	YES	**Sprague, Kevin** *VP, Engineering*
3/20/2019	YES	**Main, Dan** *Assistant Controller*
3/22/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*
3/21/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$1,200,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$1,200,000.00
Retirement:	$900,000.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$1,200,000.00

DESCRIPTION/SCOPE

Purchase land for a new Seacoast DOC facility.

Sale of existing DOC Seacoast facility @ 114 Drinkwater Road, Kensington, NH

Includes preliminary survey and due diligence costs to vet existing building and land acquisition opportunities, as well as, the sale of 114 Drinkwater Rd.

A P&S agreement for the purchase of a parcel of land in Exeter, NH was entered into in June 2018 with approx. 12 months of due diligence prior to closing on the transaction. $1.2M (includes land purchase $1M, closing costs, broker's fee, current use tax, PSI costs)

JUSTIFICATION

The current facility is nearing 70+ years old, windows are original and need to be replaced and the garage height does not allow adequate clearance for new and taller bucket trucks.

NOTES

AUTHORIZATION COMMENTS

CWO Summary

CWO	Description	Amount
20192713	Acquisition of New DOC & Sale of Existing DOC	$0.00
20192714	Acquisition of New DOC	$1,175,000.00
20192715	Sale of Existing DOC	$25,000.00
	Total	$1,200,000.00

UES Seacoast
Construction Authorization

AUTH: **191035**
Date: **4/22/2021**
Budgeted Amount: **$1,200,000.00**

Budget Item No:	**GPBE03**	Type:	**Revision**
Budget Year:	**2019**	Sequence:	**2**
Description:	**Acquisition of New DOC & Sale of Existing DOC**	Status:	**Completed**
Project Supervisor:	**Agel, Jacquie**	Initiated Date:	**4/22/2021 11:52:55 AM**
Crew Days:	**0**	Initiated By:	**Doucette, George**
Start Date:		Finalized Date:	**6/16/2021 9:56:05 AM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
4/29/2021	YES	**Lydon, Lisa** *Plant Accountant*
4/29/2021	YES	**Bickford, Tressa** *Manager Utility Accounting and Budgeting*
4/29/2021	YES	**Agel, Jacquie** *Manager, Fleet & Facilities*
5/14/2021	YES	**Sankowich, Sara** *Manager, Forestry Operations & Sustainability*
5/26/2021	YES	**Letourneau, Raymond** *VP, Electric Operations*
5/26/2021	YES	**Bonazoli, John** *Manager Distribution Engineer*
6/2/2021	YES	**Sprague, Kevin** *VP, Engineering*
6/2/2021	YES	**Diggins, Todd** *Treasurer, Director, Finance*
6/2/2021	YES	**Hurstak, Daniel** *Controller*
6/16/2021	YES	**Hevert, Robert** *Senior Vice President & Chief Financial Officer & Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$1,322,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$1,322,000.00
Retirement:	$900,000.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$1,322,000.00

DESCRIPTION/SCOPE

Revision notes:
Requesting additional $122,000 to cover the cost of Phase II environmental site assessment work and legal fees in connection with selling this property.

Original notes:
Purchase land for a new Seacoast DOC facility.

Sale of existing DOC Seacoast facility @ 114 Drinkwater Road, Kensington, NH

Includes preliminary survey and due diligence costs to vet existing building and land acquisition opportunities, as well as, the sale of 114 Drinkwater Rd.

A P&S agreement for the purchase of a parcel of land in Exeter, NH was entered into in June 2018 with approx. 12 months of due diligence prior to closing on the transaction. $1.2M (includes land purchase $1M, closing costs, broker's fee, current use tax, PSI costs)

JUSTIFICATION

Revision notes:
Phase II environmental assessment is needed to determine and document unknown environmental conditions in an effort to reduce Unitil's liability to the extent possible when the property is sold.

Original notes:
The current facility is nearing 70+ years old, windows are original and need to be replaced and the garage height does not allow adequate clearance for new and taller bucket trucks.

NOTES

AUTHORIZATION COMMENTS

CWO Summary

CWO	Description	Amount
20192713	Acquisition of New DOC & Sale of Existing DOC	$0.00
20192714	Acquisition of New DOC	$1,175,000.00
20192715	Sale of Existing DOC	$147,000.00
	Total	$1,322,000.00

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-67 Witness: John F. Closson

REQUEST:

Reference: Tech Session held on July 26, 2021, and also testimony of John F. Closson, Exhibit JFC-2 and JFC-3 at Bates 343-344. At the Tech Session, Unitil stated that it chose not to commission an independent commercial appraisal of the Exeter property before entering into the Purchase and Sale Agreement with the Seller because the Company was relying on real estate market data provided by the Company's realtor and recent referrals also provided by the realtor as represented in Exhibit JFC-3.

a. Did the Company's realtor provide an opinion of value related to the Exeter property? If yes, please provide a copy of the realtor's opinion. If not, please describe the decision-making process the company undertook to verify that the $1 million purchase price for the Exeter property was reasonable and not in excess of current market values for similarly situated properties.
b. How many of the sites listed in Exhibit JFC-3 were visited and inspected by Unitil?
c. It appears that many of the sites listed were rejected by Unitil because they represented a "non-central location within service territory." What areas within the Company's seacoast service territory does Unitil consider a central location? What criteria did the Company use to determine what constitutes a central location? Was it reasonable for the Company to assume that there would be a broad range of choices under such a limiting criteria? Is the existing Drinkwater Road location in Kingston considered by Unitil to be a central location? Did the Company ever consider non-central sites and did Unitil's realtor provide research on those sites?
d. The locations matrix prepared by the Company's realtor in Exhibit JFC-3 at Bates 343 is dated April 13, 2017. Given that the Purchase and Sale Agreement for the Exeter property was not executed by the Unitil until approximately one year later, June 5, 2018, did Unitil continue its property search during the interim or did it effectively end its search in April of 2017? If the search continued, what other locations were considered by the Company?
e. Reference locations matrix in d. above:
    i. Site #6 : "May be interested in selling." Was this option pursued further with the owners by Unitil? If yes, what was the outcome? If not, why not?
    ii. Site #'s 10, 14, 15, and 17: "Passed on this due to location within service territory…Undetermined usable acreage." What other factors aside from being non-central locations disqualified these sites for Unitil? Did Unitil ever conduct site visits of these locations to determine what made them unusable or undesirable?

RESPONSE:

a. The Company's realtor did not provide an opinion of value related to the Exeter property. The decision-making process to verify that the $1 million

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purchase price was based on comparable properties on the market. The Company reviewed historical transactions in the region provided by its realtor to compare pricing to the amount requested by the seller. The Company also had list pricing for adjacent parcels including 19, 22 and 24 Continental Drive for its consideration. The Company determined tha the purchase price paid for the Exeter property was reasonable and within the range of comparable transactions. The Company notes that numerous factors, including buildable area, site access, and proximity to towns within the Company's service territory, were also considered in the Company's evaluation process.

b. Two of the sites listed on Exhibit JFC-3 were visited by the Company. Site #1 22 Industrial Drive, Exeter was visited and toured by the Company and its representatives. Site #5 was visited by the Company. This visit included both 20 Continental Drive and 19 Continental Drive. A site visit was not required for site #9 on the list as the Company has extensive knowledge of this site, 319 New Zealand Rd, Seabrook, as the location has acted as the Company's staging site for storm restoration efforts. The Company was able to narrow down site visits to two through a prioritization process where all sites were evaluated through an internal charrette evaluating location, size, buildable area, access and other factors.

c. As stated in Exhibit JFC-1, see Bates 000279, locations along NH Route 101 corridor between Exeter and Hampton were preferential to the Company based on historic outage data, see Exhibit JFC-4, Bates 00345. A location in this area would provide proximity to the towns which constituted the bulk of the Company's seacoast customer interruption. A location along the NH Route 101 corridor between Exeter and Hampton would also provide access to NH Route 111 and 125 which extends to the Company's western seacoast service territory, including Plaistow, another location with many customer interruptions as shown in Exhibit JFC-4.

The company used outage data (Exhibit JFC-4, Bates 000345), for a four year period (Jan 2013 – Dec 2016), showing total outage incidents, customers interrupted and Customer-Minutes of Interruption.

Yes, it was reasonable for the Company to assume there would be a broad range of choices along the NH Route 101 corridor between Exeter and Hampton as the Company's realtor had informed the Company that multiple commercial sites had been sold and/or developed in that area over previous years.

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Date Request Received: 08/05/2021 Date of Response: 08/19/2021
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Yes, the Drinkwater Road location in Kensington would be considered a central location; however, this site is limited as all traffic must traverse a narrow and heavily treed town road (Drinkwater Road) for approximately 2 miles.

The Company did consider non-central sites that the realtor provided. See Exhibit JFC-3, Bates 000343. The notes section of this document includes why the parcels were not selected, including information provided by the realtor.

d. The Company worked with a realtor and vetted options from the time the site search began and until a Purchase and Sales Agreement was executed for the 20 Continental Drive parcel. Additional locations that were considered included; 22 Industrial Drive and 19 Continental Drive, both locations are located in Exeter, NH. The Company was presented with two properties in Epping, NH (Epping Crossing and 46 Martin Road) which were passed on because they are located outside of the Company's electric service territory (site visits were not conducted).

e. Reference locations matrix in d. above:

   i. Site #6 was not pursued. It was not on the market.

   ii. Site #s 10, 14, 15 and 17. No other factors aside from being non-central locations disqualified these sites for Unitil. Site visits were not conducted.

Unitil Energy Systems, Inc.
Minutes of Meeting of Directors
July 25, 2018

- A meeting of the Board of Directors of Unitil Energy Systems, Inc., duly called, was held today at the office of the Company, 6 Liberty Lane West, Hampton, New Hampshire, at eight o'clock (8:00 AM).

- Present were the following Directors of the Company: Robert V. Antonucci, David P. Brownell, Lisa Crutchfield, Albert H. Elfner, III, Edward F. Godfrey, Michael B. Green, Thomas P. Meissner, Jr., Eben S. Moulton, M. Brian O'Shaughnessy, David A. Whiteley

- Also present: Mark H. Collin, Senior Vice President, Chief Financial Officer and Treasurer (Unitil Corporation); Laurence M. Brock, Chief Accounting Officer and Controller (Unitil Corporation); Todd R. Black, Senior Vice President (Unitil Corporation)

  - Presiding: President, Thomas P. Meissner, Jr.

  - Recording: Secretary, Sandra L. Whitney

- The minutes of the last meeting of the Board of Directors held on April 25, 2018, were unanimously approved, and the reading of said minutes was waived.

Mr. Meissner opened the meeting.

Purchase and Sale Agreement

Mr. Meissner explained that the existing Seacoast distribution operating center ("DOC") facility is over 70 years old and current daily operational requirements have outgrown the facility, and a new DOC facility is needed. Mr. Meissner stated that options were vetted land was located at 20 Continental Drive in Exeter, New Hampshire, and that the post P&S due diligence work is expected to be completed successfully, including building design and permitting, and the land will be purchased by mid-2019.

Mr. Meissner then proposed the following motions:

Action A: Approval to Execute Purchase and Sale Agreement

The Board was asked to authorize management to execute a Purchase and Sale Agreement in connection with the purchase of land in Exeter, New Hampshire, for the purpose of expansion of the Company's Seacoast distribution operating center. On motion duly made and seconded, the following vote was unanimously adopted:

VOTED:

That the president, any vice president, and the treasurer (together, "Authorized Officers"), of Unitil Energy Systems, Inc. (the "Company") or any of them, be and they hereby are authorized and directed to enter into with Garrison Glen LLC, a New Hampshire limited liability company (together with its successors and assigns, "Seller"), from time to time, on behalf of this Company ("Buyer"), a purchase and sale agreement for the property located at 20 Continental Drive, Exeter, New Hampshire, and any other agreement, instrument, certificate, representation and document, and to take any other action as may be advisable, convenient or necessary, the execution thereof by any such Authorized Officer shall be conclusive as to such determination; and further,

That the Authorized Officers, or any of them, be and they hereby are authorized and directed to execute and deliver any and all documents and agreements relating thereto, and to extend, renew, renegotiate or otherwise modify such terms and conditions by agreement with Seller, and to execute and deliver such necessary documents, in each case, as and upon such terms and conditions as any such Authorized Officer may deem necessary, desirable, or appropriate, as conclusively evidenced by the execution of any such documents and agreements; and further,

That all acts and deeds of any Authorized Officer of this Company heretofore performed on behalf of this Company in entering into, executing, performing, carrying out or otherwise pertaining to the arrangements and intentions authorized by these resolutions are hereby ratified, approved, confirmed and declared binding upon this Company; and further,

That the Secretary shall certify to Seller the names and titles of the Authorized Officers of this Company, and Seller shall be fully protected in relying on such certifications of the Secretary and shall be indemnified and saved harmless from any claims, demands, expenses, loss or damage resulting from or growing out of honoring the signature of any officer so certified or for refusing to honor any signature not so certified; and further,

That the Secretary be and she hereby is authorized and directed to certify to Seller the foregoing resolutions and that the provisions thereof are in accordance with the provisions of law and of the Articles of Incorporation and the By-Laws of this Company.

UNITIL ENERGY SYSTEMS, INC.

CERTIFICATE OF VOTE

VOTED:

That the president, any vice president, and the treasurer (together, "Authorized Officers"), of Unitil Energy Systems, Inc. (the "Company") or any of them, be and they hereby are authorized and directed to enter into with Garrison Glen LLC, a New Hampshire limited liability company (together with its successors and assigns, "Seller"), from time to time, on behalf of this Company ("Buyer"), a purchase and sale agreement for the property located at 20 Continental Drive, Exeter, New Hampshire, and any other agreement, instrument, certificate, representation and document, and to take any other action as may be advisable, convenient or necessary, the execution thereof by any such Authorized Officer shall be conclusive as to such determination; and further,

That the Authorized Officers, or any of them, be and they hereby are authorized and directed to execute and deliver any and all documents and agreements relating thereto, and to extend, renew, renegotiate or otherwise modify such terms and conditions by agreement with Seller, and to execute and deliver such necessary documents, in each case, as and upon such terms and conditions as any such Authorized Officer may deem necessary, desirable, or appropriate, as conclusively evidenced by the execution of any such documents and agreements; and further,

That all acts and deeds of any Authorized Officer of this Company heretofore performed on behalf of this Company in entering into, executing, performing, carrying out or otherwise pertaining to the arrangements and intentions authorized by these resolutions are hereby ratified, approved, confirmed and declared binding upon this Company; and further,

That the Secretary shall certify to Seller the names and titles of the Authorized Officers of this Company, and Seller shall be fully protected in relying on such certifications of the Secretary and shall be indemnified and saved harmless from any claims, demands, expenses, loss or damage resulting from or growing out of honoring the signature of any officer so certified or for refusing to honor any signature not so certified; and further,

That the Secretary be and she hereby is authorized and directed to certify to Seller the foregoing resolutions and that the provisions thereof are in accordance with the provisions of law and of the Articles of Incorporation and the By-Laws of this Company.

I, Sandra L. Whitney, hereby certify that I am Secretary of Unitil Energy Systems, Inc.; that the foregoing is a true copy from the record of votes unanimously adopted at a meeting of the Directors of said Company, duly called and held July 25, 2018, at which meeting a quorum was present and acting throughout; and that the said votes have not since been altered, amended or rescinded.

WITNESS my hand and the corporate seal of Unitil Energy Systems, Inc. this 22nd day of July, 2019.

Sandra L. Whitney
Secretary

UNITIL ENERGY SYSTEMS, INC.
CERTIFICATE OF INCUMBENCY AND SIGNATURES

I, Sandra L. Whitney, hereby certify that I am the Secretary of Unitil Energy Systems, Inc. (the "Company"), a New Hampshire corporation, and that, as such, I am authorized to execute this Certificate on behalf of the Company, and further certify that the persons listed below hold the office in the Company indicated opposite his name on the date hereof and that the signature appearing opposite his/her name is the genuine signature of each such person:

NAME	TITLE	SIGNATURE
Thomas P. Meissner, Jr.	President	
Todd R. Black	Senior Vice President	
Christine L. Vaughan	Senior Vice President & Treasurer	
Raymond J. Letourneau, Jr.	Vice President	
Laurence M. Brock	Controller	
Sandra L. Whitney	Secretary	

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of Unitil Energy Systems, Inc. this 25th day of July, 2019.

Secretary

(Corporate Seal)

I, Laurence M. Brock, do certify that I am Controller of Unitil Energy Systems, Inc. and do further certify that Sandra L. Whitney is the duly elected, qualified and acting Secretary of Unitil Energy Systems, Inc. and that the signature set forth above is her genuine signature.

WITNESS my hand this 25th day of July, 2019.

Laurence M. Brock
Controller

Operations Update
July 2018

GENERAL TOPICS

New Seacoast Operations Center

- Unitil Energy Systems has executed a Purchase and Sales agreement for the acquisition of an 11.75 acre parcel in Exeter New Hampshire along the Rt. 101 corridor which will be the site of a new Distribution Operations Center. We have begun the immediate due diligence phase of the project. We will also be evaluating whether this new facility can accommodate space needs present throughout the organization (i.e, central electric dispatch, system emergency operations center, Prometric OQ testing center, etc.).

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Revised Response: 11/12/2021
Request No. Energy 6-29 Witness: John F. Closson

REQUEST:

Reference DOE 4-68: Kensington/Exeter DOC Project. Please provide copies of all meeting minutes from any Board of Directors meetings, and copies of all written communications between and among board members, executive officers, and/or Unitil staff, related to all discussions involving the following:

a. Initial proposals and presentations that prompted the Board to consider the need for a new Seacoast DOC.
b. The Proposed Seacoast Region Facility Project Decision Document and the Procon Study (Exhibit JFC-2), including any discussions or communications related to Options 1 – 4, the risk assessments, cost estimates, and construction schedule.
c. Any presentations and communications by and with the Company's realtor related to property searches and listings, market conditions, rental options, and potential purchasing opportunities.
d. The purchase and sale of 20 Continental Drive (Lot 6), Exeter, New Hampshire.
e. The real estate listing and pricing for 114 Drinkwater Road, Kensington, New Hampshire.
f. Final decision and approval by the Board for construction of the Exeter DOC.

REVISED RESPONSE:

Following a discussion between the Company and the Commission Staff regarding the scope of this request, Staff helpfully refined the request as follows:

Reference DOE 4-68: Kensington/Exeter DOC Project. Please provide copies of all meeting minutes from any Board of Directors meetings, and copies of all written communications between and among board members, including the Chair of the Board, ~~executive officers,~~ and/or corporate officers, ~~Unitil staff,~~ related to all discussions involving the following:

a. Initial proposals and presentations that prompted the Board to consider the need for a new Seacoast DOC.
b. The Proposed Seacoast Region Facility Project Decision Document and the Procon Study (Exhibit JFC-2), including any discussions or communications related to Options 1 – 4, the risk assessments, cost estimates, and construction schedule.
c. Any presentations and communications by and with the Company's realtor related to property searches and listings, market conditions, rental options, and potential purchasing opportunities.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Revised Response: 11/12/2021
Request No. Energy 6-29 Witness: John F. Closson

d. The purchase and sale of 20 Continental Drive (Lot 6), Exeter, New Hampshire.
e. The real estate listing and pricing for 114 Drinkwater Road, Kensington, New Hampshire.
f. Final decision and approval by the Board for construction of the Exeter DOC.

a. The Board did not "consider the need for a new Seacoast DOC" at any of the meetings of the Board. Board members exercise their fiduciary duty to the Company and its shareholders by, among other things, providing oversight of the development of Company policy and strategy, and assessing the Company's operational effectiveness and financial strength. The Board does not serve as the final approver of operational decisions and capital projects. Such decisions are entrusted to management and senior management personnel, who provide updates to the Board as necessary.

   The Company did seek Board approval of a purchase and sale agreement in connection with the acquisition of the land in Exeter. Please see Energy 6-29 Attachment 1, which includes (1) a relevant excerpt of minutes of from the July 25, 2018 meeting of the Unitil Board of Directors, during which the Board authorized management to execute a purchase and sale agreement in connection with the acquisition of the land in Exeter; (2) a Certificate of Vote in connection with the purchase and sale agreement; and (3) a relevant excerpt from an Operations Update for July 2018.

b. The Company conducted a search of its email archive using the parameters established by the Staff's revised request and located no responsive written communications. As a general matter, corporate officers did not confer with the Board about the new Seacoast DOC by email. The Company notes that Board members do not maintain Unitil email addresses, and the Company has no access to the email accounts of Board members.

c. Please see the Company's response to subpart b.

d. Please see the Company's responses to subparts a. and b.

e. Please see the Company's response to subpart b.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Revised Response: 11/12/2021
Request No. Energy 6-29 Witness: John F. Closson

f. Please see the Company's response to subparts a and b.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 2

Date Request Received: 10/29/2021 Date of Response: 11/12/2021
Request No. Energy TS 2-9 Witness: John F. Closson

REQUEST:

Reference Testimony of John F. Closson, Exhibit JFC-2 at Bates 285, 287, 292, and 310. According to the Decision Document, the decision to move forward with the planning for new seacoast facility was begun in 2017 and a search committee was formed to consider potential sites. The date of the Decision Document was June 17, 2019, and the date of the ProCon Study was March 26, 2019. The Purchase and Sale Agreement for the Exeter property was dated June 15, 2018. Given that the ProCon Study and the Decision Document (providing the DOC options analysis for Unitil) were not available to decision makers until 2019, please explain the basis for management's decision to move forward with the seacoast facility project and the purchase of a new site two years prior to the availability of that information.

RESPONSE:

In 2017 the Company began reviewing available commercial properties as part of its plan to replace the existing Seacoast Electric Distribution Operations Center (DOC). On June 15, 2018, after more than a year of searching for a suitable location, the Company entered into a purchase and sales (P&S) agreement for land in Exeter, New Hampshire at 20 Continental Drive. It was important to the Company to enter into the P&S agreement to reserve this land due to the limited amount of suitable options within the Company's seacoast electric service territory.

The P&S agreement included language stating that the purchaser (the Company) could terminate the agreement any time, for any reason or no reason, within the Due Diligence or Permitting Due Diligence periods (see Bates 000315). The Due Diligence period and the Permitting Due Diligence period were 90 days and 180 days respectively. The P&S included a Company option to extend the Permitting Due Diligence period an additional 180 days. Before closing on the land purchase, the Company prepared the Decision Document and ProCon study which included cost estimates of four final options reviewed by the Company (see Bates 000309).

Capital Budget 2019 UES Seacoast

Project Description

Year:	2019
Company:	UES Seacoast
Status:	[A] Accepted
Priority:	3
Budget Category:	GPBE02 Structures
Project Name:	Construction - New DOC Facility
Submitted By:	Jacquie Agel

Project Categorizations

Repair/Replacement

Project Estimates

Labor Time to Install (Man Hours):	
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	
Other Specific Charges ($):	5000000
Overhead on Specific Charges (%):	
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	
Salvage:	

Description/Scope

Construct a new NH Seacoast Region Electric Distribution Operations Facility (DOC), in Exeter, to include;

* Preconstruction:, engineers & designers, construction management pre-construction services, geo-tech, civil/survey, environmental survey, legal fees, permitting, insurance, etc.

*Construction: site work, utilities (electric, gas, telco, sewer/water), construction to include:
** 50,000 sf +/- sf for office areas, warehouse, enclosed vehicle storage area with a wash bay, etc.
** Bermed outside transformer storage area with overflow/run off tank in case of spill, mimics Lunenburg DOC
** Bermed outside storage area with piping to tie in with transformer overflow/run off tank , mimics Lunenburg DOC
** Outside material laydown areas
** Natural Gas Generator
** Construction Administration: Construction Manager and engineers & designers field observations, RFIs, Submittals review and other miscellaneous construction phase documentation.
** Project Close Out: Commissioning, As-Builts, etc.
** Furniture/Furnishings/Equipment: Office, warehouse, operations areas, building electronic access and security systems, and Information Technology infrastructure.
** Move

Anticipated Schedule:
Q4 2018/Q1 2019: Complete P&S due diligence and purchase land (separate Auth).

Q1 2019 Break ground/begin construction

Q1 2020: Completion, Commissioning and Occupancy

Justification

The current Distribution Operations Center (DOC) is 70+ years old and no longer adequately supports the present day operational needs of UES/Seacoast. The line truck garage height and therefore height of its doors is inadequate leaving very little clearance for today's bucket trucks.

This budget item is set up the same as the 2017 Non-Budget Auth (017084) for the construction of the new FGE DOC.

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Capital Budget 2020 UES Seacoast

Project Description

Year: 2020
Company: UES Seacoast
Status: [A] Accepted
Priority: 3
Budget Category: GPCE03 Structures, Carryover
Project Name: Construct New NH Seacoast Region Facility, Exeter
Submitted By: George Doucette

Project Categorizations

Other

Project Estimates

Labor Time to Install (Man Hours):	
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	
Other Specific Charges ($):	10000000
Overhead on Specific Charges (%):	
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	
Salvage:	800000

Description/Scope

Construct a new NH Seacoast Region Facility, in Exeter NH, to include space for the following business needs; NH Seacoast's Electric Distribution Operations Center (DOC), Business Continuity for Gas Control & Field Services, System Emergency Operating Center (S-EOC), Central Electric Dispatch (CED), OQ Testing, Training, Offices and lab for Electric Engineering Department.

Scope to include;

* Preconstruction:, engineering & design, construction management pre-construction services, geo-tech, civil/survey, environmental survey, legal fees, permitting, insurance, etc.

*Construction: site work, utilities (electric, gas, comm, sewer/water), construction to include:
** 53,940 sf +/- sf for office areas, warehouse, enclosed vehicle storage area with a wash bay, etc.
** Bermed outside transformer storage ** Bermed outside storage ** Outside material laydown areas
** Emergency back-up Generator
** Construction Administration: Construction Manager and engineers & designers field observations, RFIs, Submittals review and other miscellaneous construction phase documentation.
** Project Close Out: Commissioning, As-Builts, etc.
** Furniture/Furnishings/Equipment: Office, warehouse, operations areas, building electronic access control and security systems, and Information Technology infrastructure.
** Move

Schedule:
Q3 2019: Complete P&S due diligence and purchase land (separate Auth).
Q3 2019 Break ground/begin construction
Q2/Q3 2020: Completion, Commissioning and Occupancy

Justification

The current Distribution Operations Center (DOC) is 60+ years old and no longer adequately supports the present day operational needs of UES/Seacoast. The current DOC was constructed in the 1950s. Since that time the customer base has grown as has the requirement to stock more materials (inside and out) including transformers and poles. The transformers take up a great deal of space in a stockyard that was designed for operations 60+ years ago when utility trucks were much smaller. The current day line trucks barely fit into the 1950s garage. In addition, this building will solve space constraints at other company facilities, in connection with business continuity for the company's Gas Control, Field Services and Central Electric Dispatch (CED) functions , Electric Engineering department including lab space for functional testing of equipment as well as, provide space for a Prometric certified Operator Qualifications (OQ) testing

UES Seacoast
Construction Authorization

AUTH: **191060**
Date: **8/22/2019**
Budgeted Amount: **$5,000,000.00**

Budget Item No:	**GPBE02**	Type:	**Original**
Budget Year:	**2019**	Sequence:	**1**
Description:	**Construction - New DOC Facility**	Status:	**Completed**
Project Supervisor:	**Agel, Jacquie**	Initiated Date:	**8/22/2019 11:47:27 AM**
Crew Days:	**0**	Initiated By:	**Doucette, George**
Start Date:		Finalized Date:	**9/12/2019 9:46:20 AM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
9/10/2019	YES	**Lydon, Lisa** *Plant Accountant*
9/10/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
9/10/2019	YES	**Agel, Jacquie** *Manager, Fleet & Facilities*
9/11/2019	YES	**Closson, John** *VP, People, Shared Services & Org. Effectiveness*
9/11/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
9/11/2019	YES	**Sprague, Kevin** *VP, Engineering*
9/11/2019	YES	**Main, Dan** *Assistant Controller*
9/12/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
9/12/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$15,931,474.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$15,931,474.00
Retirement:	$0.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$15,931,474.00

DESCRIPTION/SCOPE

Construct a new NH Seacoast Region Facility, in Exeter NH, to include space for the following business needs; NH Seacoast's Electric Distribution Operations Center (DOC), Business Continuity for Gas Control & Field Services, System Emergency Operating Center (S-EOC), Central Electric Dispatch (CED), OQ Testing, Training, Offices and lab for Electric Engineering Department.

Scope to include:

Preliminary Survey cost including:
- Preconstruction, engineering & design, construction management pre-construction services, geo-tech, civil/survey, environmental survey, legal fees, permitting, insurance, etc.

Construction: site work, utilities (electric, gas, comm, sewer/water), construction to include:
- 53,940 sf +/- sf for office areas, warehouse, enclosed vehicle storage area with a wash bay, etc.
- Bermed outside transformer & other storage
- Outside material laydown areas
- Emergency back-up Generator
- Construction Administration: Construction Manager and engineers & designers field observations, RFIs, Submittals review and other miscellaneous construction phase documentation.
- Project Close Out: Commissioning, As-Builts, etc.
- Furniture/Furnishings/Equipment: Office, warehouse, operations areas, building electronic access control and security systems, and Information Technology infrastructure.
- Move

This is a multi-year project:
Q3 2019 Break ground/begin construction
2020 Completion, Commissioning and Occupancy

JUSTIFICATION

The current Distribution Operations Center (DOC) is 60+ years old and no longer adequately supports the present day operational needs of UES/Seacoast. The current DOC was constructed in the 1950s. Since that time the customer base has grown as has the requirement to stock more materials (inside and out) including transformers and poles. The transformers take up a great deal of space in a stockyard that was designed for operations 60+ years ago when utility trucks were much smaller. The current day line trucks barely fit into the 1950s garage. In addition, this building will solve space constraints at other company facilities, in connection with business continuity for the company's Gas Control, Field Services and Central Electric Dispatch (CED) functions , Electric Engineering department including lab space for functional testing of equipment as well as, provide space for a Prometric certified Operator Qualifications (OQ) testing.

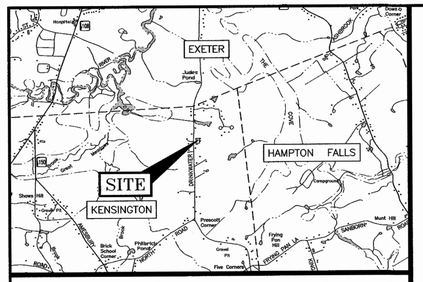
NOTES

Preliminary Survey costs need to be transferred into individual CWO's.

AUTHORIZATION COMMENTS

CWO Summary

CWO	Description	Amount
20192718	Construction - New DOC Facility	$13,681,559.00
20192719	Engineering & Architectural Services	$933,415.00
20192720	Legal . Insurance, Permitting & Misc	$36,500.00
20192721	Internal Project Management	$150,000.00
20192722	Office: Furniture/Equip./Appliances & Furnishings	$825,000.00
20192723	Warehouse & Ops: Equipment & Furnishings	$20,000.00
20192724	IT / Data / Tel / Misc Equipment & Travel	$160,000.00
20192725	Move to 20 Continental Drive & Clean Out of 114 DWR Building	$125,000.00
	Total	$15,931,474.00



LOCATION MAP SCALE: 1" = 3,000'

TABLE A NOTES:

1) MONUMENTS ARE SHOWN ON THE PLAN.
2) ADDRESSES ARE SHOWN ON THE PLAN.
3) A PORTION OF THE PARCEL IS IN A SPECIAL FLOOD HAZARD AREA, ZONE A, AS SHOWN ON FIRM PANEL 33015C0408E. EFFECTIVE DATE MAY 17, 2005. SCALED LOCATION SHOWN ON THE PLAN.
4) EXISTING LOT AREA:
   1,159,078 S.F.
   26.6088 ACRES
5) NOT REQUESTED
6) PARCEL IS LOCATED IN THE RESIDENTIAL – AGRICULTURAL (RA) ZONING DISTRICT.
   DIMENSIONAL REQUIREMENTS (FROM ZONING ORDINANCE):
   (REQUIREMENTS SHOWN IN PARENTHESIS FOR BUSINESS, COMMERCIAL, OR INDUSTRIAL VENTURES)
   MIN. LOT AREA: 2 ACRES
   FRONTAGE: 200 FEET (250 FEET)
   SETBACKS:
   FRONT: 25 FEET (100 FEET)
   SIDE: 25 FEET (50 FEET)
   REAR: 25 FEET (50 FEET)
   MAXIMUM STRUCTURE HEIGHT
   (HIGHEST DOOR OR WINDOW): 32 FEET
7) NOT REQUESTED
8) SEE PLAN LOCATIONS FOR SUBSTANTIAL FEATURES OBSERVED.
9) TOTAL NUMBER OF ONSITE PARKING SPACES:
   (SEE PLAN FOR LOCATIONS)
   STANDARD SPACES: 69
   HANDICAP SPACES: 2
TOTAL: 71
10) NOT REQUESTED
11) UTILITY LOCATION: SEE PLAN LOCATION
   UTILITIES BASED UPON:
   OBSERVED EVIDENCE
   1993 LOT LAYOUT PLAN FROM UNITIL
12) NOT REQUESTED
13) SEE PLAN FOR NAMES OF ADJOINERS.
14) NOT REQUESTED
15) NOT REQUESTED
16) NO EVIDENCE OF EARTH MOVING WORK, ONGOING BUILDING CONSTRUCTION, OR BUILDING ADDITIONS UNDER CONSTRUCTION WAS OBSERVED.
17) BY CONSULTATION WITH TOWN OFFICIALS, NO CHANGES IN STREET RIGHT OF WAY LINES ARE PROPOSED. NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED.
18) SHOWN ON PLAN, SEE WETLAND NOTES FOR DELINEATION DETAILS.
19) NO PLOTTABLE OFFSITE EASEMENTS OR SERVITUDES HAVE BEEN DISCLOSED OR OBTAINED.
20) NOT REQUESTED
21) LEGAL DESCRIPTION – SHOWN ON PLAN SEE SHEET 3.

RESTRICTIONS TO SUBJECT PROPERTY

RESTRICTIONS REFERENCED TO SCHEDULE B II EXCEPTIONS IN COMMITMENT FOR TITLE INSURANCE DATED OCTOBER 25, 2017

(1) ANY AND ALL FACTS AND CONDITIONS AS SHOWN OR SET FORTH IN THE NOTES ON A PLAN OF LAND RECORDED IN SAID REGISTRY OF DEEDS AS PLAN #02130. SEE PLAN LOCATION.

(2) EASEMENTS, RESERVATIONS, CONDITIONS, AND AGREEMENTS SET FORTH IN DEED TO CHARLES W. BARKER DATED JULY 15, 1911 AND RECORDED IN SAID REGISTRY AT BOOK 661, PAGE 69. NOT PLOTABLE.

(3) EASEMENTS, RESERVATIONS, CONDITIONS AND AGREEMENTS AS SET FORTH IN THE DEED TO EXETER AND HAMPTON ELECTRIC COMPANY DATED JUNE 14, 1954 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AT BOOK 1319, PAGE 33. SEE PLAN LOCATION.

(4) RESTRICTIONS AND CONDITIONS AS SET FORTH IN THE CURRENT LAND USE DATED MARCH 18, 1999 AND RECORDED IN SAID REGISTRY OF DEEDS AT BOOK 3381, PAGE 2887. NOT A SURVEY ISSUE.

(5) CONDITIONS AS SET FORTH IN THE GROUNDWATER MANAGEMENT PERMIT ISSUED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES ISSUED ON JULY 15, 1999 AND RECORDED IN SAID REGISTRY AT BOOK 3413, PAGE 839. NOT A SURVEY ISSUE.

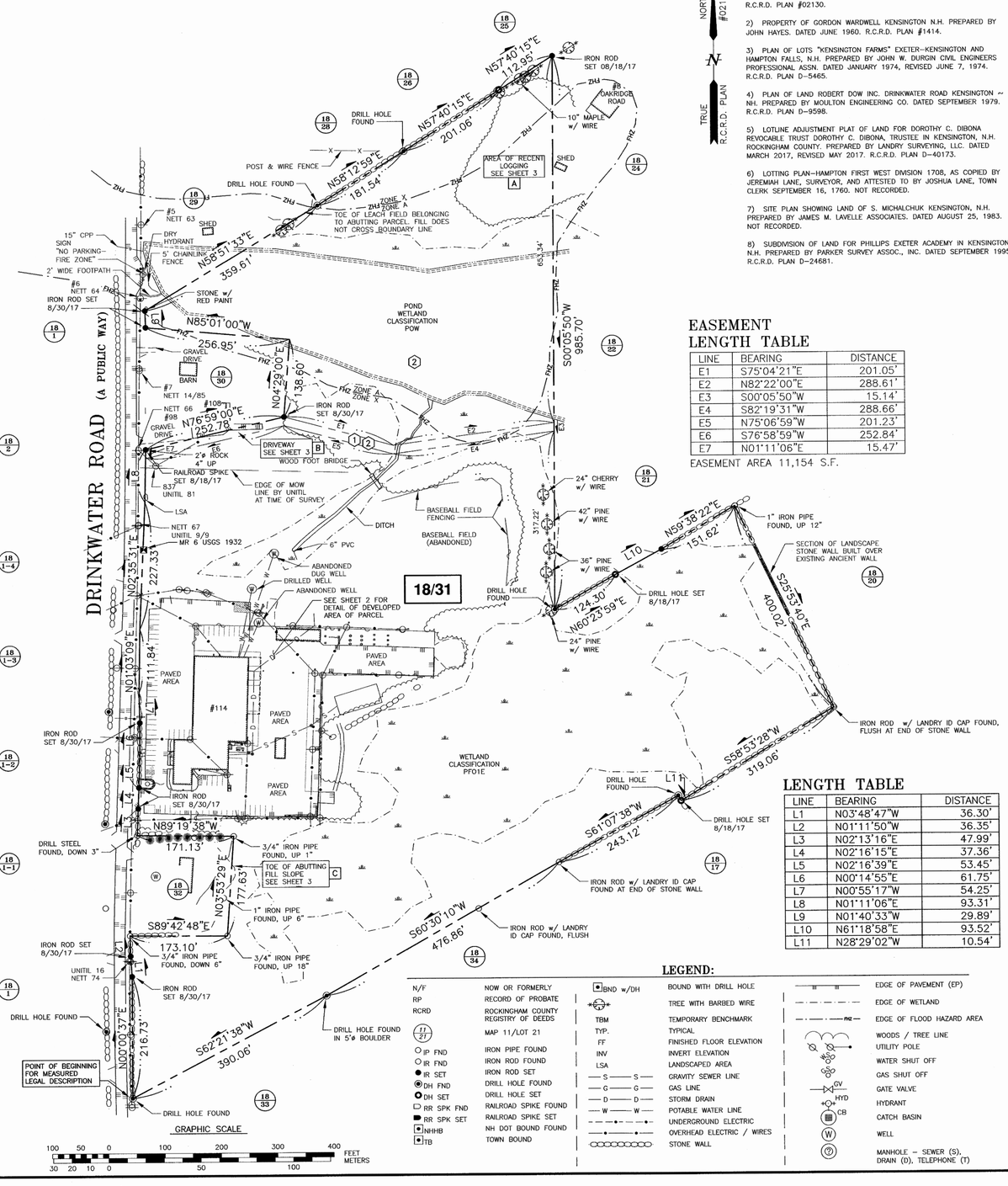
STATEMENT OF ENCROACHMENTS

[A] AREA OF RECENT LOGGING BY ABUTTER

[B] ASPHALT DRIVEWAY OF ABUTTER

[C] FILL SLOPE OF ABUTTING PROPERTY DEVELOPMENT

SEE SHEET 3



PLAN REFERENCES:

1) PLAN OF LAND KENSINGTON, N.H. FOR EXETER & HAMPTON ELECTRIC CO. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS. DATED MAY 1954. R.C.R.D. PLAN #02130.

2) PROPERTY OF GORDON WARDWELL KENSINGTON N.H. PREPARED BY JOHN HAYES. DATED JUNE 1960. R.C.R.D. PLAN #1414.

3) PLAN OF LOTS "KENSINGTON FARMS" EXETER–KENSINGTON AND HAMPTON FALLS, N.H. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS PROFESSIONAL ASSN. DATED JANUARY 1974, REVISED JUNE 7, 1974. R.C.R.D. PLAN D–5465.

4) PLAN OF LAND ROBERT DOW INC. DRINKWATER ROAD KENSINGTON ~ NH. PREPARED BY MOULTON ENGINEERING CO. DATED SEPTEMBER 1979. R.C.R.D. PLAN D–9598.

5) LOTLINE ADJUSTMENT PLAT OF LAND FOR DOROTHY C. DIBONA REVOCABLE TRUST DOROTHY C. DIBONA, TRUSTEE IN KENSINGTON, N.H. ROCKINGHAM COUNTY. PREPARED BY LANDRY SURVEYING, LLC. DATED MARCH 2017, REVISED MAY 2017. R.C.R.D. PLAN D–40173.

6) LOTTING PLAN–HAMPTON FIRST WEST DIVISION 1708, AS COPIED BY JEREMIAH LANE, SURVEYOR, AND ATTESTED TO BY JOSHUA LANE, TOWN CLERK SEPTEMBER 16, 1760. NOT RECORDED.

7) SITE PLAN SHOWING LAND OF S. MICHALCHUK KENSINGTON, N.H. PREPARED BY JAMES M. LAVELLE ASSOCIATES. DATED AUGUST 25, 1983. NOT RECORDED.

8) SUBDIVISION OF LAND FOR PHILLIPS EXETER ACADEMY IN KENSINGTON, N.H. PREPARED BY PARKER SURVEY ASSOC., INC. DATED SEPTEMBER 1995. R.C.R.D. PLAN D–24681.

EASEMENT LENGTH TABLE

LINE	BEARING	DISTANCE
E1	S75°04'21"E	201.05'
E2	N82°22'00"E	288.61'
E3	S00°05'50"W	15.14'
E4	S82°19'31"W	288.66'
E5	N75°06'59"W	201.23'
E6	S76°58'59"W	252.84'
E7	N01°11'06"E	15.47'

EASEMENT AREA 11,154 S.F.

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	N03°48'47"W	36.30'
L2	N01°11'50"W	36.35'
L3	N02°13'16"E	47.99'
L4	N02°16'15"E	37.36'
L5	N02°16'39"E	53.45'
L6	N00°14'55"E	61.75'
L7	N00°55'17"W	54.25'
L8	N01°11'06"E	93.31'
L9	N01°40'33"W	29.89'
L10	N61°18'58"E	93.52'
L11	N28°29'02"W	10.54'

LEGEND:

N/F NOW OR FORMERLY
RP RECORD OF PROBATE
RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
(11/21) MAP 11/LOT 21
IP FND IRON PIPE FOUND
IR FND IRON ROD FOUND
IR SET IRON ROD SET
DH FND DRILL HOLE FOUND
DH SET DRILL HOLE SET
RR SPK FND RAILROAD SPIKE FOUND
RR SPK SET RAILROAD SPIKE SET
NHHB NH DOT BOUND FOUND
TB TOWN BOUND
BND w/DH BOUND WITH DRILL HOLE
TREE WITH BARBED WIRE
TBM TEMPORARY BENCHMARK
TYP. TYPICAL
FF FINISHED FLOOR ELEVATION
INV INVERT ELEVATION
LSA LANDSCAPED AREA
S GRAVITY SEWER LINE
G GAS LINE
D STORM DRAIN
W POTABLE WATER LINE
UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC / WIRES
STONE WALL
EDGE OF PAVEMENT (EP)
EDGE OF WETLAND
EDGE OF FLOOD HAZARD AREA
WOODS / TREE LINE
UTILITY POLE
WATER SHUT OFF
GAS SHUT OFF
GV GATE VALVE
HYD HYDRANT
CB CATCH BASIN
W WELL
MANHOLE – SEWER (S), DRAIN (D), TELEPHONE (T)

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road, Unit 3
Portsmouth, N.H. 03801–7114
Tel (603) 430–9282
Fax (603) 436–2315

WETLAND NOTES:

1) WETLANDS LINE DELINEATED BY STEVEN D. RIKER, CWS ON <6/26/2017> IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
   A) U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL: TECHNICAL REPORT Y–87–1 (JAN. 1987). AND REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012.
   B) FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8.1, USDA–NRCS, 2017 AND (FOR DISTURBED SITES) FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4. NEWPCC WETLANDS WORK GROUP (2017).
   C) NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST (REGION 1). USFWS (MAY 1988).
   D) CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES. USFW MANUAL FWS/OBS–79/31 (1997).
   E) "IDENTIFICATION AND DOCUMENTATION OF VERNAL POOLS IN NEW HAMPSHIRE" (1997). NEW HAMPSHIRE FISH AND GAME DEPARTMENT.
2) WETLAND DELINEATION FLAGS WERE FIELD LOCATED BY AMBIT ENGINEERING, INC.
3) THE TOWN OF KENSINGTON REQUIRES A 100 FOOT SETBACK TO HYDRIC A SOILS AND A 50 FEET SETBACK TO HYDRIC B SOILS FOR STRUCTURES GREATER THAN 400 SQUARE FEET, AS WELL AS A 25 FOOT NO CUT, NO DISTURBANCE BUFFER AROUND ALL WETLANDS. NO DELINEATION OF HYDRIC A AND B SOILS WAS MADE FOR THE PURPOSE OF THIS SURVEY AND SETBACKS TO WETLANDS SHOWN ARE MADE USING THE 50 FEET HYDRIC B SETBACK.

DRINKWATER ROAD RIGHT–OF–WAY NOTE:

1) THE SECTION OF DRINKWATER ROAD WHICH RUNS PAST THE SUBJECT PARCEL WAS LAID OUT 2 RODS (33') WIDE BY THE TOWN OF HAMPTON FALLS FEBRUARY 20, 1733/4, AND WAS WIDENED BY THE TOWN OF KENSINGTON TO 3 RODS (49.5') WIDE FEBRUARY 25, 1830.

SEE SHEET 3 FOR HISTORIC AND MEASURED LEGAL DESCRIPTIONS

SURVEYORS CERTIFICATION:

I HEREBY CERTIFY TO UNITIL ENERGY SYSTEMS, INC.:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS", JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2016, AND INCLUDES ITEMS 1, 2, 3, 4, 6a, 6b, 8, 9, 11, 13, 16, 17, 18, 19, AND 21 (LEGAL DESCRIPTION) OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW HAMPSHIRE, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

PAUL A. DOBBERSTEIN

LICENSED LAND SURVEYOR No. 1000

DATE OF SURVEY: 29 JUNE 2017
DATE OF LAST SITE VISIT: 28 APRIL 2020

DATE OF LAST REVISION: 11 JUNE 2020

STATE OF NEW HAMPSHIRE No. 1000 PAUL A. DOBBERSTEIN LICENSED LAND SURVEYOR

ALTA/NSPS LAND TITLE SURVEY

TAX MAP 18 – LOT 31
OWNER OF RECORD:
UNITIL ENERGY SYSTEMS INC.
6 LIBERTY LANE WEST
HAMPTON, NH 03842
PROPERTY LOCATED AT:
114 DRINKWATER ROAD
TOWN OF KENSINGTON
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=100' SEPTEMBER 2017 SHEET 1 OF 3

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road, Unit 3
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Tel (603) 430-9282
Fax (603) 436-2315

ABUTTER LIST

18/1
N/F
PHILIPS EXETER ACADEMY
20 MAIN STREET
EXETER, NH 03833
1621/404 & 1954/82
D-24681

18/1-1
N/F
DENNIS W. SMITH &
CHERYL A. SMITH
123 DRINKWATER ROAD
KENSINGTON, NH 03833
3169/205
D-24681

18/1-2
N/F
GRAHAM REALTY TRUST
SARAJEAN GRAHAM, TRUSTEE
121 DRINKWATER ROAD
KENSINGTON, NH 03833
4246/106
D-24681

18/1-3
N/F
SYDNEE M. GODDARD &
JEFFERY A. GODDARD
119 DRINKWATER ROAD
KENSINGTON, NH 03833
3164/1729
D-24681

18/1-4
N/F
JEFFERY P. GRAY &
ROBIN M. GRAY
117 DRINKWATER ROAD
KENSINGTON, NH 03833
3169/2744
D-24681

18/2
N/F
THOMAS D. CURL &
LISA M. CURL
115 DRINKWATER ROAD
KENSINGTON, NH 03833
3467/2049

18/17
N/F
DOROTHY C. DIBONA REVOCABLE TRUST
DOROTHY C. DIBONA, TRUSTEE
PO BOX 292
WATERVILLE VALLEY, NH 03215
3224/1461
D-40173

18/20
N/F
PAUL D. KADY &
MARGARET KADY
10 LAUREL LANE
KENSINGTON, NH 03833
2262/1739
D-5465

18/21
N/F
JAY F. GREEN &
PATRICIA A. GREEN
12 LAUREL LANE
KENSINGTON, NH 03833
2560/1424
D-5465

18/22
N/F
ILLINGWORTH FAMILY 2012 REVOCABLE TRUST
LEWIS ILLINGWORTH &
KARINA L. ILLINGWORTH, TRUSTEES
14 LAUREL LANE
KENSINGTON, NH 03833
5279/1408
D-5465

18/24
N/F
MICHAEL D. RADICE &
DEBRA K. RADICE
8 OAKRIDGE ROAD
KENSINGTON, NH 03833
5431/2057
D-5465

18/25
N/F
DIANE C. DAVIS &
DANIEL J. DAVIS
6 OAKRIDGE ROAD
KENSINGTON, NH 03833
3771/1297
D-5465

18/26
N/F
EVAN DOYLE &
LAUREN MCCARTHY
4 OAKRIDGE ROAD
KENSINGTON, NH 03833
5685/2527
D-5465

18/28
N/F
GEORGE A. LUFKIN &
BARBARA LUFKIN
104 DRINKWATER ROAD
KENSINGTON, NH 03833
1736/123

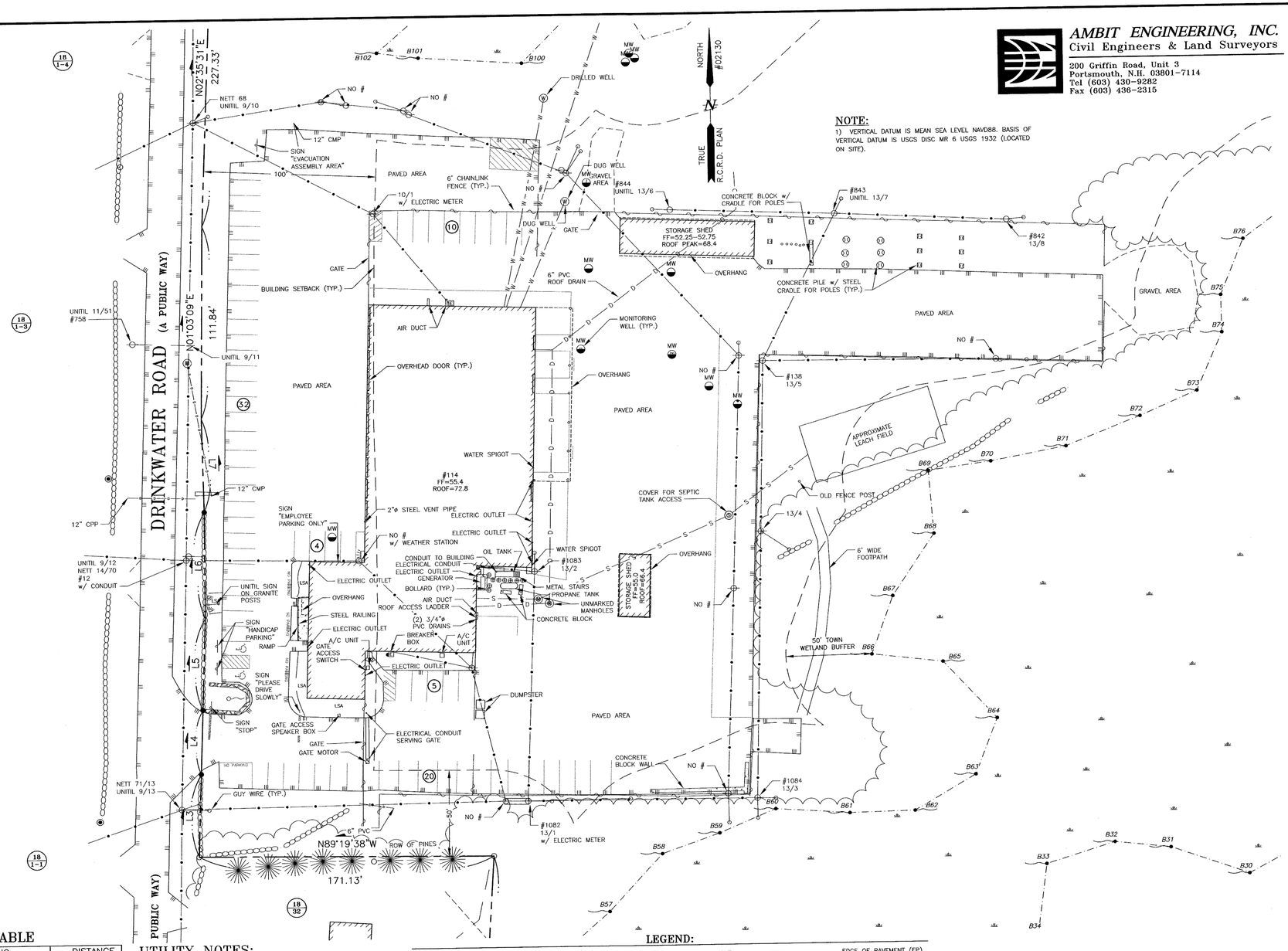
18/29
N/F
VARN FAMILY REVOCABLE TRUST
JAMES S. VARN &
SUSAN S. VARN, TRUSTEES
106 DRINKWATER ROAD
KENSINGTON, NH 03833
5534/2651
PLAN REF. #7

18/30
N/F
ALAN TSUI &
KIM WANT YAP
141A COURT STREET
EXETER, NH 03833
3721/838

18/32
N/F
ARTHUR H. CHAPMAN &
MARION J. CHAPMAN
28 CONCORD ROAD, #1
LEE, NH 03861
4898/2163

18/33
N/F
TAYLOR M. SHEEHAN &
SARAH A. SHEEHAN
122 DRINKWATER ROAD
KENSINGTON, NH 03833
5546/1327
R.C.R.D. PLAN #1414
D-9598

18/34
N/F
DOROTHY C. DIBONA REVOCABLE TRUST
DOROTHY C. DIBONA, TRUSTEE
PO BOX 292
WATERVILLE VALLEY, NH 03215
3224/1461
D-40173



NOTE:

1) VERTICAL DATUM IS MEAN SEA LEVEL NAVD88. BASIS OF VERTICAL DATUM IS USGS DISC MR 6 USGS 1932 (LOCATED ON SITE).

SURVEYORS CERTIFICATION:

I HEREBY CERTIFY TO UNITIL ENERGY SYSTEMS, INC.:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS", JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2016, AND INCLUDES ITEMS 1, 2, 3, 4, 6a, 6b, 8, 9, 11, 13, 16, 17, 18, 19, AND 21 (LEGAL DESCRIPTION) OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW HAMPSHIRE, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

PAUL A. DOBBERSTEIN

LICENSED LAND SURVEYOR No. 1000

DATE OF SURVEY: 29 JUNE 2017
DATE OF LAST SITE VISIT: 28 APRIL 2020

DATE OF LAST REVISION: 11 JUNE 2020

STATE OF NEW HAMPSHIRE
No. 1000
PAUL A. DOBBERSTEIN
LICENSED LAND SURVEYOR
SIGNATURE

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	N03°48'47"W	36.30'
L2	N01°11'50"W	36.35'
L3	N02°13'16"E	47.99'
L4	N02°16'15"E	37.36'
L5	N02°16'39"E	53.45'
L6	N00°14'55"E	61.75'
L7	N00°55'17"W	54.25'
L8	N01°11'06"E	93.31'
L9	N01°40'33"W	29.89'
L10	N61°18'58"E	93.52'
L11	N28°29'02"W	10.54'

UTILITY NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

GRAPHIC SCALE

30 0 50 100 120 FEET
10 5 0 10 20 30 METERS

LEGEND:

N/F NOW OR FORMERLY
RP RECORD OF PROBATE
RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21 MAP 11/LOT 21
IP FND IRON PIPE FOUND
IR FND IRON ROD FOUND
IR SET IRON ROD SET
DH FND DRILL HOLE FOUND
DH SET DRILL HOLE SET
RR SPK FND RAILROAD SPIKE FOUND
RR SPK SET RAILROAD SPIKE SET
NHHB NH DOT BOUND FOUND
TB TOWN BOUND
BND w/DH BOUND WITH DRILL HOLE
TREE WITH BARBED WIRE
TBM TEMPORARY BENCHMARK
TYP. TYPICAL
FF FINISHED FLOOR ELEVATION
INV INVERT ELEVATION
LSA LANDSCAPED AREA
S GRAVITY SEWER LINE
G GAS LINE
D STORM DRAIN
W POTABLE WATER LINE
UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC / WIRES
STONE WALL
EDGE OF PAVEMENT (EP)
EDGE OF WETLAND
FH2 EDGE OF FLOOD HAZARD AREA
WOODS / TREE LINE
UTILITY POLE
WS WATER SHUT OFF
GS GAS SHUT OFF
GV GATE VALVE
HYD HYDRANT
CB CATCH BASIN
W WELL
MANHOLE - SEWER (S), DRAIN (D), TELEPHONE (T)

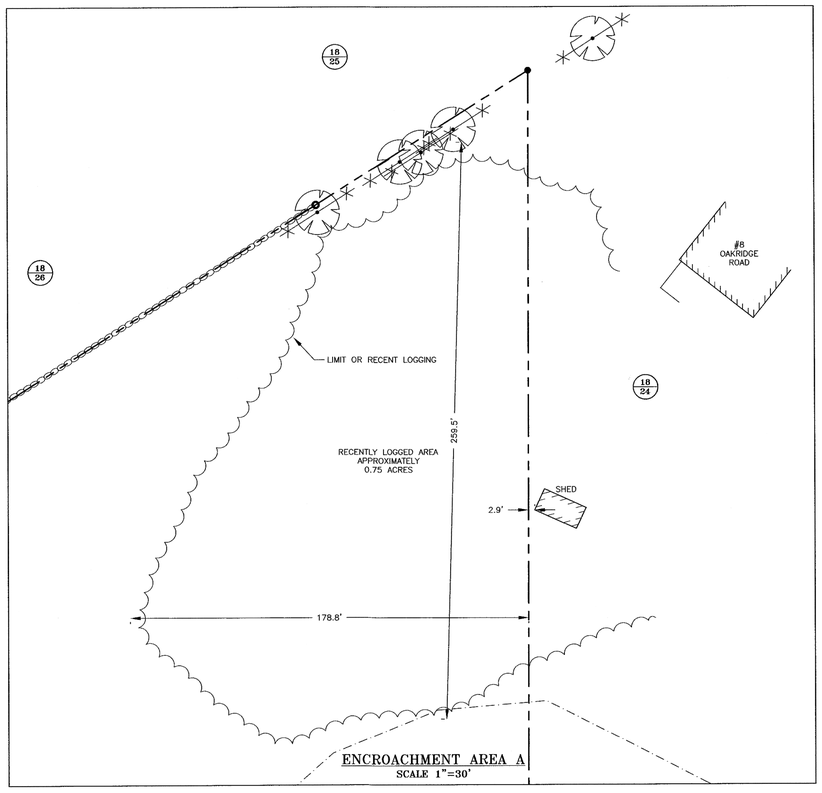
ALTA/NSPS LAND TITLE SURVEY

TAX MAP 18 - LOT 31
OWNER OF RECORD:
UNITIL ENERGY SYSTEMS INC.
6 LIBERTY LANE WEST
HAMPTON, NH 03842
PROPERTY LOCATED AT:
114 DRINKWATER ROAD
TOWN OF KENSINGTON
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

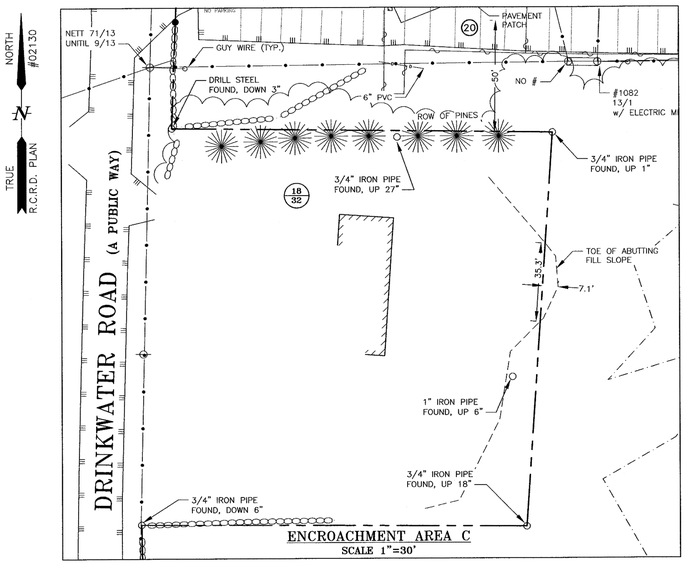
SCALE 1"=30' SEPTEMBER 2017 SHEET 2 OF 3

FB 267 PG 7

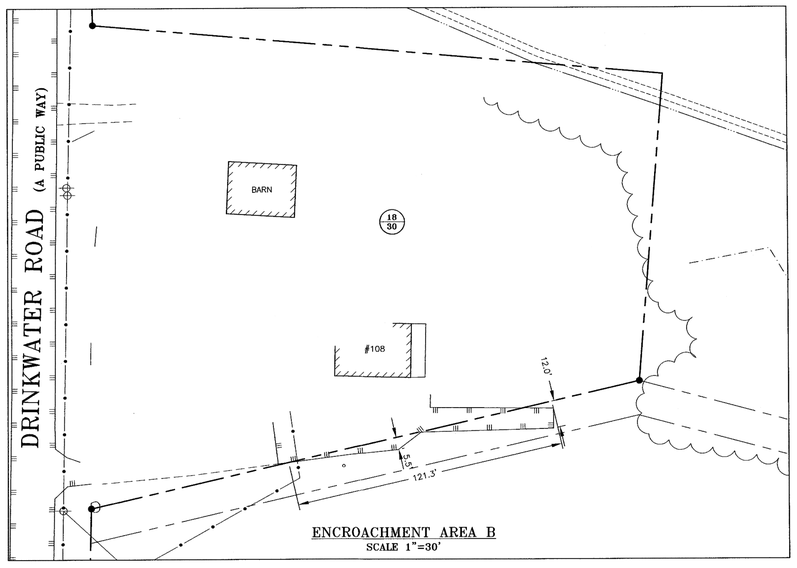
2743



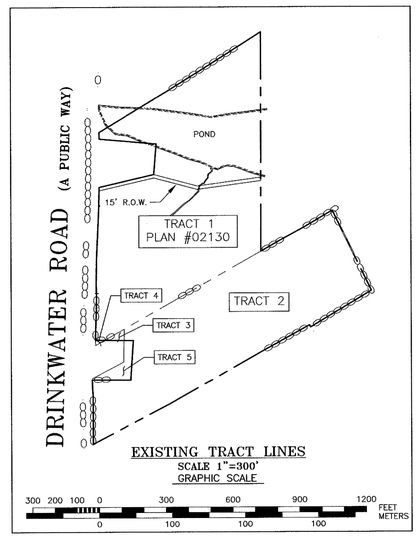
ENCROACHMENT AREA A
SCALE 1"=30'



ENCROACHMENT AREA C
SCALE 1"=30'



ENCROACHMENT AREA B
SCALE 1"=30'



EXISTING TRACT LINES
SCALE 1"=300'
GRAPHIC SCALE

SURVEYORS CERTIFICATION:

I HEREBY CERTIFY TO UNITIL ENERGY SYSTEMS, INC.:

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NO. 1000
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SIGNATURE

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors

200 Griffin Road, Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

HISTORIC LEGAL DESCRIPTION
ALL CONVEYED TO EXETER & HAMPTON ELECTRIC COMPANY

TRACT 1 (1319/33)

A certain tract of land, situate in Kensington, in the County of Rockingham, and State of New Hampshire, on the Easterly side of the Drinkwater Road, so called, bounded and described as follows: Commencing at a point on the Easterly side of said Drinkwater Road at the junction of two stone walls, distant in a direction of N. 1° 14' E., as said road runs, 25.1 feet from a hub marking the Northwesterly corner of land of Earl F. Wilbur and Marjorie E. Wilbur, and a land of Steve Michalchuck and Mary L. Michalchuck; thence running N. 58° 52' E. following line of said stone wall in part, crossing a pond, by land of said Michalchuck in part, and in part by land of Joseph Laconis. 361.3 feet to an angle point at the end of a stone wall; thence N. 57° 42' E. 322.1 feet to an angle point; thence N. 59° 22' E., all by land of said Michalchuck and land of said Laconis, 175.3 feet to an iron pipe driven in the ground at other land of said John W. York; thence by said York's other land S. 00° 09' W. 982 feet to a drill hole in a boulder at land of Christie Poultry Farms, Inc.; thence S. 60° 27' W. following in part line of stone wall and by land of said Christie Poultry Farms, Inc. in part, and in part by land of Thomas W. Tobin and Rose A. Tobin 854.8 feet to a point in the Easterly side line of said Drinkwater Road at the Northwesterly corner of land of said Tobins; thence by said Drinkwater Road, following in part line of stone wall as it now exists, N. 2° 32' E. 125.1 feet to an angle point; thence N. 2° 34' W. 145.4 feet to an angle point; thence N. 1° 14' E. 438.5 feet to a point in the Southwesterly corner of land of Earl F. Wilbur and Marjorie E. Wilbur; thence by said Wilbur land N. 78° 36' E., following line of fence as it now exists, 258.2 feet to a point at land herein conveyed; thence by said land herein conveyed N. 1° 53' E. 138.6 feet to a hub at land herein conveyed; thence N. 82° 47' W 255 feet to a hub at said Drinkwater Road marking the Northwesterly corner of said Wilbur land; thence N. 1° 14' E. by said Drinkwater Road 25.1 feet to point of beginning. Containing 15.319 acres.

TRACT 2 (1921/432)

A certain parcel of land without buildings situate in Kensington, County of Rockingham, State of New Hampshire, on the Easterly side of Drinkwater Road, so-called, bounded and described as follows:
Westerly by said Drinkwater Road, 292 feet, more or less; Northerly in part by land of Arthur H. and Marion J. Chapman 155 feet, more or less, and in part by land of Exeter & Hampton Electric Company 855 feet, more or less; Easterly by land formerly of Gardener Gilman; Southerly by land formerly of H. B. Hubbard, now said to be of Cyrus J. and Edna M. Wardwell.

TRACT 3 (1955/89)

A certain tract of land situate in Kensington, County of Rockingham, State of New Hampshire, near the Easterly side of Drinkwater Road, so-called, bounded and described as follows:

Beginning on the present division line between land or Chapman on the South and land of Exeter & Electric Company on the North 40.0 feet from said Drinkwater Road, measured on a course North 60° 27' East from said Drinkwater Road and continuing North 60° 27' East along said present division line 107.5 feet to an iron pipe; thence running South 1° 04' 30" West along other land of said Exeter & Hampton Electric Company 53.72 feet; thence running North 89° 34' 20" West along remaining land or Arthur H. and Marion J. Chapman 92.51 feet to the point of beginning.

TRACT 4 (1955/91-PARCEL #1)-out from TRACT 1

Beginning on the Easterly side of Drinkwater Road upon the present division line between land of Arthur H. and Marion J. Chapman on the South and Exeter & Hampton Electric Company on the North and running North 2° 32' East along said Drinkwater Road 20.0 feet; thence running South 89° 34' 20" East along said land of Exeter & Hampton Electric Company 33.91 feet to the Westerly corner of a triangular parcel conveyed or to be conveyed by Chapman to Exeter & Hampton Electric Company; thence running South 60° 27' West along the present division line between Chapman and Exeter & Hampton Electric Company 40.0 feet to the point of beginning.

TRACT 5 (1955/91-PARCEL #2)-out from TRACT 2

Beginning on the Easterly side of said Drinkwater Road at the present division line between land of Arthur H. and Marion J. Chapman on the North and land of Exeter & Hampton Electric Company on the South and running along said Chapman land North 62° 11' East 155.0 feet to an iron pipe; thence running North 1° 04' 30" East along said Chapman land 93.78 feet to the Southeasterly corner of a triangular parcel of land conveyed or to be conveyed by Chapman to Exeter & Hampton Electric Company; thence running along other land of said Exeter & hampton Electric Company South 89° 34' 20" East 43.95 feet, South 4° 29' 30" West 174.72 feet, and South 89° 10' 30" West 170.0 feet to the Easterly side of said Drinkwater Road; thence running North 4° 29' 30" East along said Drinkwater Road 10.91 feet to the point of beginning.

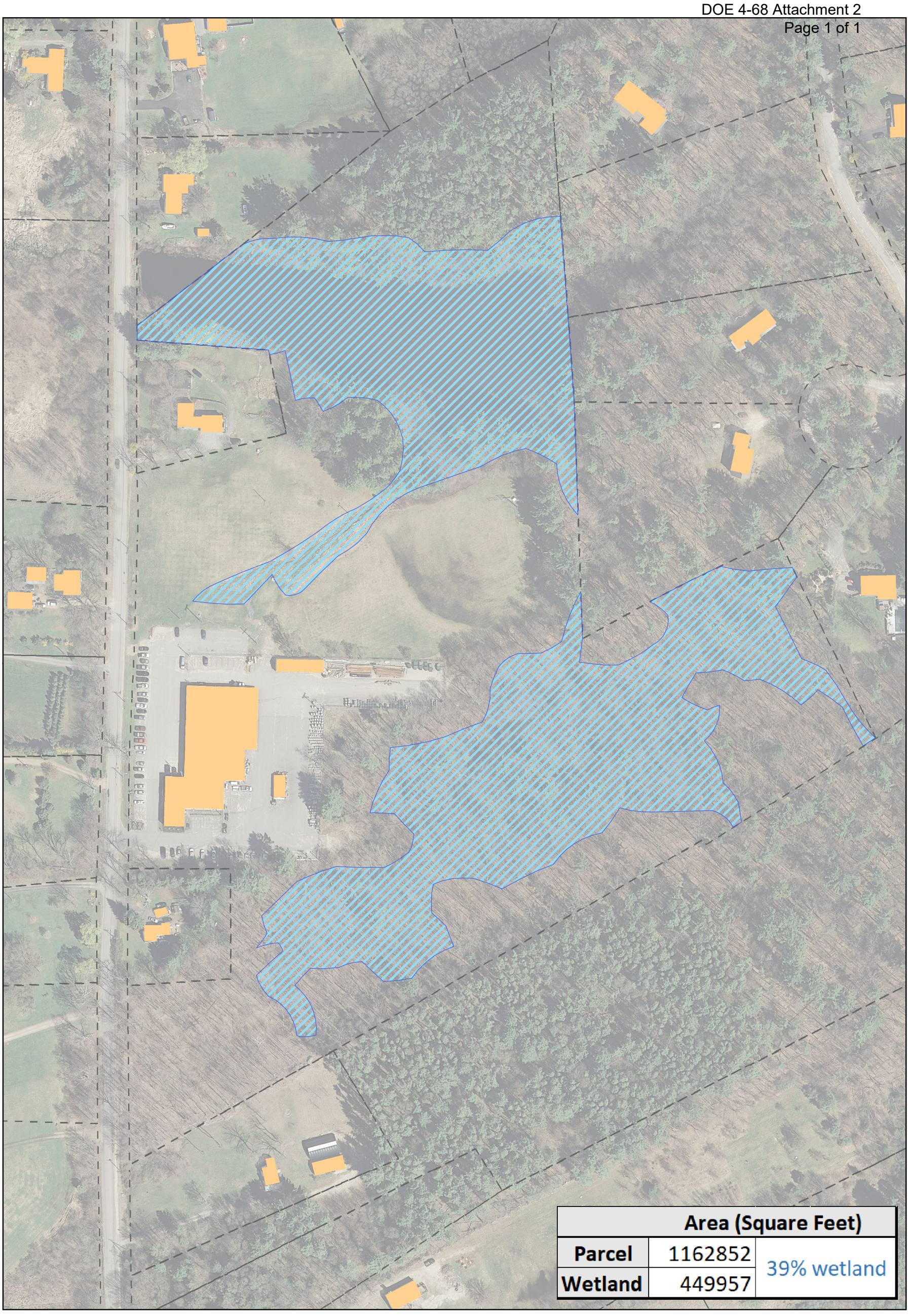
MEASURED LEGAL DESCRIPTION

Beginning at a drill hole at the end of a stone wall at the southwesterly corner of the parcel on the easterly side of Drinkwater Road, and the northwest corner of land now or formerly of Taylor M. Sheehan and Sarah A. Sheehan; thence running along the easterly side of Drinkwater Road, and a stone wall N 00°00'37" E a distance of 216.73 feet to a drill hole set at the end of a stone wall; thence continuing along the easterly side of Drinkwater Road, N 03°48'47" W a distance of 36.30 feet to a drill hole set at the end of a stone wall; thence continuing along the easterly side of Drinkwater Road, and a stone wall N 01°11'50" W a distance of 36.35 feet to a 3/4" iron pipe found at the southwesterly corner of land now or formerly of Arthur H. Chapman and Marion J. Chapman; thence turning and running along land now or formerly of said Chapman S 89°42'48" E a distance of 173.10 feet to a 3/4" iron pipe found at the southeasterly corner of land now or formerly of said Chapman; thence turning and continuing along land of said Chapman N 03°53'29" E a distance of 177.63 feet to a 3/4" iron pipe found at the northwesterly corner of land now or formerly of said Chapman; thence turning and continuing along land now or formerly of said Chapman N 89°19'38" W a distance of 171.13 feet to a drill steel found at the northwesterly corner of land now or formerly of said Chapman and the easterly side of Drinkwater Road; thence turning and running along the easterly side of said Drinkwater Road, and a stone wall, with the following eight (8) courses all being along the easterly side of said Drinkwater Road, N 02°13'16" E a distance of 47.99 feet to a drill hole set at the end of a stone wall; thence N 02°16'15" E a distance of 37.36 feet to a drill hole set at the end of a stone wall; thence running along a stone wall N 02°16'39" E a distance of 53.45 feet to a drill hole set; thence continuing along said stone wall N 00°14'55" E a distance of 61.75 feet to a drill hole set at the end of a stone wall; thence N 00°55'17" W a distance of 54.25 feet; thence N 01°03'09" E a distance of 111.84 feet; thence N 02°35'31" E a distance of 227.33 feet; thence N 01°11'06" E a distance of 93.31 feet, to an iron rod set at the southwesterly corner of land now or formerly of Alan Tsui and Kim Want Yap at the easterly side of Drinkwater Road; thence turning and running along land now or formerly of said Tsui and Yap N 76°59'00" E a distance of 252.78 feet to an iron rod set at the southeasterly corner of land now or formerly of said Tsui and Yap; thence turning and continuing along land now or formerly of said Tsui and Yap N 04°39'00" E a distance of 138.60 feet to an iron rod set at the northeasterly corner of land now or formerly of said Tsui and Yap; thence turning and continuing along land now or formerly of said Tsui and Yap N 85°01'00" W a distance of 256.95 feet to an iron rod set at the northwesterly corner of land now or formerly of said Tsui and Yap and the easterly side of Drinkwater Road, ; thence turning and running along the easterly side of said Road N 01°40'33" W a distance of 29.89 feet to an iron rod set at the southwesterly corner of land now or formerly of the Varn Family Revocable Trust; thence turning and running along land now or formerly of said Trust N 58°51'33" E a distance of 359.61 feet to a drill hole found at the end of a stone wall; thence continuing along land now or formerly of said Trust and along a stone wall N 58°12'59" E a distance of 181.54 feet to a drill hole found in a stone wall; thence continuing and running in part along land now or formerly of Evan Doyle and Lauren McCarthy and in part along land now or formerly of Diane C. Davis and Daniel J. Davis along a stone wall N 57°40'15" E a distance of 201.06 feet to a drill hole found at the end of a stone wall; thence continuing along land now or formerly of said Davis N 57°40'15" E a distance of 112.95 feet to an iron rod set at the southeasterly corner of land now or formerly of said Davis and land now or formerly of Michael D. Radice and Debra K. Radice; thence turning and running in part along land now or formerly of said Radice, land now or formerly of the Illingworth Family 2012 Revocable Trust, and land now or formerly of Jay F. Green and Patricia A. Green S 00°05'50" W a distance of 985.70 feet to a drill hole found at the end of a stone wall; thence turning and running along land now or formerly of said Green and a stone wall N 60°23'59" E a distance of 124.30 feet to a drill hole set at the end of a stone wall; thence continuing along land now or formerly of said Green N 61°18'58" E a distance of 93.52 feet to a drill hole set at the end of a stone wall; thence continuing along land now or formerly of said Green and a stone wall N 59°38'22" E a distance of 151.62 feet to a 1" iron pipe found at the intersection of stone walls and land now or formerly of Paul D. Kady and Margaret Kady; thence turning and running along land now or formerly of said Kady and a stone wall S 25°53'40" E a distance of 400.02 feet to an iron rod found at the corner of stone walls and land now or formerly of the Dorothy C. DiBona Revocable Trust; thence turning and running along land now or formerly of said Trust and a stone wall S 58°53'28" W a distance of 319.06 feet to a corner of stone walls; thence turning and continuing along land now or formerly of said Trust N 28°29'02" W a distance of 10.54 feet to a drill hole found at the end of a stone wall; thence turning and continuing along land now or formerly of said Trust and a stone wall S 61°07'38" W a distance of 243.12 feet to an iron rod found at the end of a stone wall; thence continuing along land now or formerly of said Trust S 60°30'10" W a distance of 476.86 feet to a drill hole found in a five foot diameter boulder at the northeast corner of land now or formerly of Taylor M. Sheehan and Sarah A. Sheehan; thence running along land now or formerly of said Sheehan S 62°21'38" W a distance of 390.06 feet to the point of beginning. The above described parcel of land containing 1,159,078 square feet, 26.6088 acres, more or less.

GRAPHIC SCALE
30 0 50 100 120
FEET
10 5 0 10 20 30
METERS

ALTA/NSPS LAND TITLE SURVEY
TAX MAP 18 – LOT 31
OWNER OF RECORD:
UNITIL ENERGY SYSTEMS INC.
6 LIBERTY LANE WEST
HAMPTON, NH 03842
PROPERTY LOCATED AT:
114 DRINKWATER ROAD
TOWN OF KENSINGTON
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=30' & 1"=300' SEPTEMBER 2017 SHEET 3 OF 3



Area (Square Feet)		
Parcel	1162852	39% wetland
Wetland	449957	

Wetland Building Parcel

Kensington DOC Wetlands

Unitil

N W E S

Drawn: doreyk

Date: 8/17/2021

Scale: 1 inch = 150 feet

0 25 50 100 Feet

Disclaimer:
Unitil has prepared these maps based on best available information. Facility locations are approximate and are not suitable for engineering, designing or field location purposes. The data provided are not warranted for accuracy or completeness. Field verification is advised for all data presented on this map.

Parcel Boundary

Wetland

Parcel square feet: 530249
Wetland square feet: 168054
Wetland Percentage: 31.7%

Exeter Facility Unitil Service Corporation		
Drawn kickham	Date 8/17/2021	Scale 1 inch = 108 feet Feet 0 30 60

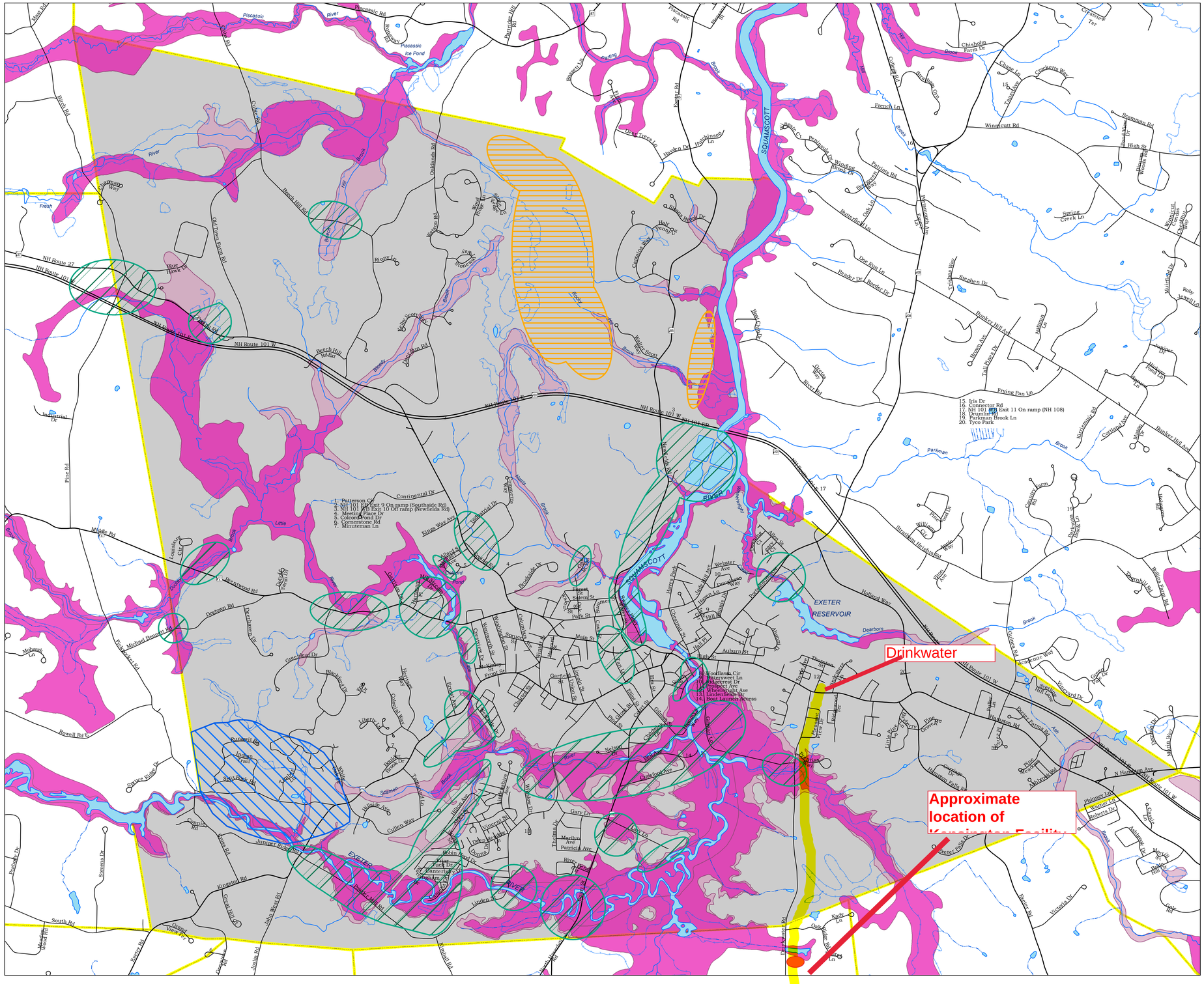
Unitil

N E S W

Disclaimer:
Unitil has prepared these maps based on best available information. Facility locations are approximate and are not suitable for engineering, designing or field location puposes. The data provided are not warranted for accuracy or completeness. Field verification is advised for all data presented on this map.

Past and Future Hazards Map
Exeter, New Hampshire

Spring 2018



Past/Future Hazard Areas (Defined by Community)

type

- Flood Hazard Areas
- Wind Hazard Areas
- Fire Concern Area

FEMA Flood Hazard Zones

- 1% Annual Chance Flood Hazard (100 Year Flood)
- 0.2% Annual Chance Flood Hazard (500 Year Flood)
- Open Water

- Shoreline; Stream
- Apparent Wetland Limit
- Intermittent Stream
- Other Surface Water Feature
- Surface Water
- Interstate
- US Route
- State Route
- Local
- Town Boundaries
- Town of Exeter

Past and future hazards were identified by the Hazard Mitigation Planning Committee from the Town of Exeter and subsequently revised. Information was gathered to accompany the development of a Hazard Mitigation Plan under the guidance and funding of the NH Office of Emergency Management.

Flood Hazard Zones on this map are from the Digital Flood insurance Rate Map (DFIRM) Database. The Digital Flood Insurance Rate Map (DFIRM) Database depicts flood risk information and supporting data used to develop the risk data. The primary risk classifications used are the 1-percent-annual-chance flood event, the 0.2-percent-annual-chance flood event, and areas of minimal flood risk. The DFIRM Database is derived from Flood Insurance Studies (FISs), previously published Flood Insurance Rate Maps (FIRMs), flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available. The FISs and FIRMs are published by the Federal Emergency management Agency (FEMA).This was provided by GRANIT, Complex Systems Research Center, UNH
latest revision in 2013.

Base Features (transportation, political and hydrographic) were automated from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992-2012. The roads are supplied by by NH Department of Transportation updated December 2017.

ROCKINGHAM PLANNING COMMISSION

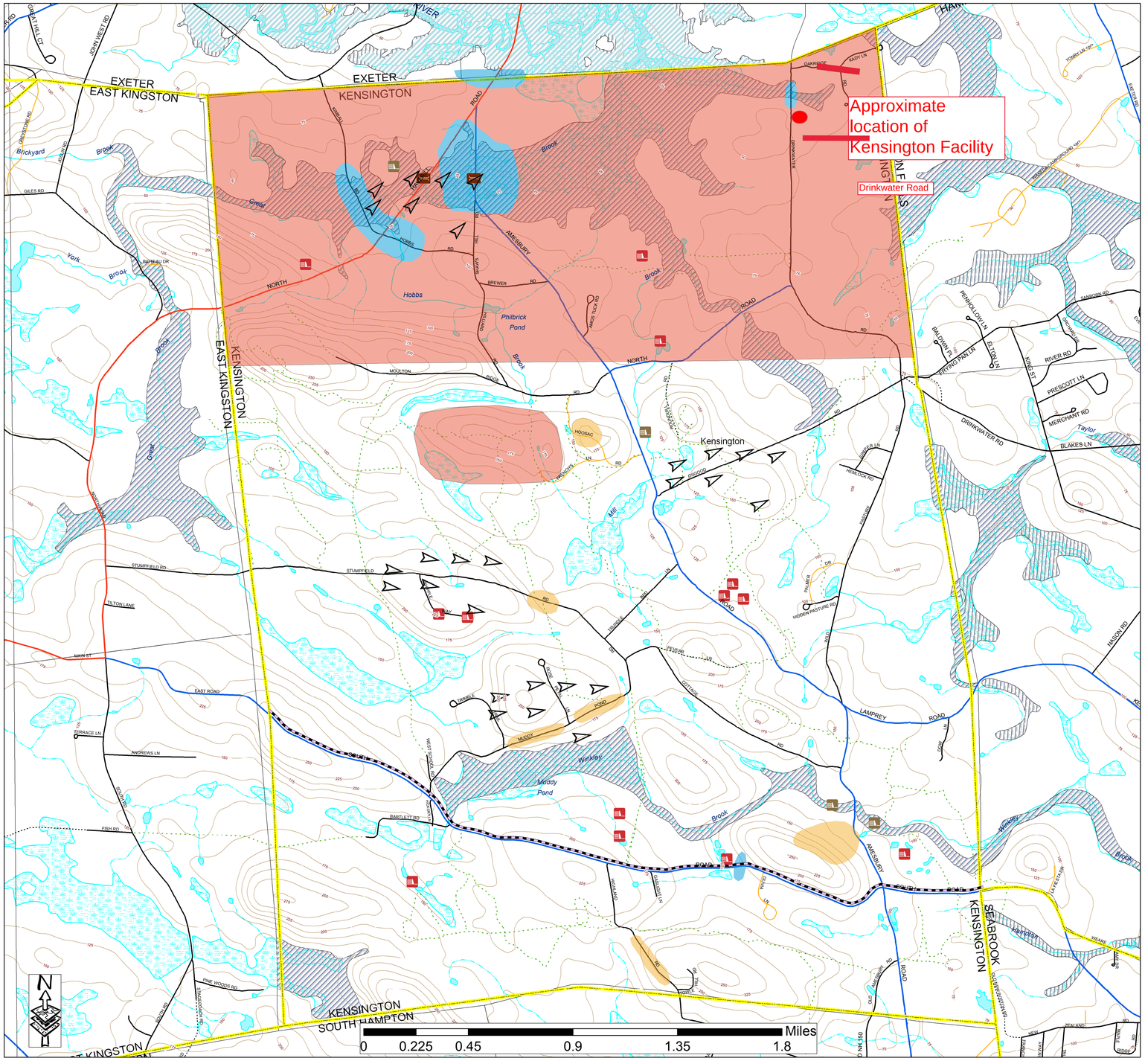
N W E S

0 0.25 0.5 1 1.5 Miles

Document Path: O:\d-multiyear\d-NHOEM\d-towns\d-exeter_2018\d-maps\Past_and_Future_Hazards_2018_Revised.mxd

MAP 2: Hazards Map
Kensington, New Hampshire

Fall 2012



Flood Zones

- A — *Area inundated by 1% annual chance flooding, for which no base flood elevations(BFEs) have been determined*
- AE — *Area inundated by 1% annual chance flooding, for which base flood elevations have been determined*
- X500 — *Area inundated by 0.2% annual chance flooding; an area inundated by 1% annual chance flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 1% annual chance flooding.*

Past or Potential Hazards

- Flooding
- Washout
- Wildfire
- Wind

- Elevation Contour -25 ft interval
- Elevation Contour -25 ft interval
- Kensington Pipeline
- Bridge
- Dam - Ruins
- Dam - Hazard Class AA

Roads

- Class I
- Class II
- Class III
- Class IV
- Class V
- Class VI
- Private Roads

Surface Water Features

- Stream or Shoreline
- Apparent Wetland Limit
- Intermittent Stream
- Other Surface Water Feature
- Wetlands_USGS
- Surface Water Bodies
- State Boundary
- Town Boundary
- County Boundary

DRAFT - WORKING COPY

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-68 Witness: John F. Closson

REQUEST:

Reference: Tech Session held on July 26, 2021, testimony of John F. Closson at Bates 273-276, and Exhibit JFC-2.

a. The Company stated at the Tech Session that the zoning regulations for the Town of Kensington would not have been supportive of new construction at the existing DOC site and a special exemption from the town would need to be obtained. Did Unitil contact and discuss Options 1-3 with Kensington zoning officials and the possibility of obtaining an exemption from the zoning regulations? If not, why not? If yes, what was the extent and outcome of those discussions?
b. Exhibit JFC-2 at Bates 294 states that "the impact to the surrounding wetlands could be considerable" if the Kensington site were redeveloped. Please describe and explain how the wetlands would be further impacted by Options 1-3 beyond those impacts already existing at the site. To what extent did the Company research the viability of wetland permitting and the costs of mitigation? Please provide that documentation if any. How much of the 26.6 acre site in Kensington is occupied by unusable wetlands? Please provide a site plan depicting the wetland area. In terms of Options 2 and 3, was re-positioning of the addition or the new DOC on the site further away from the wetland area ever considered as an alternative to reduce impacts?
c. The map of the Exeter site provided at Bates 328 also indicates the presence of wetlands (the map is not completely legible in pdf format). Please confirm the existence of wetlands at the Exeter location and what impacts if any it may have had on design, permitting, construction, and operations of the new Seacoast facility.
d. Exhibit JFC-2 at Bates 294 proposed installation of a new leach field and water well at the Kensington site. Please explain why the existing facilities are inadequate and unable to supply the needs of the new buildings under Options 1-3.
e. Why is it critical for the Company to have dispatch, gas, testing and training, and engineering all under one roof given that these functions were able to perform adequately while being separated for so many years? Would moving only some functions, for example dispatch and engineering, have alleviated the space constraints at the Hampton and Portsmouth locations?
f. Option 2 as represented in the Decision Document in Exhibit JFC-2 at Bates 290 appears to have been the cheaper option at an estimated cost of $11.9 million (Procon's estimate at Bates 299 was between $8.5 - $9.0 million), however this option was disqualified because the proposal did not meet the space requirements under the space program. Given that the existing DOC at Kensington is 43,448 sf. and the proposed addition is 10,500 sf. for a total of 53,948 sf., why was that amount of space insufficient under Unitil's analysis? Why was it not possible to enlarge the size of the addition, if needed, to meet the space requirements?

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-68 Witness: John F. Closson

g. Attachment F of Exhibit JFC-2 at Bates 309 appears to show that Option 2 was still the cheaper option despite relocation and business disruption costs. Why did Unitil believe that such costs were unworkable or prohibitive given that this option was approximately $5 million less than what was ultimately spent for Exeter at $17.5 million?
h. The "Risks" under Option 1 as represented in the Decision Document in Exhibit JFC-2 at Bates 289 appear to relate exclusively to problems associated with renovating the Kensington DOC. Also, it is unclear from Attachment D at Bates 306 why the addition to and renovation of the Hampton headquarters was not feasible or cost prohibitive. Please provide those additional details.
i. Exhibit JFC-2 at Bates 300 states that "Drinkwater Road floods during large rain events." On average, how many times per year do these events occur to the point where Drinkwater Road is impassable? Are Unitil crews and workers prevented from entering or exiting the site during these events with no alternative routes? Is the Kensington DOC essentially isolated during these events and if so for how long? Has the Company explored potential flood mitigation measures with the Town of Kensington to alleviate this situation?

RESPONSE:

a. Unitil did not meet with the Town of Kensington to discuss zoning regulations and permitted use of the Company's Kensington property. The Company was aware of the Kensington property's status as lawful non-conforming use, see JFC-2 Bates 000293. The Company did familiarize itself with the steps to petition for a zoning variance should it be required. However, the Company decided not to pursue Options 1-3 for site-specific reasons and risks that are described in Exhibits JFC-1 and JFC-2. As such, the Company did not initiate those discussions with the Town of Kensington.

b. The Company is familiar with wetland permitting through its normal operations, including the requirements of the New Hampshire Department of Environmental Services, US Army Corps of Engineers and the role of the local conservation commission. However, the Company decided not to pursue Options 1-3 for site-specific reasons and risks that are described in Exhibits JFC-1 and JFC-2. The Company therefore did not research the viability of wetland permitting and costs of mitigation.

The Kensington parcel is 26.6 acres and 10.3 acres is occupied by wetlands. It was further estimated using the total usable acreage, outside of the 50' wetland setback and building setbacks, would be approximately 5.90 acres. An ALTA survey was completed for the Kensington location in 2017. See DOE 4-68

Unitil Energy Systems, Inc.
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Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-68 Witness: John F. Closson

Attachment 1 for three (3) ALTA survey drawings. Also see DOE 4-68 Attachment 2 for an additional view of wetlands at the Kensington location.

As noted in the analysis prepared by the Company's engineering contractor, Procon, the impact to the surrounding wetlands could be considerable under Options 1-3. Exhibit JFC-2 at 294. In connection with Options 2 and 3, re-positioning of the addition or the new DOC on the site further away from the wetlands was not fully evaluated due to the volume of wetlands throughout the site in addition to other site limitations including the rural/residential road that is prone to flooding and the lack of access to municipal water and sewer.

c. The Exeter site did contain approximately 3.8 acres of wetland. To complete the project the Company needed to dredge and fill 15,425 sf (approximately 1/3 acre) of palustrine forested wetlands. Compensatory mitigation for this activity included a total payment of $133,868.11 to the Aquatic Resource Mitigation Fund. This expense was not paid entirely by the Company costs where shared with the developer (Garrison Glenn LLC) who paid $56,102.03. DOE 4-68 Attachment 3 provides view of the wetlands at the Exeter site.

d. The existing leach field and water well at the Kensington were unable to the supply the needs of the new buildings under Options 1-3, due to increase in personnel and facility requirements. Also, the existing leach field and water well were located in the wetland boundaries and may have required relocation if upgraded or altered. As described in Exhibit JFC-2 at Bates 000293, approvals for and installing a new leach field with today's regulations would be difficult and more expensive due to assumed high groundwater levels. In addition, any construction or significant renovation at the Kensington facility would require a sprinkler/fire protection system installation or upgrade to comply with building codes. The water required to supply a sprinkler/fire protection system installation would dictate large underground storage tank or a pond in the absence of municipal water supply.

e. Unitil has not argued that it is "critical" for the Company to have dispatch (a.k.a. Central Electric Dispatch), gas (a.k.a. Gas Control), and testing & training, and Engineering all under one roof. However, doing so achieves efficiencies and enables the Company to address several business needs including;

1.) Moving the Central Electric Dispatch (CED) team into one of the Company's Electric Distribution Operations Centers, from their former constrained location at Unitil's NH Gas Distribution Operations Center in Portsmouth. This move also provides a business continuity space, in Portsmouth, if the new Exeter CED center is compromised.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-68 Witness: John F. Closson

2.) A business continuity space was included in the new Exeter facility to provide redundant space for the Gas Control and Field Services teams. The primary location for both of these teams is in Unitil's Portsmouth NH office. Previously, the failover Gas Control Room was located in a rehabilitated Audio/Video closet in the Hampton office. If the Gas Control team had to relocate to the Hampton office the space would be less than adequate for sustained operations. The new room at the Exeter facility will provide adequate space for the Gas Control and Field Services teams should they need to relocate due to the loss of their primary locations in Portsmouth.

3.) The Operator Qualification (OQ) testing and training space was designed to be used by Unitil's Gas Operations for OQ testing and also by other departments, from Exeter or other Unitil locations, for training. This space can also be used as back up space to the System Emergency Operations Center located in Hampton.

4.) The decision to move the Electric Engineering team from Hampton to Exeter was driven by the need for more space at the Hampton building which was at capacity and more space was needed.

While moving some functions would partially alleviate space constraints at the Hampton and Portsmouth locations, it would not address Unitil's need for adequate business continuity space for Gas Control, Field Services, training and testing.

f. The existing Kensington DOC is approximately 21,000 sf, not 43,448 sf. Option 2, as represented in the Decision Document in Exhibit JFC-2 at Bates 000290, did not meet the space requirements under the space program because the existing total sf for this option would yield only 31,000 sf (existing DOC 20,390 + 10,000 sf addition). The Company did not evaluate the possibility of more than doubling the size of the addition to meet the Company's space requirements.

g. Although Option 2, in Attachment F of Exhibit JFC-2 at Bates 000309, appears to be the cheaper option, it was not pursued due to anticipated risks of pursuing approval to develop the site due to expansive wetlands and the additional anticipated costs associated with pursuing approvals/permits from various local and state government agencies. The Company does not believe that it is meaningful to compare the *budgeted* cost of Option 2 to the *actual* cost of Option 4. As shown by the considerable risk factors associated with Option 2, the Company could have experienced additional unknown costs for Option 2. These factors combined with other factors including, no viable lease options to relocate during the renovation and

Unitil Energy Systems, Inc.
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Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-68 Witness: John F. Closson

construction phases, no access to municipal sewer and water, and issues with the road flooding during significant rain events made Option 2 unviable for a contemporary day commercial facility.

h. The Company notes that the estimate provided as Attachment D predates the risk analysis provided as Exhibit A by more than a month. The more recent risk analysis concluded that the time and cost to renovate the existing building under Option 1 would exceed any gain in operational improvements and less long-term value versus what Unitil would gain in operational improvements and value with a new building. The Company also does not agree that that the "Risks" under Option 1 as represented in the Decision Document in Exhibit JFC-2 at Bates 000289 are exclusively related to the renovation of the Kensington DOC. For example, the risks numbered 9, 10, and 11 include: disruption to the Hampton office during construction of an addition; soft costs nearly doubled for designers/legal/permitting in connection with pre-construction and construction administration for two projects instead of one; and the cost for/availability of additional Unitil resources to manage and administer two large facilities projects simultaneously. These numerous risk factors, in combination with other site-specific factors described in Exhibits JFC-1 and JFC-2, led the Company to conclude that Option 1 was unsuitable.

i. Drinkwater road has flooded during multiple large rain events. The frequency of the road being impassable has not been tracked by the Company. Current hazard maps from both the Town of Exeter and the Town of Kensington note potential flood hazards on Drinkwater road leading to the Kensington facility; see DOE 4-68 Attachment 4 and DOE 4-68 Attachment 5. During flooding events involving Drinkwater Road, which typically accompanied storm restoration efforts, the Kensington facility was not fully isolated. However, storm response vehicles were directed to use an alternate route to access the Site, which extended response time to outages, downed wires and municipal support. The Company did not approach the Town of Kensington regarding flood mitigation efforts.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-69 Witness: John F. Closson

REQUEST:

Reference Tech Session held on July 26, 2021, testimony of John F. Closson at Bates 271-272. What benefit/cost analysis did the Company perform comparing the costs of continuing with the current training and testing in Portland ME as opposed the costs of including that function as part of the new Seacoast Facility?

RESPONSE:

A benefit/cost analysis was not performed comparing the costs of continuing with the current testing and training in Portland, ME as opposed to the costs of including that function as part of the new Seacoast Facility. The testing and training functions at the new Seacoast Facility is not intended to replace the training and testing operations in Portland, ME, but instead augment the Company's current capabilities. The justification for incorporating a testing facility at the new Seacoast Facility included redundancy for the Portland, ME facility in addition to closer proximity to Unitil's natural gas workers in NH and MA.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 5

Date Request Received: 09/02/2021 Date of Response: 09/17/2021
Request No. DOE 5-17 Witness: John F. Closson

REQUEST:

Please provide the expenditures for any artwork at the new Seacoast Regional Facility above the line and provide a reference in the testimony for such expenditure.

RESPONSE:

The expenditures for artwork (a.k.a. H/A/B = History/Art/Branding) is $38,082.59. This amount includes design, production and installation by the graphics vendor. Artwork was an intentional component of the building's design, aligned with other design components such as lighting, thermal comfort and ergonomics. Some of the H/A/B walls were designed to provide employees with a sense of unity, place and purpose by incorporating Unitil's Vision, Mission, and Values in select locations. Most of the artwork installed were produced from photos in Unitil's archives. Historical photos were largely chosen for artwork in the conference rooms. Photos taken in the field were chosen to represent views of nature while still highlighting Unitil's electric operations. The artwork chosen complements the sustainability and wellness goals for the project. The artwork also includes a plaque, located in the lobby that describes the sustainability features of the building and also graphical sustainability signage that was installed throughout the building to highlight sustainability features and for a tool to educate employees and visitors.

Unitil Energy Systems, Inc.

Company	Work Order	Utility Account Description	Long Description	Posting Amount
10 Unitil Energy Systems	E-191060-20192718	390-00 Structures-E	Construction - New DOC Facility	291,526.93
10 Unitil Energy Systems	E-191060-20192718	390-00 Structures-E	Construction - New DOC Facility	(246.17)
10 Unitil Energy Systems	E-191060-20192719	390-00 Structures-E	Engineering & Architectural Services	80,215.32
10 Unitil Energy Systems	E-191060-20192719	390-00 Structures-E	Engineering & Architectural Services	2,197.50
10 Unitil Energy Systems	E-191060-20192720	390-00 Structures-E	Legal . Insurance, Permitting & Misc	2,340.00
10 Unitil Energy Systems	E-191060-20192720	390-00 Structures-E	Legal . Insurance, Permitting & Misc	4,453.50
10 Unitil Energy Systems	E-191060-20192721	390-00 Structures-E	Internal Project Management	21,830.06
10 Unitil Energy Systems	E-191060-20192721	390-00 Structures-E	Internal Project Management	10,890.19
10 Unitil Energy Systems	E-191060-20192725	390-00 Structures-E	Move to 20 Continental Drive & Clean Out of 114 DWR Building	79,443.43
10 Unitil Energy Systems	E-191060-20192725	390-00 Structures-E	Move to 20 Continental Drive & Clean Out of 114 DWR Building	3,650.02
10 Unitil Energy Systems	E-191060-20192722	391-01 Office Furniture & Fixtur-E	Office: Furniture/Equip./Appliances & Furnishings	73,069.62
10 Unitil Energy Systems	E-191060-20192722	391-01 Office Furniture & Fixtur-E	Office: Furniture/Equip./Appliances & Furnishings	3,237.58
10 Unitil Energy Systems	E-191060-20192723	393-00 Stores Equipment-E	Warehouse & Ops: Equipment & Furnishings	2,006.37
10 Unitil Energy Systems	E-191060-20192723	393-00 Stores Equipment-E	Warehouse & Ops: Equipment & Furnishings	2,529.21
			Total	**577,143.56**

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 5

Date Request Received: 09/02/2021 Date of Response: 09/17/2021
Request No. DOE 5-34 Witness: John F. Closson

REQUEST:

Reference: Staff Data Response 2-46b Attachment 1, at 13; DOE Data Response 3-47, Attachment 1, at 133-135, Acquisition of New DOC, and 136-139, Construction – New DOC Facility. Also reference Testimony of John F. Closson at Bates 282, and Schedule RevReq 4-4 at Bates 188.

a. Total expenditures for the new Seacoast DOC in Exeter, including the costs of land acquisition and construction, appear to be $17,079,857 ($1,405,413 + $15,674,444) as represented in Staff Data Response 2-46b. However, Mr. Closson's testimony references an all-in cost of $17,517,969. Please explain the $438,112 difference between the two totals and confirm which amount was included in the test year rate base.
b. It appears that an additional Authorization (Sequence 3?) to support the expenditures identified in a. above was not provided. Please explain and provide any missing project documentation.
c. Schedule RevReq 4-4 appears to indicate that additional expenditures in the amount of $577,144 were incurred as part of the Seacoast DOC project in 2021 but are to be included the 2020 test year rate base. Please explain. If included, please provide greater detail behind what constitutes each expense listed on lines 2, 3, and 4. Is this amount part of the $438,112 referenced in a. above?

RESPONSE:

a. Mr. Closson's testimony provided cost of $17,517,969 which reflected the total costs at the time of the Company's initial filing which includes costs incurred after the Company's 2020 test year. The total expenditures ($17,079,857), reflected in Staff Data Response 2-46b, reflect total capital expenditures/plant in service as of the end of the test year. The amount included in the Company's test year-end rate base is $17,079,857. In addition, the company has included a post test year rate base addition of $577,144. This results in a total cost of $17,657,001 included in the Company's requested pro forma rate base.

b. Per the Company's Authorization Policy a revision is only required to be written if there is a change in scope anticipated or the expenditures/spending are expected to exceed 15% or $5,000. Both of the authorizations are within the policy tolerance.

c. As described in Messrs. Goulding and Nawazelski testimony, Bates 105, the

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 5

Date Request Received: 09/02/2021 Date of Response: 09/17/2021
Request No. DOE 5-34 Witness: John F. Closson

Company included a test year pro forma increase to Utility Plant in Service of $577,144, as shown on Schedule RevReq-4-4 (Bates 188), Column 2, Line 5, to account for the carry-over work closed to Plant in Service during the two months ended February 28, 2021 related to the new Exeter DOC. Detail for these amounts has been provided in DOE 5-34 Attachment 1. This amount is part of the $438,112 referenced in part a of this discovery request.

DOE 6-30
Attachment 1

New Seacoast Region Facility (DOC) - Permitting Legal Fees

Description	Amount
Legal Fees - Feb 2019	$ 14,744.00
Legal Fees - Mar 2019	$ 9,880.00
Legal Fees - Apr 2019	$ 7,300.72
Legal Fees - May 2019	$ 5,740.00
Legal Fees - Jun 2019	$ 3,643.44
Total:	$ 41,308.16

HSI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors

December 28, 2018
Revised: March 12, 2019
Job #4891 - USPP

Mr. Langdon Plummer, Chairman
Exeter Planning Board
10 Front Street
Exeter, NH 03833

RE: SITE PLAN WAIVER REQUESTS
PROPOSED UNITIL OPERATIONS FACILITY
20 CONTINENTAL DRIVE
EXETER, NH

Dear Sir:

On behalf of our client, PROCON, and in accordance with Section 13.7 of the Town of Exeter Site Plan Review and Subdivision Regulations (SPR), we respectfully request the following waivers for the above referenced project.

WAIVER REQUEST #1

SPR Regulation: Section 7.4.7 requires the location and mapping of any significant trees (greater than 16-inches in diameter as measured 12-inches above ground).

Waiver Request: To waive the requirement that the Existing Conditions Plan shows the location and size of any significant trees upon the property.

Basis of Waiver: The Existing Conditions Plan that is included as part of this site plan application accurately depicts the natural features of this property, with the exception of the location of significant trees. Wetlands, watercourses, tree lines, ledge outcroppings and topography are all environmental features that are shown on the plans. Location of individual trees for a large project is time consuming and expensive. Furthermore, unlike many residential projects, large commercial projects such as this generally do not have the flexibility to design around individual trees.

3 Congress St. Nashua, NH 03062 · (603) 883-2057
131 Middlesex Turnpike, Burlington, MA 01803 · (781) 203-1501
www.hayner-swanson.com

WAIVER REQUEST #2

SPR Regulation: Section 7.5.4 requires a High Intensity Soils Survey (HISS) information to be added to the site plan.

Waiver Request: To waive the requirement that the site plan set shows HISS information.

Basis of Waiver: HISS mapping shows the general soil types of the land with an emphasis on the drainage class of the soils. The Existing Conditions Plan that is included as part of this site plan application shows Site Specific Soils as mapped by Gove Environmental Services of Exeter, NH. Site Specific Soils Mapping is a more detailed representation of the on-site soils. Both methods provide the Town with a good understanding of the on-site soils. One other reason that Site Specific Soils Mapping was used in that it is a requirement of the New Hampshire Department of Environmental Services Alteration of Terrain Permit process.

WAIVER REQUEST #3

SPR Regulation: Section 9.2.4 (in particular 1 a & b, 2 and 4), which requires certain architectural guidelines for new construction.

Waiver Request: To waive the requirements that the proposed building additions need pitched roofs, façade treatments, exterior material types and historic details incorporated into the architecture.

Basis of Waiver: The architecture of the proposed building is harmonious with the other buildings in this corporate park in terms of roof type, size and exterior materials. The building will not be seen from any major collector road in Town. The use of high-maintenance natural materials and pitched roofs is not practical for this type of use located in an industrial/commercial-type setting.

WAIVER REQUEST #4

SPR Regulation: Section 9.5.1.4 does not allow grading within five (5) feet of any exterior property line.

Waiver Request: To waive the requirement to allow grading within five (5) feet of the property that abuts this project along the east side of the entrance driveway/parking area (Map 46, Lot 2).

Basis of Waiver: The original design of this commercial/industrial subdivision contemplated a shared access and utility design for the subject site and the abutting property to the north (Map 46, Lot 2 – FW Webb). The proposed site plan for the Unitil project includes the easternmost entrance driveway and parking area, which will require minimal grading and work upon along the common property line. Map 46, Lot 2.

WAIVER REQUEST #5

SPR Regulation: Section 9.7.5.5 requires that landscape islands be provided in parking lots between every ten to fifteen spaces to avoid long rows of parked cars.

Waiver Request: To allow parking aisles in excess of ten to fifteen (10-15) parking spaces without the use of a landscaped island.

Basis of Waiver: As can be seen on the site plans, the proposed facility will contain a medium size parking area in front of the building. Curbed islands are proposed in the parking area to define traffic patterns and provide areas for landscaping. The proposed design attempts to balance the amount of site landscaping with the ability to provide ease of snow plowing and general maintenance of the parking lots. The hardship of complying with this regulation would be the loss of approximately five (5) parking spaces. The proposed site enjoys significant exterior buffers and provides for over 60% open space where 30% is required for this zone. Lastly, this property is party of the Garrison Glen Corporate Park, where other users within the development do not contain islands within their parking lots.

WAIVER REQUEST #6

SPR Regulation: Section 9.9.2 requires a seventy-five (75) foot structural and parking setback from wetlands that contain poorly drained soils.

Waiver Request: To allow portions of the proposed building and parking areas (including driveways) to be constructed within the seventy-five (75) foot setback.

Basis of Waiver: As can be seen on the plans, wetlands surround the interior buildable portion of this lot. In order to meet the development program needs of the proposed building there are several areas where the building and parking encroaches into the seventy-five (75) foot setback. Without these encroachments this property would be unable to accommodate this proposed development.

Wetland Waiver Guidelines (SPR Section 9.9.3)

1. Relative value of the wetland including its ecological sensitivity and function with the greater landscape.

The wetland areas on the site are red maple dominated forested wetlands formed within the poorly drained glacial till on a bouldery landscape. These wetlands lie upgradient and distinctly separate from the Little River and its contiguous marsh and scrub shrub wetlands within its floodplain. This wetland type is very common in the Continental Drive area and can be found on all the adjoining lots, often in close proximity to the road or to existing industrial development. These types of wetlands generally act as buffers to the more sensitive wetlands more closely associated with the river or other more sensitive wetland areas. This type of wetland is not particularly sensitive to small direct impacts or disturbances within its buffer. Their value is generally limited to modest wildlife habitat and water quality unless they closely associated with the Little River or with other features such as vernal pools, streams, or similar more sensitive areas. There are no such features on this site. The majority of the proposed wetland and buffer impacts occur to this type of wetland.

2. Functions and Values Assessment

Gove Environmental Services, Inc. evaluated the wetlands in the vicinity of the proposed impacts and buffer encroachment to determine the functions and values of these areas. The function of the wetlands on the site is limited to modest wildlife habitat and maintenance of water quality in the watershed, essentially acting as a buffer to the more sensitive wetlands near the Little River. The wildlife habitat value of the wetlands on the site is little different than that of the surrounding uplands since there are no vernal pools or streams on the site that would elevate the habitat value of these forested wetlands. The true wetland related habitat value lies within the Little River and its contiguous wetlands along its floodplain. Since impacts are located far upgradient of these areas and stormwater management systems will be design to protect water quality, proposed impacts will have negligible, if any effect on the overall functions and values of the wetland areas which will remain intact and largely offsite.

3. Use cannot be reasonably carried out outside of the buffers

Given the unique manner in which the wetlands and buffers surround this property there is no way to meet the development needs of the proposed project without impacting the buffers and wetland areas as shown on the plans.

4. Effort to minimize impacts to the buffer

The proposed site design utilizes guardrail and steep slopes in an attempt to minimize buffer and wetland impacts. A good portion of the buffer impacts is due to grading, which will be restored using a conservation seed mix.

5. Drainage facilities within the buffer

The proposed stormwater management areas include a number of features designed to improve water quality of the stormwater runoff. Deep sump catch basins and sediment forebays are uses to reduce velocities and settle our suspend solids. The subsurface detention system and "wet pond" basin area will provide for added residence time so that additional settling of suspended solids can occur. Furthermore, by using a multi-stage outlet control structure at each treatment area, peak flow rates can be reduced to the pre-development rates.

6. Recommendations from the Exeter Conservation Commission

See the attached letter from the Exeter Conservation Commission dated December 13, 2019 indicating 'no objection' to the proposed project.

7. Mitigation Proposal

The Applicant proposes to contribute $77,765.81 to the State of New Hampshire Department of Environmental Services Wetlands Bureau Aquatics Resource Mitigation fund.

WAIVER REQUEST #7

SPR Regulation: Section 9.17.9 which requires private sites to use granite curbing.

Waiver Request: To allow the use of Cape Cod berm in lieu of granite curb in the back area of the proposed project.

Basis of Waiver: Given the commercial nature of this project and the fact that the front part of the site will utilize granite curbing a waiver from this regulation is being sought. Cape Cod berm is a proven product and is being proposed in the rear loading dock area and site storage area, away from the building, of the front parking lot. Cape Cod berm has been used on other sites within this corporate park and is used along Continental Drive, the public road providing access to these lots.

Granting these waivers is in accordance with the criteria of Section 13.7 and RSA 674:44, III (e). We feel that the above requests are reasonable for a project of this size and that a strict enforcement of these requirements would pose a hardship and difficulties to our client. Furthermore we think that the spirit and intent of the Town of Exeter Site Plan Review and Site Plan Regulations is met with this project in that the development will not be detrimental to public health, safety and welfare.

Thank you for your consideration in this matter.

Respectfully,

James N. Petropulos, P.E.
President/Principal Engineer
HAYNER/SWANSON, INC.

TOWN OF EXETER

Planning and Building Department

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709
www.exeternh.gov

Date: **March 19, 2019**

To: **Planning Board**

From: **Dave Sharples, Town Planner**

Re: **Unitil Energy Systems, Inc. PB Case #18-16**

The Applicant is seeking site plan approval and a Wetlands Conditional Use Permit for the proposed construction of a 53,490 square foot building which will contain offices, storage, warehouse and wash bays, along with associated site improvements on an 11.7 acre parcel located at 20 Continental Drive. The subject property is located in the CT-1, Corporate Technology Park-1 zoning district and is identified as Tax Map Parcel #46-3.

The Applicant appeared before the Technical Review Committee (TRC) on January 31, 2019. UEI has submitted their comment letter; dated February 5, 2019 (Review No. 1). Both the TRC comment letter and UEI comments are included for your review.

The Applicant appeared before the Conservation Commission at their December 11th, 2018 meeting for review of their Wetlands Conditional Use Permit application. The ConCom voted unanimously with no objection to the issuance of a Wetland CUP but did express some concerns. A copy of the Commission's comments is included for your review. The Applicant returned to the ConCom at their February 12th, 2019 meeting for review of their NH Dredge & Fill (Wetlands) application. Attached is a copy of the letter to NH DES in support of the application.

The Applicant is requesting six (6) waivers from the Board's Site Plan Review & Subdivision regulations as outlined in their Waiver request letter dated December 28, 2018, and revised March 12, 2019 and included herein.

Waiver Request Motions:

Significant Trees (16-inches diameter {caliper} or greater) waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 7.4.7. of the Site Plan Review and Subdivision Regulations regarding identifying significant trees 16" in diameter (caliper) or greater be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

High Intensity Soils Survey (HISS) waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 7.5.4 of the Site Plan Review and Subdivision Regulations to provide High Intensity Soil Survey information on the **Proposed Site Plan** be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Architectural Guidelines waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 9.2.4 of the Site Plan Review and Subdivision Regulations regarding architectural guidelines for new construction be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Grading within 5 feet of property line waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 9.5.1.4 of the Site Plan Review and Subdivision Regulations regarding grading within 5 feet of the property line be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Landscape Islands within /Parking Lots waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 9.7.5.5 of the Site Plan Review and Subdivision Regulations regarding landscape islands be provided in parking lots between every 10 to 15 spaces to avoid long rows of parked cars be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Wetland Setbacks – 75 foot structural/parking setback from Inland Stream waiver motion: After reviewing the criteria for granting waivers, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a waiver from Section 9.9.2 of the Site Plan Review and Subdivision Regulations regarding proposed construction to be permitted within the setback be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Planning Board Motions

Site Plan Motion: I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for Site Plan approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Conditional Use Permit (Wetlands) Motion: After reviewing the criteria for a Wetlands Conditional Use permit, I move that the request of Unitil Energy Systems, Inc. (PB Case #18-16) for a Conditional Use Permit be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures

TOWN OF EXETER

Planning and Building Department

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www.exeternh.gov

Date: **March 19, 2019**

To: **Planning Board**

From: **Dave Sharples, Town Planner**

Re: **Unitil Energy Systems, Inc. PB Case #18-20**

The Applicant is seeking a lot line adjustment to relocate the common lot line between the properties located at 20 Continental Drive (Tax Map Parcel #46-3) and 60 Gourmet Place (Tax Map Parcel #46-1) to provide additional land area to the 20 Continental Drive parcel for the proposed construction of the Operations Center also under review by the Planning Board. The area of land being transferred by this adjustment is 41,560 square feet. The subject properties are located in the CT-1, Corporate Technology Park-1 zoning district.

Also as part of this application is a proposed street dedication. The owner of property at 60 Gourmet Place (12 Continental Drive LLC) is proposing to dedicate the land beneath Gourmet Place, which is currently a private way that serves as the driveway to the Gourmet Gift Basket facility, as a public street. A letter from the Applicant dated November 19, 2018 is enclosed which outlines the reason for this request. I am unclear on the process for requesting the Planning Board to review a proposed public street that was previously approved by the Board and, at that time, the applicant stated that the roadway would remain private and would not be dedicated to the town. I will be discussing this internally and will provide an update at the meeting.

The Applicant appeared before the Technical Review Committee (TRC) on January 31, 2019 for review of the proposed construction of the Operations Center, and several comments relative to the lot line adjustment plan were provided to the Applicant. These items are outlined in the Applicant's cover letter, dated March 12th, 2019 and included herein.

The Applicant has not requested any waivers from the Board's Site Plan Review and Subdivision Regulations. However, if they are seeking a recommendation on street acceptance of the portion of the roadway that is already built, then several waivers may be needed. This is also a discussion I will have internally and report back to the board. Outside of the street dedication, I have no issues with the lot line adjustment.

Planning Board Motions

Lot Line Adjustment Motion: I move that the request of Unitil Energy Systems, Inc. (PB Case #18-20) for Lot Line Adjustment approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures

TOWN OF EXETER
PLANNING BOARD
APPROVED MINUTES
March 28, 2019

1. CALL TO ORDER: Session was called to order at 7:00 pm by Vice-Chair Brown.

2. INTRODUCTIONS

Members Present: Vice-Chair Aaron Brown, Gwen English, Kelly Bergeron, Niko Papakonstantis, Select Board Representative, Nick Gray, Alternate, Jennifer Martel, Alternate and Marcia Moreno-Baez, Alternate.

Staff Present: Dave Sharples, Town Planner

Vice-Chair Brown indicated that Alternates, Nick Gray, Jennifer Martel and Marcia Biaz would be active.

3. <u>NEW BUSINESS</u>

HEARINGS:

1. The application of Unitil Energy Systems, Inc. for a commercial site plan review and Wetlands Condition Use Permit (CUP) for the proposed construction of a 53,490 SF building (offices, storage, warehouse and wash bay area) parking and associated site improvements on an 11.70-acre parcel
   Corporate Technology-1 Park zoning district
   20 Continental Drive
   Tax Map Parcel #46-3
   Case #18-16

2. The application of Unitil Energy Systems, Inc. for a lot-line adjustment between properties located at 20 Continental Drive and 60 Gourmet Place
   CT-Corporate Technology-1 Park zoning district
   Tax Map Parcels #46-3 and #46-1
   Case #18-20

Ms. Bergeron motioned to accept the applications of Unitil Energy Systems, Inc., Case #18-16 and Case #18-20. Mr. Gray seconded the motion, with all in favor, the motion passed unanimously.

James Petropulos of Hayner/Swanson, Inc. presented the design plan on behalf of the applicant. Mr. Petropulos noted the cases go hand in hand, one site plan and one lot-line adjustment. The11-acre lot located in Corporate Technology Park zoning district abutted by Gourmet Gift Basket (GGB), undeveloped land to the South, created in subdivision in 1990 (referring to the L-shaped parcel). The majority is wooded, wetlands, which have been flagged by Brendan Quigley. Lot-line plan needed to support new building, relocate between subject line and

GGB which would give the Unitil lot more room and better geography. Made sense to shift close to road. Unitil looking to acquire Gourmet Place and convey some land, would be town matter. Proposing a two-story facility, 53,490 SF. Currently their operation is in Kensington and they are first responders during outage or emergency. Proposed development would consist of offices, storage, wash bay, two access locations off Gourmet Place with 80 employees and addition 20 spots for emergency. 61% open space, few impact areas, impact from wetland, with difficult soil conditions, not a lot of choices for infiltration, catch basin and run to back of property, outlet to surface created wetland and drainage off-site.

Mr. Petropulos reviewed the proposed site lighting and landscaping plan with focus on the front of the building which would have a flat roof, be 26' feet in height and require seven waivers which are fairly straightforward and CUP.

Mr. Petropulos indicated other permitting necessary, the applicant has secured alteration of terrain permit, been before the Conservation Commission, received a favorable recommendation and think it has been designed responsibly.

Mr. Sharples noted the project requires wetlands CUP, and several waivers. The applicant appeared before the TRC (comment and response letter enclosed in packet). Project was reviewed by UEI in February and will have a second review. No significant comments. Mr. Sharples advised the lot line is not ready to be accepted due to changes and uncertainties and may need to schedule a site walk and table until the second meeting in April.

Vice-Chair Brown recommended addressing the waivers and CUP.

Mr. Petropulos added Gourmet Place is intended to provide access (showing on plan here). There are seven waivers fully explained in package (will paraphrase).
7.4.7 Significant Trees, less critical than in R-1 zone;
7.5.4 High Intensity Soils Survey (HISS). DES requires site specific soil mapping, provided that so seeking relief from HISS.
9.2.4 Architectural Guidelines waiver motion, the flat roof and exterior materials are consistent with nearby buildings;
9.5.1.4 Grading within 5 feet of property line waiver motion, approached FW Webb and they support the project.
9.7.5.5 Landscape islands with parking lots waiver motion, focus on greenery on perimeter of parking area;
9.9.2 Wetland Setbacks, 75 foot structural/parking setback from inland stream waiver, not highest quality wetlands, mitigation approximately $75,000;
9.17.9 Slope Graded Lines, Cape Cod Berm.

Mr. Petropulos noted seven items for the CUP:
1. Proposed use allowed in zone;
2. Use not carried out elsewhere on site, avoid other areas;
3. Wetland scientist functional rate assessment, common wooded wetland;

4. Construction and maintenance not detrimental to 2:1 slope on perimeter, flatter design would increase impact;
5. Buffer impact would leave remaining areas in natural state, will be vegetated;
6. No hazardous impact, clean use;
7. Obtain other permits, are in process of getting those.

Vice-Chair Brown opened the hearing to the public for comments and questions at 7:34 and being none closed the hearing for deliberations.

Vice Chair Brown noted minor items with the public right-of-way, making sure it meets our requirements.

Ms. Martel asked about the detention basin, it appears as if going over the property line? Mr. Petropulos responded yes, the owner owns the abutting property as well. Ms. Martel questioned Stormwater area B points to pavement? Mr. Petropulos explained the underground system will capture the runoff. The slope works front to back. Stores in underground piping system and exits at slower rate, filters out sediments in the subsurface system.

Ms. Martel stated there are 2:1 slopes over majority of site, would like to see a more bioengineered approach. Mr. Petropulos indicated it was something they could look into, generating some rock and more vegetation. Ms. English added more natural features.

Ms. English asked about storage of chemicals, with concerns about nearby wetlands and rain seepage. Mr. Petropulos responded the transformers are new and contain oil and are only a hazard if hit. The area is well contained. The drainage system is oversized in case it runs into a problem the water quality unit separates hydrocarbon from water which is a good way to address any incident. Poles are treated because they need to be preserved and small quantities of hydrocarbons could come off but would run through quality unit with high maintenance. Ms. English asked if the poles are covered. Mr. Petropulos answered no, there are a lot of safety procedures, don't deliver wet poles, there are many safety measures.

Ms. English asked about the snow storage location(s). Mr. Petropulos stated there is a fenced in area with a gate. DES wants snow in treatment practice rather than slope.

Ms. English asked about tree cutting area limits. Mr. Petropulos advised it was tight to diagram, only the area within the rectangle will be cleared.

Ms. English asked about the trees in parking area, it would be nice to create some shade.

Mr. Papakonstantis asked about stored equipment and odors. Mr. Petropulos indicated there was nothing problematic.

Vice-Chair Brown asked about practices on site. Tom Murphy indicated transformer's containment capacity will have countermeasure plan, stored undercover and tested. PCP acquires, used for test transfer processes, internal procedures on spills. Have several consultants as well, visual inspection of pole, PCP soluble with diesel but not water, will be separated in quality unit, dripping is mostly diesel fuel, if drips spill pads absorb oil, is maintained regularly.

Mr. Murphy commented on recyclables such as conductors and the different dumpsters used to recycle those. No fuel oil will be stored on site and there will be no refueling on site. In 10 years at Kensington never had a release from transformers.

Ms. Bergeron asked if a three-day supply? Mr. Murphy indicated several size transformers, 40 small units, 25-30 larger ones, largest units are not stored on site.

Ms. English asked where recycling storage takes place? Mr. Murphy indicated the top left corner of the first shop.

Mr. Gray asked if oil dielectric needs to be in transformers in storage? Mr. Murphy indicated there is a risk of corrosion without, have experimented with other solutions, this works best as a dialectic. Mr. Gray asked if it was unlikely the unit gets hit? Mr. Murphy advised oil can also release through valve if it starts to heat up. Mr. Gray asked if there were ever any problems with vandalism? Mr. Murphy responded there were a few incidents concerning theft of metal, have cameras and barbed wire. Last time was in Concord in 2010 which wasn't as secure as it is now.

Ms. Martel asked about traffic volume. Mr. Murphy noted the proposed facility is not as large as Eversource, 8-10 trucks are possible and stored internally. Mr. Murphy added the facility can support 10-20 trucks in the emergency area as mentioned previously.

Vice-Chair Brown asked for feedback on waivers and CUP.

Mr. Gray stated he was okay with waivers as proposed, and fine with practical design of building, strong precedent for trees and soil survey, if neighbor approves of grading then no problems.

Vice-Chair Brown indicated the proposed use of Cape Cod berm on back.

Ms. Martel noted she would like to see how much canopy would be lost when the area is developed, opposes Cape Cod curb, seen so many fail with heavy trucks present. Concerned that would release stormwater and become an environmental nightmare. Everything else fine.

Ms. English stated she agreed with Ms. Martel on both waivers and is on the fence about the landscape islands.

Mr. Papakonstantis stated he agreed with Mr. Gray but is concerned about significant trees as well.

Ms. Bergeron stated she had nothing else to add, wish didn't have to survey entire site.

Ms. Moreno-Baez stated she agreed with Ms. Martel, but the others were alright.

Vice-Chair Brown agreed the tree waiver was granted too often, have no issue with parking lot waiver, there is less impact without trees there, FW Webb supports grading encroachment, take action on lot line?

Mr. Sharples noted he would advise holding off because the road agreement, not looking to make road private so may change, not sure would want adjustment before sorting out that change and can cover at the next meeting.

Vice-Chair Brown recommended scheduling a site walk.

Mr. Petropulos proposed April 29, with plenty of time to complete plan and comments will be taken under advisement.

Ms. English asked if considered alternative energy sources for the facility (indicating she did not expect a response just a suggestion).

Mr. Sharples indicated significant tree waiver can be sorted out with the site walk. New plans are needed by April 18th.

Vice-Chair Brown proposed April 11th at 5:30. Ms. Martel indicated she would like to see an inventory along with count.

Ms. Bergeron motioned to continue Case #18-16 and Case #18-20 until April 29th. Mr. Gray seconded the motion, with all in favor, the motion passed unanimously.

3. The application of VWI Towers LLC for a site plan review for the proposed construction of a wireless communications facility and associated improvements on a 31.48-acre parcel located on Kingston Road (Town of Exeter landfill property)
R-1, Low Density Residential zoning district
Tax Map Parcel #100-004
Case #19-02

Ms. Bergeron motioned to accept Case #19-02. Mr. Papakonstantis seconded the motion, with all in favor, the motion passed unanimously.

HSI Hayner/Swanson, Inc.
Civil Engineers/Land Surveyors

December 28, 2018
Revised: March 12, 2019
April 25, 2019
Job #4891 - USPP

Mr. Langdon Plummer, Chairman
Exeter Planning Board
10 Front Street
Exeter, NH 03833

RE: SITE PLAN WAIVER REQUESTS
PROPOSED UNITIL OPERATIONS FACILITY
20 CONTINENTAL DRIVE
EXETER, NH

Dear Sir:

On behalf of our client, PROCON, and in accordance with Section 13.7 of the Town of Exeter Site Plan Review and Subdivision Regulations (SPR), we respectfully request the following waivers for the above referenced project.

WAIVER REQUEST #1

SPR Regulation: Section 7.4.7 requires the location and mapping of any significant trees (greater than 16-inches in diameter as measured 12-inches above ground).

Waiver Request: To waive the requirement that the Existing Conditions Plan shows the location and size of any significant trees upon the property.

Basis of Waiver: The Existing Conditions Plan that is included as part of this site plan application accurately depicts the natural features of this property, with the exception of the location of significant trees. Wetlands, watercourses, tree lines, ledge outcroppings and topography are all environmental features that are shown on the plans. Location of individual trees for a large project is time consuming and expensive. Furthermore, unlike many residential projects, large commercial projects such as this generally do not have the flexibility to design around individual trees.

3 Congress St. Nashua, NH 03062-3301 · (603) 883-2057/5057 (fax) · www.hayner-swanson.com

Based on a suggestion by the Exeter Planning Board at their March 28, 2019 hearing Gove Environmental Services of Exeter, NH has performed a detailed inventory of the trees, greater than 16-inches in diameter as measured 12-inches above ground, within the portion of the site to be cleared for construction. They have determined the following:

White Pine – 23
Red Pine – 2
Eastern Hemlock – 2
Red Oak – 6
Shagbark Hickory – 6
Red Maple – 5
Sugar Maple – 1
White Oak – 2
Red Pine – 2

The total number of trees, greater than 16-inches in diameter as measured 12 inches above ground, is 49.

WAIVER REQUEST #2

SPR Regulation: Section 7.5.4 requires a High Intensity Soils Survey (HISS) information to be added to the site plan.

Waiver Request: To waive the requirement that the site plan set shows HISS information.

Basis of Waiver: HISS mapping shows the general soil types of the land with an emphasis on the drainage class of the soils. The Existing Conditions Plan that is included as part of this site plan application shows Site Specific Soils as mapped by Gove Environmental Services of Exeter, NH. Site Specific Soils Mapping is a more detailed representation of the on-site soils. Both methods provide the Town with a good understanding of the on-site soils. One other reason that Site Specific Soils Mapping was used in that it is a requirement of the New Hampshire Department of Environmental Services Alteration of Terrain Permit process.

WAIVER REQUEST #3

SPR Regulation: Section 9.2.4 (in particular 1 a & b, 2 and 4), which requires certain architectural guidelines for new construction.

Waiver Request: To waive the requirements that the proposed building additions need pitched roofs, façade treatments, exterior material types and historic details incorporated into the architecture.

Basis of Waiver: The architecture of the proposed building is harmonious with the other buildings in this corporate park in terms of roof type, size and exterior materials. The building will not be seen from any major collector road in Town. The use of high-maintenance natural materials and pitched roofs is not practical for this type of use located in an industrial/commercial-type setting.

WAIVER REQUEST #4

SPR Regulation: Section 9.5.1.4 does not allow grading within five (5) feet of any exterior property line.

Waiver Request: To waive the requirement to allow grading within five (5) feet of the property that abuts this project along the east side of the entrance driveway/parking area (Map 46, Lot 2).

Basis of Waiver: The original design of this commercial/industrial subdivision contemplated a shared access and utility design for the subject site and the abutting property to the north (Map 46, Lot 2 – FW Webb). The proposed site plan for the Unitil project includes the easternmost entrance driveway and parking area, which will require minimal grading and work upon along the common property line. Map 46, Lot 2.

WAIVER REQUEST #5

SPR Regulation: Section 9.7.5.5 requires that landscape islands be provided in parking lots between every ten to fifteen spaces to avoid long rows of parked cars.

Waiver Request: To allow parking aisles in excess of ten to fifteen (10-15) parking spaces without the use of a landscaped island.

Basis of Waiver: As can be seen on the site plans, the proposed facility will contain a medium size parking area in front of the building. Curbed islands are proposed in the parking area to define traffic patterns and provide areas for landscaping. The proposed design attempts to balance the amount of site landscaping with the ability to provide ease of snow plowing and general maintenance of the parking lots. The hardship of complying with this regulation would be the loss of approximately five (5) parking spaces. The proposed site

enjoys significant exterior buffers and provides for over 60% open space where 30% is required for this zone. ***Furthermore, at the request of the Exeter Planning Board, Unitil has added an island on the interior bay of the front parking field to break up the parking area.*** Lastly, this property is party of the Garrison Glen Corporate Park, where other users within the development do not contain islands within their parking lots.

WAIVER REQUEST #6

SPR Regulation: Section 9.9.2 requires a seventy-five (75) foot structural and parking setback from wetlands that contain poorly drained soils.

Waiver Request: To allow portions of the proposed building and parking areas (including driveways) to be constructed within the seventy-five (75) foot setback.

Basis of Waiver: As can be seen on the plans, wetlands surround the interior buildable portion of this lot. In order to meet the development program needs of the proposed building there are several areas where the building and parking encroaches into the seventy-five (75) foot setback. Without these encroachments this property would be unable to accommodate this proposed development.

Wetland Waiver Guidelines (SPR Section 9.9.3)

1. Relative value of the wetland including its ecological sensitivity and function with the greater landscape.

The wetland areas on the site are red maple dominated forested wetlands formed within the poorly drained glacial till on a bouldery landscape. These wetlands lie upgradient and distinctly separate from the Little River and its contiguous marsh and scrub shrub wetlands within its floodplain. This wetland type is very common in the Continental Drive area and can be found on all the adjoining lots, often in close proximity to the road or to existing industrial development. These types of wetlands generally act as buffers to the more sensitive wetlands more closely associated with the river or other more sensitive wetland areas. This type of wetland is not particularly sensitive to small direct impacts or disturbances within its buffer. Their value is generally limited to modest wildlife habitat and water quality unless they closely associated with the Little River or with other features such as vernal pools, streams, or similar more sensitive areas. There are no such features on this site. The majority of the proposed wetland and buffer impacts occur to this type of wetland.

2. Functions and Values Assessment

Gove Environmental Services, Inc. evaluated the wetlands in the vicinity of the proposed impacts and buffer encroachment to determine the functions and

values of these areas. The function of the wetlands on the site is limited to modest wildlife habitat and maintenance of water quality in the watershed, essentially acting as a buffer to the more sensitive wetlands near the Little River. The wildlife habitat value of the wetlands on the site is little different than that of the surrounding uplands since there are no vernal pools or streams on the site that would elevate the habitat value of these forested wetlands. The true wetland related habitat value lies within the Little River and its contiguous wetlands along its floodplain. Since impacts are located far upgradient of these areas and stormwater management systems will be design to protect water quality, proposed impacts will have negligible, if any effect on the overall functions and values of the wetland areas which will remain intact and largely offsite.

3. Use cannot be reasonably carried out outside of the buffers

Given the unique manner in which the wetlands and buffers surround this property there is no way to meet the development needs of the proposed project without impacting the buffers and wetland areas as shown on the plans.

4. Effort to minimize impacts to the buffer

The proposed site design utilizes guardrail and steep slopes in an attempt to minimize buffer and wetland impacts. ***The sloped areas will be loamed and then seeded with a conservation seed mix to create a more natural appearance and function.***

5. Drainage facilities within the buffer

The proposed stormwater management areas include a number of features designed to improve water quality of the stormwater runoff. Deep sump catch basins and sediment forebays are uses to reduce velocities and settle our suspend solids. The subsurface detention system and "wet pond" basin area will provide for added residence time so that additional settling of suspended solids can occur. Furthermore, by using a multi-stage outlet control structure at each treatment area, peak flow rates can be reduced to the pre-development rates.

6. Recommendations from the Exeter Conservation Commission

See the attached letter from the Exeter Conservation Commission dated December 13, 2019 indicating 'no objection' to the proposed project.

7. Mitigation Proposal

The Applicant proposes to contribute $77,765.81 to the State of New Hampshire Department of Environmental Services Wetlands Bureau Aquatics Resource Mitigation fund.

WAIVER REQUEST #7

SPR Regulation: Section 9.17.9 which requires private sites to use granite curbing.

Waiver Request: To allow the use of Cape Cod berm in lieu of granite curb in ***portions of the*** back area of the proposed project.

Basis of Waiver: Given the commercial nature of this project and the fact that the front part of the site will utilize granite curbing a waiver from this regulation is being sought. Cape Cod berm is a proven product and is being proposed in the rear loading dock area and site storage area, away from the building, of the front parking lot. Cape Cod berm has been used on other sites within this corporate park.

The use of cape cod berm in the back portion of the site is limited to those areas that are adjacent to the outdoor storage of equipment and materials. These areas are away from the travel path of a snow plow and are further protected by the materials stored there and canopy overhangs.

Of the 2800 linear feet of curbing on the site we are seeking relief of 400 feet, which is 15% of the overall amount of curbing.

Granting these waivers is in accordance with the criteria of Section 13.7 and RSA 674:44, III (e). We feel that the above requests are reasonable for a project of this size and that a strict enforcement of these requirements would pose a hardship and difficulties to our client. Furthermore we think that the spirit and intent of the Town of Exeter Site Plan Review and Site/Subdivision Plan Regulations is met with this project in that the development will not be detrimental to public health, safety and welfare.

Thank you for your consideration in this matter.

Respectfully,

James N. Petropulos, P.E.
President/Principal Engineer
HAYNER/SWANSON, INC.

TOWN OF EXETER
PLANNING BOARD
DRAFT MINUTES
MAY 23, 2019

1. CALL TO ORDER: Session was called to order at 7:03 pm by Chair Plumer.

2. INTRODUCTIONS

Members Present: Chair Langdon Plumer, Vice-Chair Aaron Brown, John Grueter, Gwen English, Niko Papakonstantis, Select Board Representative, Marcia Moreno-Baez, Alternate, Nick Gray, Alternate, Jennifer Martel, Alternate.

Staff Present: Dave Sharples, Town Planner

Chair Plumer indicated that Alternates Nick Gray and Jennifer Martel would be active.

3. APPROVAL OF MINUTES

May 9, 2019

Ms. Grueter moved to approve the May 9, 2019 minutes as amended. Ms. English seconded the motion. Approved 7-0.

4. NEW BUSINESS

HEARINGS:

Continuation of public hearing on the application of VWI Towers LLC for a site plan review for the proposed construction of a wireless communications facility and associated improvements on a 31.48-acre parcel located on Kingston Road (Town of Exeter landfill property)
R-1, Low Density Residential zoning district
Tax Map Parcel #100-004
Case #19-02

Chair Plumer indicated that VWI Towers, Case #19-02 is looking to be continued to June 27, 2019.

Ms. English moved to continue Case #19-02 to June 27, 2019. Mr. Papakonstantis seconded the motion. Approved 7-0.

The application of Unitil Energy Systems, Inc. for a commercial site plan review and Wetlands Conditional Use Permit (CUP) for the proposed construction of a 53,490 S.F. building (offices, storage, warehouse and wash bay area), parking and associated site improvements on an 11.70-acre parcel located at 20 Continental Drive

Corporate Technology-1 Park zoning district
Tax Map Parcel #46-3
Case #18-16

The application of Unitil Energy Systems, Inc. for a lot line adjustment between properties located at 20 Continental Drive and 60 Gourmet Place
CT-Corporate Technology-1 Park zoning district
Tax Map Parcels #46-3 and #46-1
Case #18-20

Mr. Sharples noted this is a continued hearing.

Mr. Sharples provided the Gourmet Place email from Paul Vlasich, Town Engineer with several comments from the Town Engineer. No additional traffic requirements at intersection due to little use. Value is being moved out of public right-of-way and granite bounds on public roadway. Had Site Walk and revised plans. Added additional curbed landscape island to break up parking lot. No more rip-rap mix. Haven't gotten final sign-off from UEI. Have proposed conditions of approval for both cases.

Mark Belliveau introduced the team presenting they were not ready in prior meeting for approval. Mr. Belliveau indicated they are in a position where they would like the Board to take action and review the status of the road afterward.

James Petropulos indicated this is the third meeting. The applicant has listened to and made adjustments to comments from the last meetings. Key additions consisted of landscape island in front; using more natural seed mix; responded with tree survey with 49 trees within clearance; transferring one acre from Gourmet Gift Basket to Unitil lot to get further from wetlands.

Ms. English asked about the outline of the granite curbing. Mr. Petropulos noted 2,800 ft total curbing, 2,400 ft. granite.

Ms. English asked about planting in the island. Mr. Petropulos indicated shrubs could be added rather than tall trees which would limit lighting. Ms. English recommended planting trees elsewhere to add shade, perhaps at the beginning of where the fill line is going.

Ms. English asked about the two buffer lines and 75' setback line? Mr. Petropulos indicated that was correct.

Ms. English asked about the lighting plan, with spillover over boundary of property line and asked if it was necessary for that light to spill off where there is wetland? Mr. Petropulos noted it was a dark sky friendly system which was not on all night. The business needs security and can try to minimize lighting. Ms. English noted the bigger threat of people doing damage to property would not seem to be by the wetlands. Mr. Petropulos indicated they could try placing a shield.

Ms. Martel asked about snow storage in stormwater area adjacent to inlet and whether plows would go through? Mr. Petropulos noted the location was uncurbed, areas of storage are combined with birm curb like speed bump. Ms. Martel noted she would like to see a tree in the landscape island with the amount being removed.

Mr. Sharples asked if there was a light pole where island is going? Mr. Petropulos noted there originally was, yes.

Ms. English asked about buffer impact footage. Mr. Petropulos noted he believed wetland is 15,000 and 75,000 in buffer area. Received wetland permit and alteration of terrain permit 62% open space with a healthy buffer around Gourmet Gift Basket.

Ms. Martel asked about the construction detail for the conservation mix slope? Mr. Petropulos indicated he believed it to be a cross section and is in landscape plan.

Chair Plumer opened the hearing to the public for questions and comments at 7:37 PM and being none closed the hearing to the public.

Mr. Sharples asked if stabilization matting was biodegradable? Mr. Petropulos indicated it is.

Mr. Beliveau noted he would speak about Gourmet Place and potential road dedication. The current facility in Kensington has outgrown its location and began search for larger properties, hearing that Gourmet Place was a private road, communicated with owner as its important to be located on Town Road for business. First responders need reliable access to government-maintained roadways. Continental was an option but was very wet and did not have a viable access point. The company met with Town Manager and is very interested in returning to Exeter. The company reviewed the street policy with attorney and thought may allow for road dedication application. The road had been reviewed by the DPW at great length. Sat down with Town Engineer and discussed around eight topics. If Select Board accepts as Town road, we will make improvements listed in revised plan set, hand outs and walk through several images of roadway. One concern of DPW is damaged curb and conduit not properly restored. Indicated would replace existing pole and restore area. Concern with intersection was potential safety issue. Can be confusing what road you are on. Engaged traffic engineer who prepared memo and recommended insertion of additional traffic control such as striping. Moved stripe and stop sign up more. Excellent site distance to right and straight ahead. Road has been in place for three years. Contacted Exeter PD for accident report at intersection with no reported accidents found. Traffic engineer also recommended signage to clarify which road is which. Mr. Petropulos noted the applicant is willing to incorporate those.

Mr. Gray asked if yellow line would bear right or just pull forward? If continue to bring stop line someone coming from Gourmet Place may have reduced visibility. Mr. Beliveau indicated according to the memo it is just straight forward and didn't believe it extended far enough that you would have to look behind you. Appears to be a dramatic improvement if brought forward.

Mr. Grueter asked if the Town was concerned with the quality of the road? Mr. Sharples noted the Cape Cod birm rather than granite because that was acceptable at the time.

Mr. Grueter asked if any expansion or development planned off this part of roadway? Mr. Sharples noted there is a lot of wetlands, it would be a challenge to develop there. Mr. Beliveau noted per Town Engineer's geotechnical report which questioned if the road could sustain use, reviewed and deemed satisfactory

Ms. Martel asked about the necessity of the proposed cul-de-sac and drainage. Mr. Sharples indicated if a public road would need a turnaround for plows and emergency vehicles. Ms. Martel asked if large enough? Mr. Sharples noted yes; it meets all specifications there. Mr. Petropulos noted as the road pitches a pair of catch basins at top pand another at bottom. Slightly more pavement, raised curb and landscaped area.

Ms. Martel asked who maintains that? Mr. Petropulos responded he was not sure and asked what is usually done in the case of a cul-de-sac? Mr. Brown indicated he believed it would be the Town's responsibility, the Town has people mow. Ms. Martel asked about alternatives, so it didn't need to be mowed as she didn't see Parks & Recreation going out there. Mr. Brown noted he was unsure what you could require them to put in. Mr. Grueter noted it was not very visible either. It would be nice if the applicant would volunteer to do that. Mr. Sharples indicated they could take out or suggest ground cover that grows very slightly, requiring little maintenance. Mr. Brown noted he would rather see vegetation than pavement. Ms. Martel asked if there are plants that suppress weeds to keep from becoming a nuisance. Mr. Sharples will bring up with DPW and noted it may be up to the Select Board.

Chair Plumer noted there were several waivers to deal with. Mr. Petropulos indicated they were requesting seven waivers. The first is survey of trees. There are many trees on 11-acre lot with 49 significant trees in clearing area.

Mr. Brown moved to grant waiver request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a waiver from Section 7.4.7 of the Site Plan Review and Subdivision Regulations regarding identifying significant trees 16" in diameter (caliper) or greater, after reviewing the criteria for waivers. Mr. Gray seconded the motion.

Ms. Martel opined this waiver should never be granted as it is not good to not know.

Mr. Brown noted they did do survey of tree, just didn't map them and made a reasonable effort, in favor.

Mr. Gray stated he hasn't seen a case in which requiring it is warranted. It seems like an undue burden in 95% of cases. Mr. Grueter added "especially in commercial property."

Mr. Brown noted if it wasn't commercial the property owner could cut trees without coming to the Board.

Ms. English noted it helps to see what we are cutting, mapping gives everyone a footprint to see, not a useless requirement.

Voting in favor were: Plumer – aye, Brown – aye, Papakonstantis – aye, Gray – aye, and Grueter – aye. Voting opposed were English – nay, Martel – nay. Approved 5-2-0, so moved.

Mr. Petropulos presented the second waiver request was for HISS. Site Specific Soil Survey consistent with state regs.

Mr. Brown moved to grant the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for waiver from Section 7.5.4 of the Site Plan Review and Subdivision Regulations to provide High Intensity Soil Survey Information on the Proposed Site Plan, after reviewing the criteria for waiver. Mr. Gray seconded the motion.

Mr. Sharples noted the main difference with alteration of terrain started requiring site specific soil survey, classification differences, effectively provides same information. Discussed with Master Plan Committee and recommended changing that.

With all voting in favor, Approved 7-0-0.

Mr. Petropulos indicated request #3 was for architectural guidelines requiring pitched roofs, historic details etc. which really don't work for a building like this. The rendering is consistent with neighboring building.

Mr. Grueter moved to approve the request of Unitil Energy Systems, Inc,, Planning Board Case #18-16, for a waiver from Section 9.2.4 of the Site Plan Review and Subdivision Regulations regarding architectural guidelines for new construction, after reviewing the criteria for granting waivers. Mr. Papakonstantis seconded the motion. With all voting in favor, Approved 7-0-0.

Mr. Petropulos indicated request #4 was for grading within five feet and noted the applicant approached F.W. Webb who supported the project.

Mr. Gray moved to approve the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a waiver from Section 9.5.1.4 of the Site Plan Review and Subdivision Regulations regarding grading within 5 feet of the property line, after reviewing the criteria for granting waivers. Mr. Papakonstantis seconded the motion. With all voting in favor, Approved 7-0-0.

Mr. Petropulos indicated request #5 was for Landscape Islands within Parking Lots. Mr. Petropulos noted the applicant has four rows of parking with an island established in the center with others next to open space. Adding would limit the amount of open space.

Mr. Gray moved to approve the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a waiver from Section 9.7.5.5 of the Site Plan Review and

Subdivision Regulations regarding landscape islands be provided in parking lots between every 10 to 15 spaces to avoid long rows of parked cars, after reviewing the criteria for granting waivers. Mr. Brown seconded the motion. With all voting in favor, Approved 7-0-0.

Mr. Petropulos indicated request #6 was for wetland setbacks – 75 foot structural/parking setback from Inland Stream waiver. Mr. Petropulos noted the applicant has been before the Conservation Commission and been through the State process, isolated wetland and edges of wetlands. Addresses sub criteria such as quality of wetland and assessments. Have changed to Conservation mix.

Mr. Papakonstantis moved to approve the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a waiver from Section 9.9.2 of the Site Plan Review and Subdivision Regulations regarding proposed construction to be permitted within the setback, after reviewing the criteria for granting waivers. Mr. Grueter seconded the motion. Voting in favor were: Plumer – aye, Brown – aye, Papakonstantis – aye, Grueter – aye, Gray – aye, Martel - aye. Opposed was Ms. English – nay. Approved 6-1-0, so moved.

Mr. Petropulos indicated request #7 was for granite curbing waiver. Applicant is using Cape Cod birm in some places which will not be seen by public. Applicant added more granite curbing. 2,800 feet is granite, 400 feet is Cape Cod birm.

Mr. Gray moved to approve the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a waiver from Section 9.17.9 of the Site Plan Review and Subdivision Regulations requiring the use of granite curbing on private sites, after reviewing the criteria for granting waivers. Mr. Papakonstantis seconded the motion. With all voting in favor, Approved 7-0-0.

Mr. Sharples read the conditions of Site Plan approval adding that it was optional to add 3. Deciduous trees.

1. A dwg file of the plan shall be provided to the Town Planner showing all property lines and monumentation prior to signing the final plans. This plan must be in NAD 1983 State Plane New Hampshire FIPS 2800 Feet coordinates;

2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and Subdivision Regulations prior to the issuance of a Certificate of Occupancy;

3. A preconstruction meeting shall be arranged by the applicant and his contractor with the Town engineer prior to any site work commencing. The following must be submitted for review and approval prior to the preconstruction meeting:

i. The SWPPP (storm water pollution prevention plan), if applicable, be submitted to and reviewed for approval by DPW prior to preconstruction meeting.
ii. A project schedule and construction cost estimate.

4. All comments in the Underwood Engineers Inc. letter dated April 4, 2019 shall be addressed to the satisfaction of the Town Planner prior to signing the final plans;

5. Third party construction inspections fees shall be paid prior to scheduling the preconstruction meeting;

6. A Maintenance Log and Inspection & Maintenance Checklist for all onsite stormwater management systems shall be provided to the satisfaction of the Town Planner prior to signing the final plans. A completed log and checklist shall be submitted to the Town Engineer annually on or before January 31st. This requirement shall be an ongoing condition of approval;

7. All applicable State permit approval numbers shall be noted on the final plans;

8. The PTAPP submittal (noted in #36 in the letter from James Petropulos and dated May 14, 2019) must be accepted by DPW prior to the pre-construction meeting;

9. In the event that Gourmet Place remains private, a road maintenance agreement executed by all abutting landowners shall be provided to the Town prior to the issuance of a Certificate of Occupancy;

10. A restoration and erosion control surety, in an amount and form reviewed and approved by the Town Planner in accordance with Section 12 of the Site Plan Review and Subdivision Regulations, shall be provided.

11. Vegetation shall be added to the center parking islands;

12. Three (3) additional deciduous trees shall be added to the landscape plan; and

13. The slope stabilization matting shall be biodegradable.

Mr. Grueter moved that the request of Unitil Energy Systems, Inc, Planning Board Case #18-16 for Site Plan approval be approved with the aforesaid conditions. Mr. Papakonstantis seconded the motion. With all voting in favor, so moved.

Ms. Martel noted as they don't have specific replacement value it may be fine with what they had. Ms. English recommended placing one to three on East side of offices. Mr. Petropulos noted they could do that.

Mr. Sharples noted there were no suggested conditions for CUP approval. Conservation Commission had none.

Mr. Gray moved that the request of Unitil Energy Systems, Inc., Planning Board Case #18-16 for a Conditional Use Permit be approved, after reviewing the criteria for a Wetlands Conditional Use permit. Mr. Papakonstantis seconded the motion. With all voting in favor, so moved.

Mr. Sharples read out loud the proposed conditions for approval of the Lot Line Adjustment for Planning Board Case #18-20 with reminder that the applicant would need to go to the Select Board for acceptance and ground cover. Mr. Brown asked if a maintenance bond should be put up? Mr. Sharples recommended a three-year bond for maintenance.

1. A dwg file of the subdivision plan shall be provided to the Town Planner showing all property lines and monumentation prior to signing the final plans. This plan must be in NAD 1983 State Plane New Hampshire FIPS 2800 Feet coordinates;

2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and Subdivision Regulations;

3. In the event the proposed roadway improvements to Gourmet Place are constructed, a preconstruction meeting shall be arranged by the applicant and his contractor with the Town engineer prior to any site work commencing on the proposed roadway work. The following must be submitted for review and approval prior to the preconstruction meeting:

    i. The SWPPP (storm water pollution prevention plan), if applicable, be submitted to and reviewed for approval by DPW prior to preconstruction meeting.

    ii. A project schedule and construction cost estimate.

4. Third party construction inspections fees shall be paid prior to scheduling the preconstruction meeting; and

5. This approval recognizes that it is the intent of the applicant to seek acceptance of the existing and proposed portion of Gourmet Place to the Exeter Select Board. The Planning Board suggests the Select Board consider a ground cover or similar vegetation besides grass within the cul-de-sac island due to maintenance concerns.

Mr. Grueter moved that the request of Unitil Energy Systems, Inc., Planning Board Case #18-20 for Lot Line Adjustment approval be approved with the aforesaid conditions. Mr. Gray seconded the motion. With all voting in favor, so moved.

The application of Eversource Energy (PSNH) for a Wetlands and Shoreland Conditional Use Permits to allow for temporary impacts within the respective buffers for the proposed utility maintenance of their transmission lines Located within an existing right-of-way off Watson Road & Newfields Road RU-Rural zoning district Case #19-05

Ms. Martel recused herself from this hearing

TOWN OF EXETER
CONSERVATION COMMISSION MEMORANDUM

Date: December 13, 2018
To: Planning Board
From: Conservation Commission
Subject: 20 Continental Wetland CUP Recommendation

Project Info:
20 Continental Drive, ProCon: Unitil
Tax Map Parcel #46-3
PB CASE: 18-16

Wetland CUP

The Conservation Commission voted unanimously during their December 11th meeting with no objection to the issuance of a wetland CUP but noted they are still in discussions with the applicant regarding the wetland impacts and the wetland mitigation requirements. There was concern about the large amount of impervious ground being created and the square footage of buffers being impacted. However, the discussion related to this decision included consideration of the isolated nature of the wetlands and the large amount of wetland protection and land conservation previously secured during the subdivision of Continental Drive for industrial park development.

William E. Campbell

Bill Campbell
Chair, Exeter Conservation Commission

cc: Jim Petropulos, Hayner/Swanson Inc

TOWN OF EXETER, NEW HAMPSHIRE
10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709
www.exeternh.gov

May 29, 2019

James N. Petropulos, P.E.
Principal Engineer/President
Hayner/Swanson, Inc.
3 Congress Street
Nashua, New Hampshire 03062-3301

Re: PB Case #18-16 Unitil Energy Systems, Inc.
Site Plan Review and Wetlands Conditional Use Permit
20 Continental Drive, Exeter, N.H
Tax Map Parcel #46-3

Dear Mr. Petropulos:

Please be advised that at the meeting of May 23rd, 2019 the Exeter Planning Board voted to **APPROVE** the above-captioned application(s) for the proposed construction of a 53,490 S.F. building (offices, storage, warehouse and wash bay area), parking and associated site improvements on an 11.70-acre parcel located at 20 Continental Drive, as presented, subject to the following conditions:

1. A dwg file of the plan shall be provided to the Town Planner showing all property lines and monumentation prior to signing the final plans. This plan must be in NAD 1983 State Plane New Hampshire FIPS 2800 Feet coordinates;
2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and Subdivision Regulations prior to the issuance of a Certificate of Occupancy;
3. A preconstruction meeting shall be arranged by the applicant and his contractor with the Town engineer prior to any site work commencing. The following must be submitted for review and approval prior to the preconstruction meeting:
    i. The SWPPP (storm water pollution prevention plan), if applicable, be submitted to and reviewed for approval by DPW prior to preconstruction meeting.
    ii. A project schedule and construction cost estimate.
4. All comments in the Underwood Engineers Inc. letter dated April 4, 2019 shall be addressed to the satisfaction of the Town Planner prior to signing the final plans;
5. Third party construction inspections fees shall be paid prior to scheduling the preconstruction meeting;
6. A Maintenance Log and Inspection & Maintenance Checklist for all onsite stormwater management systems shall be provided to the satisfaction of the Town Planner prior to signing the final plans. A completed log and checklist shall be submitted to the Town Engineer annually on or before January 31st. This requirement shall be an ongoing condition of approval;

7. All applicable State permit approval numbers shall be noted on the final plans;
8. The PTAPP submittal (noted in #36 in the letter from James Petropulos and dated May 14, 2019) must be accepted by DPW prior to the pre-construction meeting;
9. In the event that Gourmet Place remains private, a road maintenance agreement executed by all abutting landowners shall be provided to the Town prior to the issuance of a Certificate of Occupancy;
10. A restoration and erosion control surety, in an amount and form reviewed and approved by the Town Planner in accordance with Section 12 of the Site Plan Review and Subdivision Regulations, shall be provided.
11. Vegetation shall be added to the center parking islands;
12. Three (3) additional deciduous trees shall be added to the landscape plan; and
13. The slope stabilization matting shall be biodegradable.

The Planning Board also granted the following waivers from the Site Plan Review and Subdivision Regulations in conjunction with the above-captioned site plan approval:

- Section 7.4.7 Significant Trees (16-inches diameter {caliper} or greater)
- Section 7.5.4 High Intensity Soils Survey (HISS) on the Proposed Site Plan.
- Section 9.2.4 Architectural Guidelines for new construction
- Section 9.5.1.4 Grading within 5 feet of property
- Section 9.7.5.5 Landscape Islands within Parking Lots
- Section 9.9.2 Wetland Setbacks – 75 foot structural/parking setback from Inland Stream
- Section 9.17.9 Granite curbing

Please feel free to contact the Planning Department at 773-6114 with any questions.

Sincerely,

Langdon J. Plumer
Chairman
Exeter Planning Board

cc: Jacqueline D. Agel, Manager, Fleet & Facilities, Unitil Energy Systems, Inc.
Mark E. Beliveau, Esquire, Pierce Atwood LLP
Thomas Monahan, Garrison Glen, LLC (property owner)
Douglas Eastman, Building Inspector/Code Enforcement Officer
Jennifer Mates, P.E., Ass't. Town Engineer
Janet Whitten, Deputy Assessor

LJP:bsm

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The State of New Hampshire

NHDES

RECEIVED

APR 22 2019

Initial:

DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

NOTICE TO RECIPIENTS OF MAJOR IMPACT N.H. WETLANDS PERMITS

Your permit was approved by the New Hampshire Wetlands Bureau as a major impact project, and your project will be reviewed by the U.S. Army Corps. Of Engineers for possible approval under the Army Corps. New Hampshire State Programmatic General Permit- SPGP. The Army Corps. will notify you within thirty (30) days as to whether you qualify.

*********NO WORK SHOULD BE DONE IN********
***********WETLANDS UNTIL YOU RECEIVE THAT NOTICE***********

IF YOU DO NOT HEAR FROM THE ARMY CORPS WITHIN THIRTY (30) DAYS, YOU SHOULD CALL THEM AT 1-800-343-4789.

****

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

April 26, 2019

Regulatory Division
CENAE-R-PEC
Permit Number: NAE-2018-03006

Unitil
Attn: Jacqueline Agle
6b Liberty Lane West
Hampton, New Hampshire 03842

Dear Applicant:

This is to inform you that we have reviewed your application to conduct activities as described on the attached NH Permit No. 2019-00088, dated April 19, 2019.

Based on the information you provided to the New Hampshire Wetlands Bureau, we have determined that your project, which may include a discharge of dredged or fill material into waters or wetlands, will have only minimal individual or cumulative environmental impacts on waters of the United States, including wetlands. Therefore, this work is authorized under General Permit No. 6 of the referenced Federal permit known as the Department of the Army General Permits for the State of New Hampshire (GPs). This work must be performed in accordance with the terms and conditions of the GPs and also in compliance with the following special condition:

1. Mitigation shall be provided in the form of an "in-lieu-fee" (ILF) payment into the State of New Hampshire Aquatic Resource Mitigation (ARM) fund in accordance with the terms of Condition No. 2 of the above-referenced Wetlands Bureau permit. Work shall not begin until this payment is made.

You are responsible for complying with all of the GP's requirements. Please review the referenced GPs carefully to familiarize yourself with its contents. You should ensure that whoever does the work fully understands the requirements and that a copy of the permit document is at the project site throughout the time the work is underway. Also, see a copy of the GPs at:
http://www.nae.usace.army.mil/Missions/Regulatory/StateGeneralPermits/NewHampshireGeneralPermit.aspx

This authorization expires August 18, 2022, unless the GPs are modified, suspended, or revoked before that. You must complete the work authorized herein by that date. If you do not, you must contact this office to determine the need for further authorization before continuing the activity. We recommend that you contact us *before* this authorization expires to discuss a time extension or reissuance of the authorization.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

This authorization requires you to complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work.

This authorization presumes that the work as described above and as shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to this office.

This permit does not obviate the need to obtain other Federal, state or local authorizations required by law, including those listed in the GPs. Performing work not specifically authorized by this determination or failing to comply with all the terms and conditions of the GPs may subject you to the enforcement provisions of Corps regulations.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://www.nae.usace.army.mil/reg/Customer_Service_Survey.pdf.

If you have questions concerning this, please contact Lindsey Lefebvre of my staff at (978) 318-8295, (978) 318-8335/8338, (800) 343-4789, or, if calling from within Massachusetts, (800) 362-4367.

Sincerely,

Michael C. Hicks
for Frank J. DelGiudice
Chief, Permits & Enforcement Branch
Regulatory Division

Enclosures

Copies Furnished:

Collis Adams, NH DES; collis.adams@des.nh.gov
Sarah Richos, NH DES; sarah.richos@des.nh.gov
Brendan Quigley, Gove Environmental Services Inc; bquigley@gesinc.biz

US Army Corps of Engineers®
New England District

COMPLIANCE CERTIFICATION FORM

(Minimum Notice: Permittee must sign and return notification within one month of the completion of work.)

Permit Number: NAE-2018-03006

Project Manager: Lindsey Lefebvre

Name of Permittee: Unitil

Permit Issuance Date: April 26, 2019

Please sign this certification and return it to our office upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

E-MAIL TO: cenae-r@usace.army.mil; or Lindsey.E.Lefebvre@usace.army.mil

MAIL TO: Permits and Enforcement Branch C
U.S. Army Corps of Engineers, New England District
Regulatory Division
696 Virginia Road
Concord, Massachusetts 01742-2751

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee	Date
Printed Name	Date of Work Completion
( ) Telephone Number	( ) Telephone Number

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

April 19, 2019

Jacqueline Agel
Unitil
6B Liberty Lane West
Hampton, NH 03842

Re: NHDES Wetlands Bureau File 2019-00088, 20 Continental Drive, Exeter Tax Map 46 Lot 3

Dear Ms. Agel:

The New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau has concluded its review of file #2019-00088. NHDES issues this approval notice for the application to:

Dredge and fill 15,425 square feet of palustrine forested wetland for the construction of a distribution, operations, and regional emergency operations center for Unitil Energy systems facilitating a 2-story 53,490 square foot commercial building and paved areas for parking, loading docks, and equipment storage. Cumulative impacts of 11,128 square feet result in additional mitigation within the subdivision. Compensatory mitigation includes a total payment of $133,868.11 to the Aquatic Resource Mitigation Fund.

The decision to approve this application was based on the following conditions being met:

1. All work shall be in accordance with plans by Hayner/Swanson, Inc. dated 27 November 2018 as received by the NH Department of Environmental Services (NHDES) on January 11, 2019.
2. This approval is not valid until NHDES receives a payment of $108,912.47 ($77,765.81 to be paid by Unitil and $31,146.66 to be paid by Garrison Glenn, LLC) to the DES Aquatic Resource Mitigation (ARM) Fund. The applicant shall remit payment to NHDES. If NHDES does not receive payment within 120 days of the date of this approval letter, NHDES will deny the application.
3. This approval is not valid until NHDES receives a payment of $24,955.64 to be paid to DES Aquatic Resource Mitigation (ARM) Fund by Garrison Glenn, LLC as noted in letter dated March 19, 2019 from Thomas F. Monahan, Manager, Garrison Glen, LLC. The Garrison Glee, LLC shall remit payment to NHDES within 180 days of the date of the issuance of the Wetlands and Non-Site Specific permit following compliance with Condition #2 above.
4. This permit is not valid unless an Alteration of Terrain permit or other method of compliance with RSA 485-A:17 and Env-Wq 1500 is achieved.
5. No person undertaking any activity shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards in RSA 485-A and Env-Wq 1700.
6. The permittee shall schedule a pre-construction meeting with NHDES Land Resources Management Program staff to occur at least 48 hours prior to the start of any work authorized by this permit to review the conditions of this wetlands permit and the Alteration of Terrain permit. The meeting may be held on-site or at the DES offices in Concord or the Pease International Tradeport. The meeting shall be attended by the permittee, his/her professional engineer(s), wetlands scientist(s), and the contractor(s) responsible for performing the work.
7. Not less than 5 state business days prior to starting work authorized by this permit, the permittee shall notify the NHDES Wetlands Program and the Exeter Conservation Commission in writing of the date on which work under this permit is expected to start.
8. Appropriate siltation and erosion controls shall be in place prior to construction, shall be maintained during construction, and shall remain until the area is stabilized. Temporary controls shall be removed once the area has been stabilized.

9. Work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
10. All dredged and excavated material and construction-related debris shall be placed outside of the areas subject to RSA 482-A .
11. The contractor responsible for completion of the work shall use techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
12. Construction equipment shall be inspected daily for leaking fuel, oil, and hydraulic fluid prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
13. The permittee's contractor shall maintain appropriate oil/diesel fuel spill kits on site that are readily accessible at all times during construction, and shall train each operator in the use of the kits.
14. All refueling of equipment shall occur outside of surface waters or wetlands during construction. Machinery shall be staged and refueled in upland areas only.
15. Faulty equipment shall be repaired immediately prior to entering areas that are subject to RSA 482-A jurisdiction.
16. . Any fill used shall be clean sand, gravel, rock, or other suitable material.
17. Within three days of final grading or temporary suspension of work in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tackifiers on slopes less than 3:1 or netting and pinning on slopes steeper than 3:1.
18. Where construction activities occur between November 30 and May 1, all exposed soil areas shall be stabilized within 1 day of establishing the grade that is final or that otherwise will exist for more than 5 days. Stabilization shall include placing 3-inches of base course gravels, or loaming and mulching with tack or netting and pinning on slopes steeper than 3:1.

The decision to approve this application was based on the following findings:

1. This is a major impact project per Administrative Rule Env-Wt 303.02(l) Projects which, when taken in the aggregate with previous work on the property within the last 5 years, would be considered major.
2. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03.
3. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) Requirements for Application Evaluation, has been considered in the design of the project.
4. Pursuant to Env-Wt 304.04(a), the applicant received written concurrence from the abutter whose property is within 20-feet of the proposed impacts.
5. The application included NH Natural Heritage Bureau (NHB) Datacheck Results Letter NHB18-3698 identifying one (1) natural community: swamp white oak basin swamp and one (1) State-endangered plant species: slender blue beardlesss-iris (*Iris prismatica*) in the vicinity of the proposed project.
6. In response to the above-referenced NHB Letter, NHB stated, "NHB does not expect any exemplary swamp white oak basin swamps to occur on the property." Relative to the plant species NHB stated, "[we] do not expect this species to occur on the property as it is generally found in tidal or freshwater marshes, wet meadow, or shorelines, and is not likely to occur in forested wetland."
7. The NH Division of Historical Resources has received the proposed impacts and found "No Historic Properties Affected."
8. On February 15, 2019, the US Environmental Protection Agency reviewed the Application and provided a copy of their NH PGP Review Sheet for the project making the determination the project was "eligible as proposed" for the Department of the Army, NH Programmatic General Permit.
9. In a letter received on February 27, 2019, the Exeter Conservation Commission stated, "no objection to the issuance of the wetland permit."
10. NHDES previously approved two projects in the same subdivision of the proposed project within the application to Garrison Glen, LLC.
11. On January 29, 2016, NHDES approved Wetlands and Non-Site Specific Permit 2015-03332 (the "2015 Wetlands Permit") on Exeter Tax Map 46 Lot 1 to: "Dredge and fill a total of 6,178 sq. ft., in 4 separate areas, along the edge of a palustrine forested/scrub-shrub wetland for work associated with the development of the property to include a 106,585 sq. ft. light industrial and distribution facility, associated access road, parking, loading areas and stormwater management features on an existing lot within the Garrison Glen Industrial Park."

12. On August 27, 2018, NHDES approved Wetlands and Non-Site Specific Permit 2018-01720 (the "2018 Wetlands Permit") on Exeter Tax Map 56 Lot 3-1 to: "Dredge and fill 4,950 square feet (sq. ft.) of forested wetland and impact 1,470 sq. ft. of protected shoreland for the development of the site and construction of access ways, parking areas, and stormwater management structures."
13. The proposed impacts and previously-approved impacts of the 2015 and 2018 Wetlands permits have been considering in aggregate pursuant to Env-Wt 303.02(l) .
14. Therefore, the calculated proposed Aquatic Resource Mitigation (ARM) Fund payment of $77,765.81 within the application includes the previous impacts of the 2015 Wetlands Permit and 2018 Wetlands Permit.
15. The additional ARM fund payments of $31,146.66 and $24,955.64 has been calculated relative to the 2015 and 2018 Wetlands Permits, respectively.
16. The applicant has reviewed on-site options for mitigation and the department has determined that this project is acceptable for payments to the Aquatic Resource Mitigation (ARM) Fund.
17. The payment calculated for the proposed wetland losses equals $133,868.11. $77,765.81 shall be submitted by Unitil. $31.146.66 and $24,955.64 shall be submitted by Garrison Glen, LLC.777
18. The payment from Garrison Glen, LLC of $24,955.64 shall be due 180 days following the receipt of the Unitil payment.
19. The Department decision is issued in letter form and upon receipt of the ARM fund payments from Unitil and Garrison Glen, LLC, the Department shall issue a posting permit in accordance with Env-Wt 803.08(f).
20. The payment into the ARM fund shall be deposited in the DES fund for the Salmon Falls-Piscataqua Rivers watershed per RSA 482-A:29.
21 In accordance with RSA 482-A:8, DES finds that the requirements for a public hearing do not apply as the permitted project is not of substantial public interest, and will not have a significant impact on or adversely affect the values of the palustrine resource, as identified under RSA 482-A:1.

Any person aggrieved by this decision may appeal to the New Hampshire Wetlands Council (the Council) by filing an appeal that meets the requirements specified in RSA 482-A:10, RSA 21-O:14, and the rules adopted by the Council, Env-WtC 100-200. The appeal must be filed **directly with the Council within 30 days** of the date of this decision and must set forth fully **every ground** upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council. Information about the Council is available at http:/nhec.nh.gov/ or http://nhec.nh.gov/wetlands/index.htm. Copies of the rules are also available from the NHDES Public Information Center at (603) 271-2975.

This permit is contingent on receipt of total payment of $108,912.47 to the NHDES Aquatic Resource Mitigation (ARM) Fund. This payment should be received after the 30-day reconsideration period or after **May 19, 2019**. If the payment is not received by NHDES by **August 27, 2019** or 120 days from the approval decision, NHDES will deny the application. $24,955.64 is to be paid to ARM Fund within 180 days of the date of the issuance of the Wetlands and Non-Site Specific permit. Please include a copy of this letter with the payments.

If you have any questions, please contact me at (603) 559-1515 or eben.lewis@des.nh.gov.

Sincerely,

Eben M. Lewis
Wetlands Inspector
Land Resource Management Program

cc: Thomas Monahan, Garrison Glenn, LLC

ec: Brendan Quigley, Gove Environmental Services, Inc.
Lori Sommer, Mitigation Coordinator, NHDES
Mark Kern, US Environmental Protection Agency
Richard Kristoff, US Army Corps of Engineers
Exeter Conservation Commission

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Response: 10/29/2021
Request No. Energy 6-30 Witness: John F. Closson

REQUEST:

Reference DOE 4-68, a., b., and c, Attachments 1, 2, and 3: Kensington/Exeter DOC Project. Please provide the following information:

a. Describe the Company's experience with the Town of Exeter zoning regulations and zoning officials related to the permitting process for the Exeter DOC facility from the time of application to the final permit decision, including any concerns raised by the zoning officials about the project. What was the Company's outside counsel's opinion in terms of successfully completing the Exeter permitting process? What were the final legal costs of the permitting process?
b. Based on a comparison of Attachments 2 and 3, the proximity of wetlands to the project area in Exeter appears to be more significant than what is depicted for Kensington, apparently requiring the Company to dredge and fill one third of an acre of wetland. What impact did the presence of wetlands have on the final design of the Exeter DOC? To what extent did Unitil investigate and research wetland permitting and potential remediation in Exeter prior to or during construction? What concerns, if any, were raised by local and state officials about the impact of the Exeter project on wetlands at the site and the surrounding area? Please provide all related documentation and correspondence.
c. Attachments 1 and 2 depict the existence of a pond at the north end of the Kensington property. Did the Company explore the potential for using the pond as a water source for fire suppression needs under Options 1-3 instead of building a separate pond or underground storage tank? If yes, what was the result of that inquiry? If not, why not?

RESPONSE:

a. The Company's experience with the Town of Exeter zoning regulations and zoning officials related to the permitting process for the Exeter DOC facility from the time of application to the final permit decision was straightforward. The new Exeter facility was constructed in an office park that is zoned for commercial use. No concerns were raised by officials in connection with zoning for the Exeter project. The Company's outside council did not have any concerns about the Company's ability to successfully complete the Exeter permitting process. The legal costs in connection with permitting were forty one thousand three hundred eight dollars and sixteen cents ($41,308.16). Please see Energy 6-30 Attachment 1.

b. The impact of the project's final design on the wetlands was taken into

Unitil Energy Systems, Inc.
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consideration during the design process and the project team adhered to local, State, and Federal regulations and permitting processes. No concerns were raised by officials about the impact of the Exeter project on wetlands at the site and the surrounding area. See Energy 6-30 Attachment 2, which includes communication with the Exeter Planning Board and related town documentation. To minimize wetland impacts, an additional one (1) acre parcel of land was acquired from an abutting property (owned by the developer) which allowed the designers to reduce the wetland impacts in the rear of the site by sliding the building and parking area forward toward Gourmet Place (roadway that accesses site). The Company received a letter from the Exeter Conservation Commission (CC) indicating that it had no objection to the project. Please see Energy 6-30 Attachment 3 (CC letter). Finally, a conditional use permit was issued for the project. Please see Energy 6-30 Attachment 4. Approvals in connection with wetlands were also received from the NHDES and Army Corps of Engineers. Please see Energy 6-30 Attachments 5 and 6.

c. The Company did not explore the potential for using the pond as a water source for fire suppression needs under Options 1-3. The reasons reviewed by the Company include:

1. The Company does not own the on-site water body in its entirety. Instead, the company shares it with an abutting residential property owner. Unitil would be compelled to enter into a use agreement with the property owner, regarding water extraction for fire suppression purposes. Any expanded facility at Kensington would have required the installation of a fire suppression system, which the existing facility does not possess.

2. The on-site water body is associated with the aquifer that supplies the on-site community water supply (overseen by the NH DES), as well as several abutting private groundwater supply wells. Alteration to the aquifer recharge via water extraction (especially during annual low-flow volumes – July 15 to October 15) would require review/approval from the NH DES.

3. Unitil would also need to coordinate with the Town of Kensington Volunteer Fire Department, regarding extraction from the on-site water body. The fire department has maintained a dry hydrant (currently rated as an excellent source of water) along the water body's Drinkwater Road frontage for several decades.

Unitil Energy Systems, Inc.
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4. The location of the on-site body of water in relation to the buildable area at the Drinkwater Road property would have required supplemental equipment (i.e., pump, compressor, etc.) to ensure adequate supply was provided to the new facility.

5. The above activities would have required consultant, engineering, legal, and permitting fees/costs incremental to what was required of the municipal connection at the Exeter facility.

PROJECT SUMMARY REPORT
FOR
ASBESTOS ABATEMENT

Unitil Exeter and Hampton Electric Utility
114 Drinkwater Road
Kensington, New Hampshire

Prepared for:

Unitil Exeter and Hampton Electric Utility
114 Drinkwater Road
Kensington, New Hampshire

Prepared by:

Hygienetics Environmental Services, Inc.
180 Canal Street
Boston, Massachusetts 02114

7 December 1998

Hygienetics Environmental Project Number: ***1117.001***

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SUMMARY REPORT
FOR
ASBESTOS ABATEMENT PROJECT

PROJECT NAME:	Unitil Exeter & Hampton Electric Utilities
LOCATION:	114 Drinkwater Road, Kensington, New Hampshire
WORK AREA:	Areas One to Six (Per Building Layout Print)
CONTRACTOR:	National Service Cleaning Corporation (NSCC), Salem, New Hampshire
CONSULTANT:	Hygienetics Environmental Services, Inc., Boston, MA
PROJECT DATES:	September 24, 1998 to October 20, 1998

I. SUMMARY OF ABATEMENT WORK

Asbestos abatement work was conducted by National Service Cleaning Corporation located in Salem, New Hampshire. Abatement work performed at the Unitil Exeter & Hampton Electric Utilities building located at 114 Drinkwater Road, Kensington, New Hampshire, consisted of the following:

1. Isolation of the abatement areas and shutdown of HVAC systems to prevent fiber migration from the work areas to any other parts of the building (See Engineering Controls).

2. Asbestos related demolition was conducted in three separate areas: Areas One, Two and Three (as identified on asbestos abatement plans). Each of the demolition areas entailed the removal of cement asbestos board (Transite paneling), wood studs/framing and gypsum board. The Radio Room in Area Two was dismantled; the walls consisted of wooden studs, Sheet Rock and Transite paneling. Sheet rock demolition was performed prior to the removal of any asbestos containing materials. The dismantling of the Meter Department Office in Area Three entailed the removal of Transite paneling and wood framing and planking.

3. Removal of asbestos-containing materials (ACM) consisted of the following types and quantities:

- Approximately 1,000 Linear Feet of Pipe and Pipe Fitting Insulation: Areas 1, 2 4, 5 and 6
- Approximately 3,300 Square Feet of Transite Paneling: Areas 1, 2 and 3
- Approximately 2,700 Square Feet of Floor Tile and Mastic: Areas 1, 2 and 3

4. Pipe reinsulation was not in the scope of work, therefore, pipes were left un-insulated after the removal of asbestos pipe and pipe fitting insulation.

5. Final cleaning of work area consisted of HEPA vacuuming the floors and wet wiping the walls.

6. Final air clearance testing was conducted by Hygienetics Environmental prior to the release of any work area for further renovation/reoccupancy.

II. ENGINEERING CONTROLS (WORK AREA CONTAINMENT PROCEDURES)

1. Three-room worker decontamination facilities (DFs) with air locks were established at the entrance to each work area. Each of the DFs consisted of:

   a) a "clean room" for workers to change into their personal protective equipment and store their clothing;

   b) a shower/wash room for workers to wash/decontaminate hands, face and respirator; and

   c) a "dirty room" for workers to remove their disposable coveralls before entering the "clean room" from the work area.

   Each room was separated by an air lock constructed of overlapping flaps of 6-mil polyethylene sheeting. DFs were also used to load out waste.

2. Asbestos warning signs were posted at the entrance to each DF in accordance with New Hampshire Department of Environmental Services (NHDES) regulations Env-A 1805.03(c). Signs were also posted on the outside walls of the containment in several visible locations.

3. The walls and floors of Work Areas One, Two, Four and Six were covered with one layer of polyethylene sheeting. The critical barriers for Work Areas Three and Five were sealed, but no polyethylene sheeting was installed on the floor due to the nature of the ACM to be removed (e.g. floor tile and mastic). Glovebags

were used for all pipe insulation removal. These practices satisfy NHDES requirements.

4. All openings to HVAC units located in the work areas (e.g. vents, registers) were sealed with 2-layers of 6-mil polyethylene and duct tape. All HVAC seals were maintained airtight and verified over the course of the project.

5. Small openings leading to the work areas were sealed with fiberglass insulation.

6. Asbestos abatement was performed during the day while the affected HVAC systems were shutdown. All openings to the HVAC system were sealed with polyethylene sheeting. HVAC air filters were replaced following asbestos removal in the main office area. The disposed filters were treated as asbestos waste as prescribed by the NHDES.

7. Portable HEPA-filtered exhaust units were installed to maintain each work area under negative pressure relative to the surrounding environment. Whenever feasible the negative air units were exhausted outside the building. The units venting inside were monitored for fibrous discharge during Asbestos removal operations as required by NHDES Env-A 1805.04(d)(2).

8. Contractor electrical equipment (HEPA-filtered exhaust units, temporary lighting, HEPA vacuums etc.) was protected by Ground Fault Circuit Interrupters (GFCI) installed inside the work areas.

9. Asbestos materials were wetted/misted with amended water to maintain the materials in a wetted condition while being removed and packaged for disposal.

10. The abatement workers were required to wear personal protective equipment during all phases of asbestos work. The required protective equipment included two impervious full-body disposable coveralls, protective hand and footwear, and HEPA-filtered negative pressure air purifying respirators.

III. AIR SAMPLING METHODS AND ANALYTICAL PROCEDURES

Ambient air sampling was conducted outside the work areas to monitor the airborne fiber concentrations during abatement activities and inside the work areas after abatement (See Appendix I for air sample results and copies of Hygienetics Environmental Asbestos Air Sample Analysis Records).

Routine air samples were collected and analyzed using Phase Contrast Microscopy (PCM) according to the NIOSH 7400 Method. This method is recognized by the U.S.

Occupational Health and Safety Administration (OSHA), the U.S. Environmental Protection Agency (EPA), and NHDES for its ability to characterize total airborne fiber levels. PCM air samples were analyzed on-site by trained PCM analysts.

The types of air sampling conducted during and after asbestos abatement include the following:

1. Outside Area Sampling: These results (obtained during asbestos abatement) document the effectiveness of the negative pressure system and the containment barriers in confining the airborne fibers to the work area. If fiber concentrations exceed the "base line" fiber concentrations outside the work area (0.01 fibers per cubic centimeter, f/cc), immediate steps are taken to determine the source of the fibers (internal work area and external work area sources must be evaluated). Depending on the detected fiber source, appropriate steps are taken to mitigate the elevated fiber levels, and appropriate decontamination is performed if the fibers are determined to be asbestos.

2. Inside Area Sampling: Inside Area Samples are collected periodically during asbestos removal operations to monitor airborne fiber levels within the work area and to evaluate effectiveness of the Contractor's work practices, engineering controls and respiratory protection.

3. HEPA Exhaust Sampling: The samples were collected over the course of the day to obtain representative airborne fiber concentrations in accordance with NHDES Env-A 1805.04(d)(2). Sampling is performed in interior building areas where negative air HEPA exhaust units discharge from the work area containment. The purpose of this sampling is to detect faulty HEPA exhaust units and to ensure that the HEPA unit discharge/exhaust is not disturbing ACM outside the work area.

4. Clearance Air Sampling: These results are obtained upon completion of the asbestos abatement activities but prior to reoccupancy of the abated area. The project may be considered complete when all of the work area samples demonstrate fiber concentrations inside the work area to be less than 0.01 f/cc, the NHDES standard for "clean air" following an asbestos abatement project as determined by PCM analysis. Final air clearance testing was performed using aggressive sampling methods as specified in Env-A 1805.08(a:f) and 101.15.

IV. AIR SAMPLING RESULTS

1. Outside area

A total of 29 ambient air samples were collected outside the abatement area(s) in locations adjacent to the work area including areas occupied by Unitil personnel. Fiber concentrations for all samples were less than 0.01 f/cc. See Appendix I for result and air data record. Sample 09309856-03 was voided due to the filter becoming damaged during sampling.

2. Inside Area Sampling

Two samples were collected inside containment during asbestos abatement operations. The result was less than 0.003 fibers/cc for one sample and sample 101998919-04 was overloaded (greater than 50% of the filter was covered by particulate matter) and voided. See Appendix I for result and air data record. The results from the sample did not exceed the regulatory standards for glovebag work.

3. HEPA Exhaust Sampling

Three samples were collected over the course of two days that this monitoring was required in areas where HEPA units exhausted inside the building. The results were less than 0.004 fibers/cc. See Appendix I for result and air data record.

4. Clearance Air Monitoring

A total of 34 PCM clearance air samples were collected during the project. Two to three clearance samples were collected per work area. All sample results were less than 0.01 f/cc. Refer to Appendix I for clearance sample results. Following receipt of these results for each work area, the Asbestos Abatement Contractor removed critical barriers, dismantled the containment, performed final work area clean up and initiated demobilization.

V. ACM MATERIAL NOT REMOVED

Asbestos containing materials (ACMs) remain in the building. The asbestos abatement plan did not call for the removal of all asbestos-containing materials. Therefore, some Transite panels, pipe and pipe fitting insulation, mastic and vinyl asbestos tiles remain in

the building. Asbestos-containing pipe insulation may be located behind in concealed spaces (e.g. walls/partitions).

VI. WASTE DISPOSAL METHODS

1. Asbestos waste was sealed in 6-mil polyethylene bags, in polyethylene-lined barrels or double wrapped with 6-mil polyethylene sheeting inside the work areas. Bags were then wet wiped in the DF, placed in a second clean 6-mil polyethylene bag, sealed, and removed from the work area. All bags were clearly marked with the required OSHA, EPA, and DOT warning labels.

2. Approximately 50 cubic yards of asbestos waste was generated during the abatement project. The waste consisted of pipe and pipe fitting insulation, Transite paneling, vinyl asbestos floor tile and mastic, contaminated polyethylene sheeting and disposable contractor equipment.

   All asbestos waste remained adequately wet prior to and during containerization. NSCC transported waste from the work site periodically to a transfer station where Summit Transport Group, Inc. received the asbestos waste. Summit Transport Group, Inc. of Morrisville, Pennsylvania was responsible for the transportation of the asbestos waste from the transfer station to Kelly Run Sanitation, Inc. of Elizabeth, Pennsylvania, the EPA approved asbestos landfill.

VII. PROJECT MONITORING PERSONNEL

The following Hygienetics Environmental personnel were involved with inspecting and documenting the work:

Project Manager Stephen Minassian	As Project Manager, Mr. Stephen Minassian was responsible for oversight of Hygienetics Environmental's field inspectors.
Project Monitors Andrew Techet Mike Lane	As Project Monitors, these individuals performed the duties of the on-site industrial hygienist. Andrew Techet and Mike Lane served as the owner's representative during abatement work. Their duties included pre and post-abatement visual inspection of the work areas, review of required documentation, preparation of daily reports, final visual inspections, and collection and analysis of air samples during and after asbestos abatement.

Unitil Exeter & Hampton Electric Company
Summary Report for Asbestos Abatement

Hygienetics Environmental Services, Inc.

REPORT PREPARED BY:	REVIEWED BY:
Signature:	Signature:
Name: Andrew H. Techet	Name: Stephen Minassian
Title: Associate Scientist	Title: Project Manager
Date: 12/13/98	Date: 12/13/98

G:\ih\1117\001\closeout

APPENDIX I

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
AIR SAMPLE ANALYSIS RECORDS AND RESULTS

Unitil Exeter & Hampton Electric Company
AIR SAMPLE RESULTS

DATE	SAMPLE #	LOCATION	RESULTS (f/cc)	COMMENTS
09-24-98	092498956-03	Lobby Area	<0.003	Ambient Sample
09-24-98	092498956-04	Outside Boiler Room	<0.003	Ambient Sample
09-25-98	092598956-03	Lobby Area	0.003	Ambient Sample
09-25-98	092598956-04	Outside Boiler Room at DF	<0.003	Ambient Sample
09-25-98	092598956-05	By Radio Room	0.003	Ambient Sample
09-28-98	092898956-03	Conference Room (Area 1)	<0.004	Clearance Sample
09-28-98	092898956-04	Room Adjacent To Boiler Room	<0.004	Clearance Sample
09-28-98	092898956-05	Main Hallway Next To Lobby	<0.004	Clearance Sample
09-28-98	092898956-06	Main Lobby, By Radio Room	0.003	Ambient Sample
09-28-98	092898956-07	Main Lobby, By Electrical Monitoring Room	0.002	Ambient Sample
09-28-98	092898956-08	Boiler Room, Entrance	0.004	Clearance Sample
09-28-98	092898956-09	Boiler Room, Far Wall	0.004	Clearance Sample
09-29-98	092998956-03	Outside DF	0.008	Ambient Sample
09-29-98	092998956-04	Inside Electrical Room	0.006	Clearance Sample
09-29-98	092998956-05	Inside Electrical Room	0.007	Clearance Sample
09-29-98	092998956-06	Outside DF	0.006	Ambient Sample
09-29-98	092998956-07	Front Portion Of Lobby	0.008	Ambient Sample
09-30-98	093098956-03	Front Portion Of Lobby	N/A	Voided due to filter imperfections
09-30-98	093098956-04	Outside DF	0.004	Ambient Sample
09-30-98	093098956-05	Office Area Near Cubicles	0.007	Ambient Sample
09-30-98	093098956-06	Inside Women's Bathroom	0.008	Clearance Sample
09-30-98	093098956-07	Main Work Area	0.006	Clearance Sample
10-01-98	100198956-03	Lobby By Front Desk	0.009	Ambient Sample

Unitil Exeter & Hampton Electric Company
AIR SAMPLE RESULTS CONTINUED

DATE	SAMPLE #	LOCATION	RESULTS (f/cc)	COMMENTS
10-01-98	100198956-04	Outside DF	0.009	Ambient Sample
10-02-98	100298956-03	Area 2 Office By Café	0.005	Clearance Sample
10-02-98	100298956-04	Lobby Area Containment	<0.004	Clearance Sample
10-02-98	100298956-05	Front Office Area 2	<0.004	Clearance Sample
10-02-98	100298956-06	Cafeteria, Outside DF	0.004	Ambient Sample
10-02-98	100298956-07	Hall Outside Cafeteria	0.005	Ambient Sample
10-02-98	100298956-08	Cafeteria, Main Area	0.006	Clearance Sample
10-02-98	100298956-09	Cafeteria, Men's Bathroom	0.007	Clearance Sample
10-05-98	100598956-03	Outside DF, Area 4	0.007	Ambient Sample
10-05-98	100598956-04	Meter Room, Supply	0.005	Ambient Sample
10-05-98	100598956-05	Area 4, Cafeteria Side	0.004	Clearance Sample
10-05-98	100598956-06	Area 4, Middle	0.008	Clearance Sample
10-05-98	100598956-07	Area 4, By Workshop Area	0.009	Clearance Sample
10-07-98	100798956-03	Outside DF, Area 5	<0.003	Ambient Sample
10-07-98	100798956-04	Area 4, Entrance To Area 5	<0.003	Exhaust Sample
10-07-98	100798956-05	Area 4, Entrance Area	0.013	Failed Clearance Sample
10-07-98	100798956-06	Area 4, Outer Wall	0.013	Failed Clearance Sample
10-07-98	100798956-07	Area 4, Entrance To Area 5	<0.004	Exhaust Sample
10-07-98	100798956-08	Area 5, Outside DF	<0.003	Ambient Sample
10-07-98	100798956-09	Area 4, Entrance Area	<0.004	Clearance Sample
10-07-98	100798956-10	Area 4, Outer Wall	<0.004	Clearance Sample
10-08-98	100898956-03	Outside Warehouse Office	0.004	Ambient Sample
10-08-98	100898956-04	By Negative Air Exhaust	0.003	Exhaust Sample
10-08-98	100898956-05	Corner Area By Warehouse Office	0.004	Clearance Sample
10-08-98	100898956-06	Meter Stock Room	0.003	Clearance Sample

Unitil Exeter & Hampton Electric Company
AIR SAMPLE RESULTS CONTINUED

DATE	SAMPLE #	LOCATION	RESULTS (f/cc)	COMMENTS
10-08-98	100898956-07	Outside Meter Test Area	<0.004	Clearance Sample
10-08-98	100898956-08	Outside Meter Test Area	0.004	Clearance Sample
10-14-98	101498956-03	Area 4 Outside Meter Dept.	0.004	Area Sample
10-14-98	101498956-04	Outside DF To Area 3	<0.003	Area Sample
10-14-98	101498956-05	Area 4 Outside Meter Dept.	0.007	Area Sample
10-14-98	101498956-06	Outside DF To Area 3	0.005	Area Sample
10-15-98	101598956-03	Area 4 Outside Meter Dept	0.003	Area Sample
10-15-98	101598956-04	Outside DF Of Area 3	0.002	Area Sample
10-15-98	101598956-05	DF Area 3 Conference Room	<0.005	Area Sample
10-15-98	101598956-06	Conference Room Area 1	<0.004	Clearance Sample
10-15-98	101598956-07	Hallway To Café Area 1	0.004	Clearance Sample
10-15-98	101598956-08	Meter Dept Room	0.003	Clearance Sample
10-15-98	101598956-09	Meter Dept Room	0.003	Clearance Sample
10-19-98	101998919-03	Hallway By Conference RM	0.004	Ambient Sample
10-19-98	101998919-04	Radio Room Containment	N/A	Sample Overloaded
10-19-98	101998919-05	Hallway By Conference RM	0.003	Ambient Sample
10-19-98	101998919-06	Radio Room Containment	0.003	Ambient Inside Containment
10-20-98	102098919-03	Lobby, Radio Room Area	0.002	Clearance Sample
10-20-98	102098919-04	Lobby, Radio Room Area	<0.002	Clearance Sample
10-20-98	102098919-05	Lobby, Radio Room Area	<0.002	Clearance Sample
10-20-98	102098919-06	Conference Room	0.002	Clearance Sample
10-20-98	102098919-07	Conference Room	0.004	Clearance Sample

ASBESTOS AIR SAMPLE DATA FORM

DATE: 9/24/98

ACCOUNTABILITY RECORD PAGE 1 OF 1

BLDG. & PROJECT NAME: Unitil Exeter & Hampton Electric Util. 114 Drinkwater

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	092498-956-01	I	2	Blank
2	02	I	2	"
3	03	D	2	Lobby area
4	04	D	2	Outside of Boiler Room
5				
6				
7				
8				
9				
10				

REQUESTED COMPLETION DATE: 9/24/98
JOB NO.: 1117-001 BATCH NO.: B-17921
CLIENT NAME: Unitil
SAMPLER'S NAME: Andrew H. Teclet
SIGNATURE: Andrew H. Teclet
DATE: 9/24/98 TIME COMPLETED:

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A. Teclet
DATE: 9/24/98 TIME: INITIALS: AT
ANALYST: A. Teclet SCOPE #: 00520
DATE COMPLETED: 9/24/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2; FIELD AREA = 0.00785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank								1 / 100	1.0/100	0.45	X	X	
2		"								1 / 100			X	X	
3	03		10.2	10.5	10.4	1033	1340	10.7	1945	7 / 100			0.003	<LOQ	
4	04		10.2	10.2	10.2	1030	1340	10.6	1938	7 / 100			0.003	<LOQ	
5															
6															
7															
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: [redacted] 2 SAMPLES @ $[redacted] = $[redacted] 10.[redacted]

ASBESTOS AIR SAMPLE DATA FORM

DATE: 9/25/98

ACCOUNTABILITY RECORD PAGE 1 OF 1

BLDG. & PROJECT NAME: Unitil, 114 Dover Water RD NH

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	092598-92-01	I	3	Blank
2	02	I	3	"
3	03	D	3	
4	04	D	3	
5	05	D	3	
6				
7				
8				
9				
10				

REQUESTED COMPLETION DATE: 9/25/98
JOB NO.: 1117.001 BATCH NO.: B17921
CLIENT NAME: Unitil
SAMPLER'S NAME: Andrew Tecluit
SIGNATURE: Andrew Tecluit
DATE: 9/25/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A Tecluit
DATE: 9/25/98 TIME: INITIALS: AT
ANALYST: A. Tecluit SCOPE #: 00520
DATE COMPLETED: 9/25/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2; FIELD AREA = 0.00785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank								0 / 100	0	0.645	X	X	
2		"								0 / 100			X	X	
3	03		8	7	7.5	0755	1145	230	1725	12 / 100			0.003	=LOQ	
4	04		8	8	8	0750	1144	234	1872	10 / 100			0.003	<LOQ	
5	05		8	8	8	0800	1155	235	1880	10.5 / 100			0.003	=LOQ	
6															
7															
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 3 SAMPLES @ $ 5 = $ 150.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 9/28/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater Rd

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	092898-456-01	I	7	Blank
2	02	I		"
3	03	E		Conference Rm Area
4	04	E		Room adjacent to Boiler & Conference Room
5	05	E		Main hallway next to lobby
6	06	C	2	Main Lobby, By Radio Rm
7	07	C	2	Main lobby, by electronic monitoring Rm
8	08	E	7	Boiler Room, Entrance Door
9	09	E	7	Boiler Room, far wall
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 9/28/98
JOB NO.: 1117.007 BATCH NO.: B17931
CLIENT NAME: Unitil
SAMPLER'S NAME: Andrew Tarnok
SIGNATURE: [signature]
DATE: 9/ /98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: Neckel
DATE: 9/ /98 TIME: — INITIALS: [illegible]
ANALYST: Arellano SCOPE #: 005220
DATE COMPLETED: 9/ /98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.00785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	→	0/100	0	0.45			
2		"	—	—	—	—	—	—	→	0/100	0				
3	03		14	14	14.0	0830	1070	90	1260	2/100			0.004	<LOQ	
4	04		14	14	14.0	0830	0957	87	1218	1.5/100			0.004	<LOQ	
5	05		14	14	14.0	0830	0958	88	1232	2/100			0.004	<LOQ	
6	06		10	10	10.0	0947	1251	184	1840	1.5/100			0.003	<LOQ	
7	07		10	10	10.0	0945	1320	215	2150	7.5/100			0.002	=LOQ	
8	08		12	12	12	1150	1331	101	1212	10/100			0.004	=LOQ	
9	09		12	12	12	1150	1337	102	1224	11/100			0.004	=LOQ	
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 7 SAMPLES @ $ 5.00/ea = $ 35.00/ea

ASBESTOS AIR SAMPLE DATA FORM

DATE: 9/29/98

ACCOUNTABILITY RECORD PAGE 1 OF 1

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	092998.950-01	I	3	Blank
2	02	I	3	"
3	03	D	3	Outside Decon unit
4	04	E	7	In electronics Room
5	05	E	7	In " "
6	06	D	3	Outside Decon Unit
7	07	D	3	Outside Containment by front desk
8				
9				
10				

REQUESTED COMPLETION DATE: 9/29/98
JOB NO.: 1117-001 BATCH NO.: B17939
CLIENT NAME: Unitil Exeter & Hampton
SAMPLER'S NAME: Andrew Teichert
SIGNATURE: Andrew Teichert
DATE: 9/29/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A. Teichert
DATE: 9/29/98 TIME: — INITIALS: AHT
ANALYST: A Teichert SCOPE #: 00520
DATE COMPLETED: 9/29/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.00785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	→	0/100	0	0.45			
2		"	—	—	—	—	—	—	→	0/100					
3	03		8	8	8	0800	1100	180	1440	24/100			0.003	0.008	
4	04		12	12	12	0905	1046	101	1212	15/100			0.004	0.006	
5	05		12	12	12	0707	1047	100	1200	17.5/100			0.004	0.007	
6	06		10	10	10	1235	1430	115	1150	14.5/100			0.004	0.006	
7	07		10	10	10	1230	1435	125	1250	19/100			0.004	0.008	
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 5 SAMPLES @ $ 5.00 = $ 25.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 9/30/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD, NH

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	093098-3601	I	3	Blank
2	02	I	3	+
3	03	D	3	Lobby area, by front desk
4	04	D	3	Outside decon unit
5	05	D	3	Office area, near cubicles & back doors
6	06	E	7	Inside womens bathroom
7	07	E	7	In main work area
8				
9				
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 9/30/98
JOB NO.: 1117.001 BATCH NO.: B17439
CLIENT NAME: Unitil
SAMPLER'S NAME: Andrew Teichert
SIGNATURE: Andrew A Teichert
DATE: 9/30/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: AATeichert
DATE: 9/30/98 TIME: — INITIALS: AT
ANALYST: A Teichert SCOPE #: 00520
DATE COMPLETED: 9/30/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2; FIELD AREA = 0.02785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank								0/100	0	0.95			
2		+								0/100					
3	03	Scratched	X	X	X	735	X	X	X	X			N/A	N/A	
4	02		10	10	10	800	1400	360	3600	30/100			0.001	0.024	
5	05		10	10	10	855	1400	365	3650	49/100			0.001	0.007	
6	06		12	12	12.00	0945	1130	105	1260	21.5/100			0.002	0.008	
7	07		12	12.5	12.25	0947	1131	104	1274	13/100			0.004	0.006	
8															
9															
10															

SPECIAL COMMENTS: Sample # 093098-956-03 was scratched b/c of filter imperfections.

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 4 SAMPLES @ $ 5.00 = $ 20.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/1/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD, NH

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	100158-9801	I	3	Blank
2	02	I	3	+
3	03	O	3	Outside containment in front desk area
4	04	O	3	Outside of Decon unit
5				
6				
7				
8				
9				
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/1/98
JOB NO.: 1117.001 BATCH NO.: B-17939
CLIENT NAME: Unitil Exeter & Hampton Elec
SAMPLER'S NAME: Andrew Tarlet
SIGNATURE: Andrew Tarlet
DATE: 10/1/98 TIME COMPLETED:

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: Tarlet
DATE: 10/1/98 TIME: — INITIALS: AT
ANALYST: Tarlet SCOPE #: 02520
DATE COMPLETED: 10/1/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.02485 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	→	0/100	0	0.45			
2		+	—	—	—	—	—	—	→	0/100	0	↓			
3	03		10	10	10	1045	1240	121	1210	22/100	↓		0.024	0.089	
4	04		10	10	10	1045	1245	122	1220	23/100			0.024	0.089	
5															
6															
7															
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 2 SAMPLES @ $ 5.00 = $ 10.00 (TOTAL)

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/2/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD NH

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	100298-35E-01	E/I	7	Blank
2	02	E/I	7	"
3	03	E	7	office closest to Cafeteria
4	04	E	7	Lobby area of Containment
5	05	E	7	Front office
6	06	D	2	Cafeteria outside Decon by Refrigerator
7	07	D	2	Hall way outside Cafeteria
8	08	E	7	Cafeteria, Main area
9	09	E	7	Cafeteria, Bathroom area
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/2/98
JOB NO.: 1117.021 BATCH NO.: B17539
CLIENT NAME: Unitil Exeter & Hampton Elec
SAMPLER'S NAME: Andrew Techuk
SIGNATURE: Andrew Techuk
DATE: 10/2/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A Techuk
DATE: 10/2/98 TIME: — INITIALS: AT
ANALYST: A Techuk SCOPE #: [illegible]
DATE COMPLETED: 10/2/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM^2; FIELD AREA = 0.0785 MM^2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	—	0/100	0	0.45			
2		+	—	—	—	—	—	—	→	0/100					
3	03		13	13	13	0740	0920	100	1300	12/100			0.004	0.005	
4	04		13	13	13	0744	0921	97	1261	6/100			0.004	<LOQ	
5	05		13	13	13	0745	0922	97	1261	9/100			0.004	<LOQ	
6	06		8	8	8	0915	1250	185	1480	12.5/100			0.003	0.004	
7	07		8	8	8	1050	1335	165	1320	10/100			0.002	0.005	
8	08		15	15	15.0	1245	1406	81	1215	15/100			0.004	0.006	
9	09		15	15	15.0	1245	1407	82	1230	16/100			0.004	0.007	
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 7 SAMPLES @ $ 5.00 = $ 35.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/5/98

BLDG. & PROJECT NAME: Unit 1, 114 Drinkwater RD Area 4

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	100498 956-01	I	3	Blank
2	02	I	3	"
3	03	D	3	Outside Decon
4	04	D	3	In Meter Room in Supply Warehouse
5	05	E	7	
6	06	E	7	
7	07	E	7	
8				
9				
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/5/98
JOB NO.: 1117001 BATCH NO.: B17978
CLIENT NAME: Unitil Exeter Hampton Elec
SAMPLER'S NAME: Andrew Tackett
SIGNATURE: Andrew Tackett
DATE: 10/5/98 TIME COMPLETED:

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A Tackett
DATE: 10/5/98 TIME: INITIALS: AT
ANALYST: A Tackett SCOPE #: 00520
DATE COMPLETED: 10/4/98 TIME:
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.0785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank								0 / 100	0	0.45			
2		"								0 / 100					
3	03		10	10	10	1050	1315	145	1450	200 / 100			0.003	0.007	
4	04		10	10	10	1120	1400	160	1600	170 / 100			0.003	0.005	
5	05		15.1	15.1	15.1	1324	1505	81	1223	210 / 100			0.004	=LOQ	
6	06		15.1	15.1	15.1	1345	1506	81	1223	30 / 100			0.004	0.008	
7	07		15.1	15.1	15.1	1345	1506	81	1223	23 / 100			0.004	0.007	
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 5 SAMPLES @ $ 5.00 = $ 25.00/ea

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/7/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD, Kit, Area 3/5

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	100798-956-01	I	2/3	Blank
2	02	I	2/3	d
3	03	D	2	Outside Decon
4	04	D	2	Area 4, entrance to area 5, by Neg Air Machines
5	05	E	7	Area 4, 1st portion, by entrance area
6	06	E	7	Area 4, 1st portion, by outer wall
7	07	D	2	Area 4, entrance to area 5, by Neg air Machines
8	08	D	2	Area 5, By back office & decon.
9	09	E	7	Area 4, By entrance
10	10	E	7	Area 4, By outer wall

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/7/98
JOB NO.: 117001 BATCH NO.: B17978
CLIENT NAME: Unitil Exeter/Hampton Elem
SAMPLER'S NAME: Andrew Teichet
SIGNATURE: Andrew L. Teichet
DATE: 10/7/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: A Teichet
DATE: 10/7/98 TIME: — INITIALS: AAT
ANALYST: A. Teichet SCOPE #: 005520
DATE COMPLETED: 10/7/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2 ; FIELD AREA = 0.00785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	—	0/100	0	0.415			
2		d	—	—	—	—	—	—	—	0/100					
3	03		10.2	10.2	10.2	0755	1020	145	1479	0/100			0.003	<LOQ	
4	04		10.2	10.2	10.2	0803	1040	157	1601	5/100			0.003	<LOQ	
5	05		13.0	13.0	13.00	1015	1150	95	1235	34/100			0.004	0.013	
6	06		13.0	13.0	13.0	1016	1151	95	1235	323/100			0.004	0.013	
7	07		10.2	10.2	10.2	1020	1230	130	1326	6/100			0.004	<LOQ	
8	08		10.2	10.2	10.2	1046	1336	175	1785	3/100			0.003	<LOQ	
9	09		12	12	12.0	1215	1400	106	1272	5/100			0.004	<LOQ	
10	10		12	12	12.0	1216	1402	106	1276	1.5/100			0.004	<LOQ	

SPECIAL COMMENTS: Clearance samples 08 & 06 failed - samples must be retaken.

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 8 SAMPLES @ $ 5.00 = $ 40.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/8/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater RD NH Area 5 & 3

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	10089856956-4	F	7	Blank
2	02	F	7	"
3	03	D	2/7	Outside Warehouse office, Area 5
4	04	D	2/7	By negative air unit outlet, Area 5
5	05	E	7	Corner area by warehouse office
6	06	E	7	Meter stock room Area.
7	07	E	7	Containment outside Meter Dept
8	08	E	7	" " " "
9				
10				

ACCOUNTABILITY RECORD PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/8/98
JOB NO.: 1117.001 BATCH NO.: B17978
CLIENT NAME: Unitil Exeter & Hampton Elec.
SAMPLER'S NAME: Anthony Leclair
SIGNATURE: [signature]
DATE: 10/8/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Kelt
RECEIVED BY: Hand
DATE: 10/8/98 TIME: — INITIALS: [illegible]
ANALYST: Leclair SCOPE #: 00520
DATE COMPLETED: 10/8/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.00785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	—	0/100	0	0.45			
2		"	—	—	—	—	—	—	—	0/100					
3	03		10.2	10.2	10.2	800	1042	162	1657	13/100			0.003	0.004	
4	04		10.2	10.2	10.2	815	1041	146	1489	10.4/100			0.003	<LOQ	
5	05		13	13	13.0	854	1050	116	1508	0/100			0.003	0.004	
6	06		13	13.5	13.2	856	1051	115	1518	0/100			0.003	<LOQ	
7	07		13	13	13.0	1145	1321	96	1248	8/100			0.004	<LOQ	
8	08		13	13	13.0	1145	1320	95	1235	11.5/100			0.004	<LOQ	
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 6 SAMPLES @ $ 5.00/ea = $ 30.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/14/98

ACCOUNTABILITY RECORD PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/14/98
JOB NO.: 1117.001 BATCH NO.:
CLIENT NAME: Unitil Exeter Hampton Elec.
SAMPLER'S NAME: Andrew Tedeschi
SIGNATURE: Andrew Tedeschi
DATE: 10/14/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: Field
DATE: 10/14/98 TIME: — INITIALS: AAY
ANALYST: Andrew Tedeschi SCOPE #: 00 5160
DATE COMPLETED: 10/14/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater Rd, Area 3

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	101498956-01	I	3	Blank
2	02	I	3	of
3	03	D	3	Area 4 outside of Meter Dept Door
4	04	D	3	Area 5 outside Drum
5	05	D	3	Same as Sample 03
6	06	D	3	Same as Sample 04
7				
8				
9				
10				

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2; FIELD AREA - 0.00785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	—	—	—	—	—	—	—	0/100	0				
2		of	—	—	—	—	—	—	—	0/100					
3	03		8	8	8	08:30	10:30	120	1440	11.5/100		0.45	0.0003	0.001	
4	04		8	8.5	8.25	08:32	11:32	180	1485	5/100		0.45	0.0005	0.002	
5	05		8	8	8	12:30	14:40	130	1040	14/100		0.45	0.0050	0.007	
6	06		8	8	8	12:32	14:42	130	1040	10/100		0.45	0.0050	0.005	
7															
8															
9															
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 4 SAMPLES @ $ 500 = $ 20 00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/15/98

BLDG. & PROJECT NAME: Unitil, 114 Drinkwater Road, Area 3/4 carpet & tile

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	101598956-01	I	3	Blank
2	02	I	3	"
3	03	D	3	Area 4 outside of Meter Dept Door
4	04	D	3	Area 5 outside Decon to Area 3
5	05	D	3	Area 6 By decon to conference Room -
6	06	E/B	7	Conference Room - Area 1/2
7	07	E/B	7	Hallway to Cafe. Area 1/2
8	08	E/B	7	Meter Room Dept.
9	09	E/B	7	" " "
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/15/98
JOB NO.: 1117.001 BATCH NO.: 8-17183
CLIENT NAME: Unitil Hampton/Exeter Elec.
SAMPLER'S NAME: Andrew Teckut
SIGNATURE: Andrew Teckut
DATE: 10/15/98 TIME COMPLETED: —

DELIVERED TO LAB BY: Hand
LAB NAME: Field
RECEIVED BY: Hand
DATE: 10/15/98 TIME: — INITIALS: [illegible]
ANALYST: A Teckut SCOPE #: 00520
DATE COMPLETED: 10/15/98 TIME: —
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = 0.0785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1		Blank	8							0/100	0	0.45			
2		"	8							0/100					
3	03		8	8	8	09:35	10:35	185	1480	0/100			0.0030	0.0003	
4	04		8	8	8	08:35	16:35	240	1920	6/100			0.0066	0.002	
5	05		8	8	8	09:20	11:15	115	920	1/100			0.0058	0.0006	
6	06		14.5	14	14.2	10:40	12:15	95	1349	0.5/100			0.004	<LOQ	
7	07		14.5	13.5	14.0	10:40	12:15	95	1330	0.5/100			0.004	0.004	
8	08		15	15	15	11:52	13:27	95	1425	1/100			0.0038	0.003	
9	09		15	14.5	14.75	11:50	13:25	95	1401.25	0.5/100			0.0038	0.003	
10															

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 7 SAMPLES @ $ 5.00 = $ 35.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/19/98

ACCOUNTABILITY RECORD PAGE 1 OF ∞

BLDG. & PROJECT NAME: UNITIL, DRINKWATER RD. EXETER, N.H.

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	~~10198914~~ -01	F	–	BLANK
2	10198919 - 02	F	–	"
3	03	D	1	HALLWAY BY CONFERENCE
4	04	E	2/3	IN RADIO ROOM CONT.
5	05	D	3	SAME 03
6	06	E	3	SAME 04
7				
8				
9				
10				

REQUESTED COMPLETION DATE: 10/19/98
JOB NO.: 1117-001 BATCH NO.: B 190/0
CLIENT NAME: UNITIL
SAMPLER'S NAME: MIKE LANE
SIGNATURE: [signature]
DATE: 10/19/98 TIME COMPLETED:

DELIVERED TO LAB BY: HAND
LAB NAME: FIELDS
RECEIVED BY:
DATE: TIME: INITIALS:
ANALYST: MIKE LANE SCOPE #:
DATE COMPLETED: 10/19/98 TIME:
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM 2; FIELD AREA = .00785 MM 2

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1	BLANK	N/A								0/100	0/100	.045	–	–	
2	"	"								0/100			–	–	
3	03	173	8	8	8	0830	1170	180	1440	12/100			.002	.004	
4	04		8	8	8	0835	1135	180	1440	VOID			.002	–	
5	05		8	8	8	1130	1430	180	1440	10/100			.002	.003	
6	06	"	8	8	8	1135	1435	180	1440	8/100	"	"	.002	.003	
7															
8															
9															
10															
	DUP #05									8/100					
	REP #04									6/100					

SPECIAL COMMENTS: SAMPLE #04 VOID DUE TO PARTICULATE (DUST) OVERLOAD

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 4 SAMPLES @ $ 25 = $ 100.00

ASBESTOS AIR SAMPLE DATA FORM

DATE: 10/20/98

BLDG. & PROJECT NAME: UNFIL

	SAMPLE I.D. NO.	TYPE *	ACTIVITY**	DESCRIPTION OF SAMPLING LOCATION & COMMENTS
1	102098919-01	F	–	BLANK
2	02	F	–	"
3	03	B	7	LOBBY / RADIO. RM AREA
4	04	B	7	LOBBY / RADIO RM AREA
5	05	B	7	" " " "
6	06	B	7	CONFERENCE RM
7	07	B	7	" "
8				
9				
10				

ACCOUNTABILITY RECORD

PAGE 1 OF 1

REQUESTED COMPLETION DATE: 10/20/98
JOB NO.: 1117-001 BATCH NO.: B 19010
CLIENT NAME: UNFIL
SAMPLER'S NAME: MIKE LANE
SIGNATURE: MLane
DATE: 10/20/98 TIME COMPLETED:

DELIVERED TO LAB BY: HAND
LAB NAME: FIELD
RECEIVED BY:
DATE: TIME: INITIALS:
ANALYST: M. LANE SCOPE #:
DATE COMPLETED: 10/20/98 TIME:
ANALYSIS METHOD: NIOSH 7400

APPROVAL SIGNATURE (PROJECT MANAGER):

SAMPLING AND ANALYTICAL DATA

EFFECTIVE FILTER AREA = 385 MM²; FIELD AREA = .00785 MM²

	PUMP I.D. NO.	FLOW METER I.D. NO.	AIR FLOWRATE (LPM) START	STOP	AVERAGE	SAMPLING TIME START	STOP	TOTAL	VOLUME (LITERS)	FIBERS / FIELDS	AVERAGE BLANK COUNT	ANALYST'S CV	LOQ	FIBERS PER CC	UPPER CONFIDENCE LIMIT
1	BLANK	173								0/100	0/100	.045	–	–	
2	"	"								0/100			–	–	
3	03		12	12	12	0750	0950	120	1440	7/100			.002	.002	
4	04		12	12	12	0751	0951	120	1440	3/100			.002	<.002	
5	05		12	12	12	0752	0952	120	1440	4/100			.002	<.002	
6	06		12	12	12	1045	1245	120	1440	6/100			.002	.002	
7	07		12	12	12	1046	1246	120	1440	11/100			.002	.004	
8															
9															
10															
	DUP#07									14/100					
	REP#57									100/41					

SPECIAL COMMENTS:

* SAMPLE TYPE CODES

PCM = PHASE CONTRAST MICROSCOPY
TEM = TRANSMISSION ELECTRON MICROSCOPY
SEM = SCANNING ELECTRON MICROSCOPY
A = PERSONAL EXPOSURE SAMPLE
B = WORK AREA CLEARANCE
C = PREABATEMENT BACKGROUND
D = OUTSIDE WORK AREA
E = INSIDE WORK AREA
F = AIR QUALITY/ENVIRONMENTAL
G = HEPA EXHAUST DISCHARGE
H = DECONTAMINATION FACILITY
I = BLANK SAMPLE

** WORK AREA ACTIVITY CODES

1 = PREABATEMENT BACKGROUND
2 = PREPARATION OF WORK AREA
3 = ASBESTOS REMOVAL WORK
4 = CLEAN UP OF WORK AREA
5 = WASTE REMOVAL
6 = GLOVE BAG REMOVAL WORK
7 = WORK AREA CLEARANCE
8 = MAINTENANCE ACTIVITY
9 = ACBM REPAIR ACTIVITY
10 = ACBM ENCAPSULATION OR ENCLOSURE
11 = CLEANING OR DECONTAMINATION
12 = NOT APPLICABLE

CLIENT BILLING INSTRUCTIONS: 5 SAMPLES @ $ 5 = $ 25.00

APPENDIX II

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
FIELD REPORT

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate:	September 24, 1998	Hygienist:	Andrew Techet
b #:	1117.001	Project Manager:	Steve Minassian
b Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
:00	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface
	Cleaning Corp. on site with five workers A. Batista, F. Mendez, L. Mendez, R. Orellana, and M.
	Roldan and one supervisor Wilson Soto.
	HES inspected paper work and licenses, everything is current and up to date.
	Steve Minassian (HES) on site and discuss the scope of work with NSCC and Robert Conners of
	Unitil.
	HES and NSCC discussed plan of action for Area 1. NSCC will be using one two chambered
	decontamination unit for access to multiple work areas (one at a time) and the workers will be
	wearing two Tyvek Suits and have an area to wash hands and face. NSSC will be removing transite
	panels, TSI pipe insulation and VAT/Mastic in several areas throughout the building. Pipe
	Insulation will be glove bagged inside a primary containment setup consisting of 6 mill. poly. All
	Critical barriers will be sealed and floors covered in applicable areas.
)00	The containment setup is going well. NSCC plans to prep the entire day so that on 9/25/98 work
	will be able to proceed at the beginning of the shift. NSCC set up the negative air machine.
)30	HES set up air samples on either side of the work area (see air sample data form for specifics).
)45	Unitil expressed concern about NSCC ripping base boards from the wall without the containment
	fully complete. HES inspected the area and discussed the issue with NSCC supervisor. HES notes
	that the work is not impacting the transite paneling and that the nails are in the studs not the and not
	transite.
:30	HES discussed with NSCC supervisor a change in the plan of action for Area 1. Instead of a two
	session removal NSCC will contain the entire area all the way to the cafeteria, removing all the
	transite walls in Area 1 and the TSI pipe insulation except for the boiler room. HES informed Unitil
	about the change in plans and there were no problems with the alteration of the plan of action.
200	NSCC takes a lunch break.
300	HES inspects work progress of the containment. HES notes a AC duct in the conference room that
	will be abated on 9/25/98. HES discussed issue with NSCC and it was decided that there were no
	return vents in the room. Since the friable portion of the Asbestos Containing Materials (ACM) will
	be removed using glove bags there should be no ACM entering the air ducts.
330	HES stopped air samples. All sample results were less than LOQ. There were some fibers found, but
	it is impossible to determine if they were in fact ACM or not. The fibers were most likely the result of high traffic
	through the sampling area and the ripping out of ceiling tiles.
430	NSCC has sealed off the work area in the lobby. The prep work will be finished this evening.
530	NSCC finished prep work and is all set to work 9/25/98. All critical barriers have been sealed and air ducts covered.
	There are no intakes in the work area therefore the HVAC will not have to be shut down.
	NSCC and HES personnel are off site.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 9/24/98 M T W (T) F S S

ject Name Unitil Exeter & Hampton Elec. Project Number 1117-001
:ation 114 Drinking water RD, NH Client Contact Robert Conner
ent Name Unitil

ntractor NSCC Supervisor Wilson Soto

uipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

rk area secured	Y N (N/A)	*Removal*	
rning signs posted	Y N (N/A)	• Proper Wetting of asbestos	Y N (N/A)
/AC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	Y N (N/A)
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
vable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects covered with poly	(Y) N N/A	• Airless sprayer used	Y N (N/A)
lation of work area		• Applied in layers	Y N (N/A)
Openings sealed w/ 6-mil	Y N N/A	• Applied without disturbing asbestos	Y N (N/A)
Large openings with critical barriers	Y N N/A	• Encapsulation dry (post test)	Y N (N/A)
ors and walls		*Clean up*	
Floors w/2 layers	Y N (N/A)	• No visible debris prior to post test	Y N (N/A)
(12" overlap)	Y N (N/A)	• Waste removed from work area	Y N (N/A)
Walls w/2 layers of 4-mil	Y N (N/A)	*Type of Respirator Protection*	
No seams @ floor-wall joints	(Y) N N/A	• 1/2 face	
		• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: Yes • Impervious surfaces
mments: Containment is glove bags for TSI pipe insulation & 1 layer 6 mil primary containment with negative air.

ork Area:
Containment size: 700' sq.
% of work done: Ø
Amt. of material: N/A
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: N/A
4. No. of workers: 5
6. Mini-enclosures: N/A
8. Project oversight: yes

ygienist info:
ime on-site: 0800 Lunch break: —
ime left site: Total time on-site:

ygienist Name: Andrew Teckel Project Manager: Steve Minassian
LWD#: AM 53298 No. of Waste Bags Removed: Ø

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate:	September 25, 1998	Hygienist:	Andrew Techet
›b #:	1117.001	Project Manager:	Steve Minassian
›b Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
730	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	HES inspected paper work and licenses, everything is current and up to date.
300	HES starts air sampling two in the lobby area and one near the decontamination unit at the rear of the building. HES
	spoke with Robert Conners (Unitil) about NSCC beginning work, HES informed Unitil that the containment had be
	checked on 9/24/98 at the end of the shift and that there should be no problems.
	HES inspected the lobby side portion of the containment for area 1 and found no visible breaches in the containment.
	HES notes that NSCC has begun the abatement process and has posted warning signs and all the critical barriers have
	been sealed off.
900	HES entered containment and notes that the transite panels are not releasing from the walls as anticipated. NSCC is
	having to hammer portions of the paneling to free it up, so that the workers can break the paneling free of the wall
	studs. NSCC supervisor said that there were nails through he transite on each stud making it difficult to remove the
	transite.
	The pipe insulation is going slowly, but steady and the insulation is being properly wetted.
	HES notes that all workers have proper personal protective equipment on: half-face respirators and two Tyvek suits on.
	There is also a bucket of water for the workers to wash their hands and face before leaving the decontamination unit.
000	HES discussed with Unitil workers the work that NSCC is performing, as per request of a Unitil employee. HES
	reassured the Until employees that they are in no danger and explained to the glove bag procedure and the safety
	procedures that are used to protect them and the workers in the containment.
030	HES notes that NSCC has begun the bag out process. The waste bags have sufficient water and are doubled with ACM
	labels
100	HES entered the containment. HES notes that there is a good amount of debris on the floor of the containment. HES
	discussed with the NSCC supervisor as to his plan of action for the rest of the day. NSCC said that they would be
	finished with the gross removal in Area 1 on 9/25/98 and begin final cleaning process, but that the containment would
	not be ready until Monday morning for a visual inspection and clear air testing.
200	NSCC is finished with the ACM bag out process and are breaking for lunch.
	HES stopped ambient air samples and prepped them for analysis. All sample results were ≤ LOQ. HES notes that there
	Were some fibers in the lobby samples, but due to the amount of activity with regards to removing ceiling tile and
	NSCC hammering down the transite panels the fibers count is not unusual. This is to say that the vibration from the
	hammering could be the cause of additional airborne fibers. The fiber count is not high enough to raise concern, but
	HES will discuss the matter with NSCC and Unitil.
300	NSCC informed HES that they had removed 40 bags of ACM waste and 38 bundles of transite panels. NSCC has a
	waste manifest and will be removing the waste today and carting it to the waste site today.
415	HES entered into the containment and inspected the area. NSCC is vacuuming the area and sweeping the floor. NSCC

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ıte:	September 25, 1998	Hygienist:	Andrew Techet
ɔ #:	1117.001	Project Manager:	Steve Minassian
ɔ Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

	will perform the final clean on Monday. The final clean will consist of wet wiping the walls and floor and any other
	Surface that might need to be cleaned.
00	NSCC sealed containment and left the negative air units on for the weekend.
	NSCC and HES personnel off site.

Andrew Techet

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HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 9/25/98 M T W T (F) S S

ject Name 114 Drinkwater RD, NH
ation Unitil, NH
ent Name Unitil Exeter & Hampton Elec.

Project Number 1117.001
Client Contact Robert Conner

ntractor NGCC

Supervisor Wilson Soto

ipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

rk area secured	(Y) N N/A	*Removal*	
rning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
AC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	Y N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N N/A
vable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N (N/A)
overed with poly	(Y) N N/A	• Applied in layers	Y N (N/A)
lation of work area		• Applied without disturbing asbestos	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	*Clean up*	
ors and walls		• No visible debris prior to post test	Y N N/A
Floors w/2 layers	Y N (N/A)	• Waste removed from work area	Y N N/A
(12" overlap)	Y N (N/A)	*Type of Respirator Protection*	
Walls w/2 layers of 4-mil	Y N N/A	• 1/2 face ∅	
No seams @ floor-wall joints	(Y) N N/A	• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces
mments:

ork Area:
Containment size: ~750' sq
% of work done: 95%
Amt. of material: < 1100 sf
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: yes
4. No. of workers: 7
6. Mini-enclosures: NO
8. Project oversight: yes

ygienist info:
me on-site: 0730
me left site: 0500

Lunch break: —
Total time on-site:

ygienist Name: Andrew Techet
LWD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed: 40 bags & 38 bags

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ıte:	September 28, 1998	Hygienist:	Andrew Techet
b #:	1117.001	Project Manager:	Steve Minassian
b Site:	Unitil Exeter Hampton Electric Utility. 114 Drinkwater Road		

Time	Comments
30	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	Supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	HES performs a visual inspection of the containment and the containment is free of any visual debris and all pipes are
	Clean. HES began aggressive air clearance tests. HES is running 3 clearance samples throughout the containment (see
	Sample data form for details).
)00	NSCC is preparing the lobby area for the pipe insulation removal and the Radio room demo. NSCC will have to drop a
	wall from the primary ceiling to the floor to contain the area. This may take added time, but it is the only way to protect
	The occupants in the office space. NSCC points out that the electronics monitoring room will be hard to get work in
	because of several unmovable objects that will have to be covered and kept cool. This area will be addressed first and
	Then cleared for access.
)30	HES starts ambient air sampling two in the lobby area of the building where pre-abatement prep work is being
	preformed. The glovebag hanging will be very hard to place because of the mass number of wires running through the
	ceiling. If glove bags do not work NSCC may have to resort to full containment instead of partial containment and glove
	bags.
)00	HES stops air clearance testing samples and prepares them for Polarized Light Microscopy analysis using the NIOSH
	7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit. NSCC Continues prep work
	in the lobby and begins to tear down the cleared containment. NSCC finished prepping the boiler room and began
	removal of the pipe insulation. All of the NSCC workers in the Containment were wearing proper respiratory protection
	and 2 Tyvek suits. NSCC is using sufficient amounts of water and is not creating any visible emissions. NSCC
	containment has negative air, sealed criticals, decontamination unit and all appropriate paperwork / signs posted.
130	NSCC is finished with the gross removal of the pipe insulation in the boiler room.
	HES performs a visual inspection of the boiler room containment and found the containment free of any visual debris
	and all pipes are clean. HES began aggressive air clearance tests and is running 2 clearance samples throughout the
	containment (see sample data form for details).
200	NSCC breaks for lunch
330	HES stops clean air samples and prepares them for PCM analysis using the NIOSH 7400 method. The air sample results
	were less than 0.01 fibers/cc (see air sample data form for details).
	NSCC continues to prep the lobby area and begins to tear down the boiler room containment. NSCC will remove the
	Asbestos pipe insulation from the electric room in the main lobby first so that Unitil employees have access to the
	equipment in that area by lunch time on 9/29/98. NSCC will be using the outer wall from the previous containment and
	moving it over two sets of ceiling tiles and sealing from the tiles to the primary ceiling.
430	NSCC continues containment prep work and is hanging glove bags in the electric room for removal in the morning.
	HES notes that all ambient air sample results are less than 0.010 fibers/cc and that there should be no concern for the
	health of the people in the office work space.
530	NSCC almost finished with the containment in area 2 and is ready to start work in the electric room in the morning on
	9/29/98. NSCC and HES personnel off site.

Andrew Techet

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HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

te 9/28/98 (M) T W T F S S

ject Name Area 1, Boilerroom, Lobby Area
cation 114 Drinkwater RD, NH
ent Name Unitil Exeter/Hampton Elec

Project Number 1117.001
Client Contact Robert Conner

ntractor NSCC

Supervisor Wilson Soto

uipment Used On-Site: Standard

ork Requirements/Procedures: All proper paper work, certifications and records on-site.
rcle Yes or No If NO explain:

ork area secured	(Y) N N/A	*Removal*	
arning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
VAC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
ovable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
on-movable objects covered with poly	(Y) N N/A	• Airless sprayer used	Y N (N/A)
olation of work area		• Applied in layers	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Applied without disturbing asbestos	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
oors and walls		*Clean up*	
Floors w/2 layers	Y N (N/A)	• No visible debris prior to post test	(Y) N N/A
(12" overlap)	Y N (N/A)	• Waste removed from work area	(Y) N N/A
Walls w/2 layers of 4-mil	Y N (N/A)	*Type of Respirator Protection*	
No seams @ floor-wall joints	(Y) N N/A	• 1/2 face X	
		• PAPR	
		• Type C	

heck Exceptions: • Glove Bag: Yes • Impervious surfaces

omments: Glove bags w/ primary containment 1 layer

ork Area:
Containment size: 300 ft²
% of work done: 100%
Amt. of material: ~60 ft' 1.near
Barriers (poly): yes
Plywood (critical): celotex

2. Glove bag removal: yes
4. No. of workers:
6. Mini-enclosures: No
8. Project oversight: yes

ygienist info:
ime on-site: 0830
ime left site: 0330

Lunch break: —
Total time on-site:

ygienist Name: Andrew H Pechet
LWD#: AH

Project Manager: Steve Minassian
No. of Waste Bags Removed: 16

000182

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate: September 29, 1998 Hygienist: Andrew Techet
b #: 1117.001 Project Manager: Steve Minassian
b Site: Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road

Time	Comments
30	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	HES performs a visual inspection of the containment and finds no breaches in it and glove bags hung properly. NSCC
	Begins work in the small electric room in Area 2. This area will be cleared and opened up for Unitil to have access to
	the room by lunch time.
00	NSCC continues preparing the lobby area for the pipe insulation removal and the Radio room demo. NSCC has walls in
	Place and is ready to seal the containment access point and begin demo. Demo will begin when the electric room is
	finished. HES notes that the demo of the radio room non-ACM walls will be addressed first and then the transite panels
	will be taken out once the construction debris is cleared from the area.
30	HES performs a visual inspection of the electric room containment and found the containment free of any visual debris
	and all pipes are clean (all surfaces have been wet wiped with damp rags). HES began aggressive air clearance tests and
	is running 2 clearance samples throughout the containment (see sample data form for details). NSCC removed approx.
	25 linear feet of ACM pipe insulation.
00	NSCC discovered an additional pipe running the width of the radio room, across the lobby and into the women's
	bathroom (approx. 35 linear feet). Also an additional 10 linear feet was found in the unisex bathroom. HES and Unitil
	discuss the removal of the additional insulation. HES recommends that it be removed since NSCC was set up to remove
	insulation in other areas as well. Unitil agreed to have the insulation removed provided that they receive a cost estimate
	for the additional pipe insulation and NSCC said it would be no problem.
30	HES stops air clearance testing samples and prepares them for Polarized Light Microscopy analysis using the NIOSH
	7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit (see air sample data sheet for
	details). NSCC Continues prep work in the lobby and begins to tear down the cleared containment. NSCC finished
	prepping the lobby area and began the Radio Room demolition. All of the NSCC workers in the Containment were
	wearing respiratory protection and Tyvek suits. NSCC is using sufficient amounts of water and is not creating any
	visible emissions. NSCC's containment has negative air, sealed criticals and a decontamination unit to minimize dust
	from sheet rock demo.
100	HES notes that the ceiling fell down in the Radio Room as a direct result of removing the Radio room walls.
130	NSCC is finished with the sheet rock demo leaving the transite panels for the afternoon. NSCC is will clean all non-
	ACM debris prior to the removal of the transite panels. NSCC informs HES that there were VATs bellow the studs
	supporting the sheet rock wall and that some of the tiles were damaged. NSCC bagged the pieces as asbestos waste and
	HEPA vacuumed the area around the tiles. HES informed Unitil that the replacement process for the rug may cause
	VATs to break loose from their seating and that any tile waste generated would have to addressed as asbestos waste.
200	NSCC breaks for lunch
330	NSCC has begun the removal of the transite panels and the pipe insulation in the bathroom areas of the containment.
	HES inspected the containment prior to abatement commencing. HES notes that glove bags were hung in place and all
	criticals were sealed, negative air machines on and all appropriate paper wok posted (warning signs and licenses, etc.)
430	NSCC is cleaning work area and hanging glove bags on the remaining ACM pipe insulation in the main lobby area of the
	containment. No air clearances were run, but a visual inspection was conducted. HES found no visual debris remaining
	on the abated steam pipes, nor was there any debris remaining from the transite panels.

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Energy 6-31 Attachment 1
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Docket No. DE 21-030
Direct Testimony of Jay E. Dudley
Attachment JED-6
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HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

e: September 29, 1998 Hygienist: Andrew Techet
#: 1117.001 Project Manager: Steve Minassian
Site: Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road

Time	Comments
0	NSCC finished cleaning the containment and sealed it for the evening. NSCC generated 10 bags of ACM waste and 8
	bundles of transite panels. NSCC will finish removing the remaining ACM pipe insulation on 9/30/98. HES notes that
	all surfaces in the containment were clean and free of any visual debris.
	HES notes that all ambient sample (samples run outside of the containment) results were less than 0.01 fibers/cc. HES
	notes that the results were higher than normal, but attributes the high counts to ceiling tile disturbances from the
	demolition process. HES informed Unitil of all air results and noted that all results were within New Hampshire state
	Limits.
0	NSCC and HES personnel off site.

Andrew Techet 2of 2

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 9/29/98 M (T) W T F S S

ject Name Area 1, Lobby & Radio Room
:ation 114 Drinkwater RD, NH
ent Name Unitil Exeter & Hampton Elec.

Project Number 1117.001
Client Contact Robert Conner

ntractor NSCC

Supervisor Wilson Soto

uipment Used On-Site: Standard

ork Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

ork area secured	(Y) N N/A	*Removal*	
arning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
/AC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
ovable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects covered with poly	(Y) N N/A	• Airless sprayer used	Y N (N/A)
olation of work area		• Applied in layers	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Applied without disturbing asbestos	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
oors and walls		*Clean up*	
Floors w/2 layers (12" overlap)	(Y) N N/A	• No visible debris prior to post test	Y N N/A
Walls w/2 layers of 4-mil	Y N (N/A)	• Waste removed from work area	Y N N/A
No seams @ floor-wall joints	(Y) N N/A	*Type of Respirator Protection*	
		• 1/2 face —	
		• PAPR	
		• Type C	

heck Exceptions: • Glove Bag: Yes • Impervious surfaces

omments: Glove bag inside primary containment.

ork Area:
Containment size: 100 ft² 500 ft²
% of work done: 100% 0%
Amt. of material: ~25 ft Linear
Barriers (poly): Yes
Plywood (critical): Celotex

2. Glove bag removal: Yes.
4. No. of workers:
6. Mini-enclosures: No
8. Project oversight: Yes

ygienist info:
ime on-site: 0730
ime left site: 0800

Lunch break: —
Total time on-site:

ygienist Name: Andrew Techet
LWD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed: 18 bags, 8 Bundles

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te:	September 30, 1998	Hygienist:	Andrew Techet
o #:	1117.001	Project Manager:	Steve Minassian
o Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
00	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	HES performs a visual inspection of the containment to ensure that no breaches occurred over night. HES found no
	visible breaches in the containment. NSCC is hanging glove bags for removal of the ACM pipe insulation.
00	NSCC has started removal of the ACM pipe insulation. HES notes that all glove bags are hung properly and sealed
	tightly with no visible breaches. NSCC workers are wearing appropriate personal protective equipment: half face
	respirators and two Tyvek suits. HES notes that all proper signs and licenses are posted and negative air machines are
	running.
	HES has three ambient pumps running (see air sample data form for details).
35	HES performs a visual inspection of the Lobby / Radio Room containment and found the containment free of any visual
	debris and all pipe surfaces / threads are clean (all surfaces have been wet wiped with damp rags). HES began
	aggressive air clearance tests and is running 2 clearance samples throughout the containment (see sample data form for
	details).
00	HES notes that sample 093098-956-03 was scratched due to filter imperfections.
35	HES stops air clearance testing samples and prepares them for Polarized Light Microscopy analysis using the NIOSH
	7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit (see air sample data sheet for
	details).
00	NSCC breaks for lunch.
00	NSCC begins prep work for the front office and entrance area. NSCC also begins to break down the Radio Room /
	Lobby area containment. This will take the remainder of the day.
	Robert Conner inquired about the ACM waste manifest. HES informed him that once the waste was disposed and hand
	passed through the proper channels that he would receive a waste manifest in 30 to 40 days after the waste had left site.
00	NSCC continues to tear down the containment area. NSCC will be reusing the decon unit and moving it over to the
	entrance area.
	HES stopped ambient air samples and prepared the for analysis according to the NIOSH 7400 method. All results were
	less than 0.010 fibers/cc (see air sample data form for details).
00	NSCC has finished tearing down the lobby containment and has a good portion of the front entrance and office
	containment built. NSCC leaves site for the day.
	HES off site.

1 of 1

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

: 9/30/98 M T (W) T F S S

ect Name Area 2, Radio Room & Lobby
ation 114 Drinkwater RD, NH
nt Name Unitil Exeter & Hampton Elec.

Project Number 1117.001
Client Contact Robert Conner

tractor NSCC

Supervisor Wilson Soto

ipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
:le (Yes) or No If NO explain:

rk area secured	(Y) N N/A	*Removal*	
rning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
AC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
vable objects covered ith 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N N/A
overed with poly	(Y) N N/A	• Applied in layers	Y N N/A
lation of work area		• Applied without disturbing asbestos	Y N N/A
Openings sealed w/ 6-mil	(Y) N N/A	• Encapsulation dry (post test)	Y N N/A
Large openings with critical barriers	(Y) N N/A	*Clean up*	
		• No visible debris prior to post test	Y N N/A
ors and walls		• Waste removed from work area	Y N N/A
Floors w/2 layers	(Y) N N/A	*Type of Respirator Protection*	
(12" overlap)	(Y) N N/A	• 1/2 face Ø	
Walls w/2 layers of 4-mil	Y N (N/A)	• PAPR	
No seams @ floor-wall joints	(Y) N N/A	• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces N/A
mments: Glove bags w/ primary containment

ork Area:
Containment size: ~500 ft²
% of work done:
Amt. of material:
Barriers (poly): yes
Plywood (critical): yes/otex

2. Glove bag removal: yes
4. No. of workers:
6. Mini-enclosures: N/A
8. Project oversight: yes

gienist info:
me on-site: 0700
me left site: 1500

Lunch break: —
Total time on-site:

gienist Name: Andrew Fechet
WD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed: 15 bags

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate:	October 1, 1998	Hygienist:	Andrew Techet
ob #:	1117.001	Project Manager:	Steve Minassian
ob Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
730	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	Supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	NSCC is prepping the entrance way and the front offices for ACM pipe insulation removal. NSCC said that they might
	be able to complete the work by this afternoon and break down 10/2/98 in the morning.
830	NSCC continues prep work. NSCC and HES discuss another pipe that was found (an additional 10 linear feet over the
	entrance way). NSCC and Unitil discuss the issue and plan to address it because it will be within the containment.
	NSCC and HES discuss the plan of action in the cafeteria. NSCC will be removing all pipe insulation found in the café.
	and the men's room. NSCC plans to set up and remove ACM pipe insulation by 10/2/98.
000	NSCC continues prepping the front entrance and office area, the containment is almost finished.
030	HES inspects work area and containment and finds no breaches or leaks in the containment. NSCC has posted all
	Necessary signs and certifications, established negative air with HEPA filtered air machine and has hung glove bags on
	all the ACM pipe insulation. HES approved the containment for work.
	NSCC commenced with the removal of the transite panels and the ACM pipe insulation.
	HES started two ambient samples outside the containment (see air sample data form for details). HES instructed NSCC
	to place an additional negative air machine in the containment and they did so.
130	NSCC is removing ACM pipe insulation from the containment and HES informed NSCC that the bags needed more
	water in the bags. NSCC re-opened the bags and placed additional water in them. HES also notes that the ambient
	samples may have a high fiber count due to the excessive vibrations from hammering the transite panels.
	HES made NSCC aware of the situation and said that they must be as careful as possible to create as little disturbance
	as possible, NSCC agreed.
	HES re-inspected the containment to ensure that there were no breach in the outer walls. HES found not openings
	anywhere.
230	NSCC did not break for lunch so that they could finish the abatement process in the front offices and entrance way.
	NSCC continues to remove the waste from the containment. The transite boards are properly wrapped and labeled and
	the glove bags are doubled with sufficient amounts of water. HES notes that NSCC is misting the transite boards to
	minimize dust created when they saw the boards. NSCC had to use a saw to break up the transite because it would
	have been impossible to remove otherwise.
330	NSCC has finished with the removal process and is beginning the final clean. HES will run clearance tests in the
	morning of 10/2/98 to ensure the safest possible air conditions for the people working in the office area during the break
	down of the containment.
400	HES performs a visual inspection of the containment and found no visible debris on the floors, pipes or screws. HES
	notes that all surfaces in the containment had been wet wiped and that NSCC will leave the negative air units on
	overnight to continue circulating air through the containment.
430	HES and NSCC personnel of site.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 10/1/98 M T W (T) F S S

ject Name Area 2, Frontentrance & offices
ation 114 Drinkwater RD, NH
ent Name Unitil Exeter & Hampton Elec.

Project Number 1117.001
Client Contact Robert Conner

ntractor NSCC

Supervisor Wilson Soto

uipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

rk area secured	(Y) N N/A	*Removal*	
rning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
AC shut down	(Y) N N/A	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	(Y) N N/A
vable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N (N/A)
overed with poly	(Y) N N/A	• Applied in layers	Y N (N/A)
lation of work area		• Applied without disturbing asbestos	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	*Clean up*	
ors and walls		• No visible debris prior to post test	(Y) N N/A
Floors w/2 layers	(Y) N N/A	• Waste removed from work area	(Y) N N/A
(12" overlap)	(Y) N N/A	*Type of Respirator Protection*	
Walls w/2 layers of 4-mil	Y N (N/A)	• 1/2 face 6	
No seams @ floor-wall joints	(Y) N N/A	• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces N/A
mments: glove bag w/ primary containment

ork Area:
Containment size: ~400 ft2
% of work done:
Amt. of material:
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: yes
4. No. of workers: 7
6. Mini-enclosures: N/A
8. Project oversight: yes

gienist info:
me on-site: 0730
me left site:
Lunch break: —
Total time on-site:

gienist Name: Andrew Tochet
LWD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed: 25 bags, 7 bundles

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te:	October 2, 1998	Hygienist:	Andrew Techet
) #:	1117.001	Project Manager:	Steve Minassian
) Site:	Unitil Exeter Hampton Electric Utility. 114 Drinkwater Road		

Time	Comments
15	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	NSCC is prepping the cafeteria for ACM pipe insulation removal. NSCC said that there were additional pipes, but they
	thought that they could finish today.
45	HES begins aggressive air clearance sampling in the front offices and entrance way containment. There are three
	samples running one in each room of the containment.
30	NSCC continues prep work in the cafeteria. NSCC and HES discuss how the containment will be built over the
	additional pipe that runs up and over and into a transite paneling. NSCC will build a cocoon around this pipe and attach
	it to the rest of the containment as well as glove bag the pipe.
30	HES stops air clearance testing samples and prepares them for Polarized Light Microscopy analysis using the NIOSH
	7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit (see air sample data sheet for
	details). NSCC Continues prep work in the cafeteria and will begin to tear down the cleared containment.
00	NSCC begins to break down the containment in the entrance and front office area.
30	HES inspects café work area and containment and finds no breaches or leaks in the containment. NSCC has posted all
	necessary signs and certifications, established negative air with HEPA filtered air machine and has hung glove bags on
	all the ACM pipe insulation. HES instructs NSCC to place and additional negative air machine in the cafeteria
	containment. HES approved the containment for work.
30	NSCC working through lunch to finish the cafeteria area. Work so far going smoothly and no visual emissions. HES
	notes that all workers are in proper personal protective equipment and are conducting proper glove bag procedures.
30	HES visually inspects the cafeteria area for ACM pipe insulation remaining on the pipes and pipe thread. HES found no
	visible debris on the pipes or on the floor of the containment. All surfaces were wet wiped and the floor HEPA
	vacuumed.
	HES began aggressive air clearance tests and is running 2 clearance samples throughout the containment (see sample
	data form for details).
30	NSCC is prepping in Area 4 / garage area in anticipation of starting work in that area on 10/5/98.
20	HES stops air clearance testing and prepares the samples for PCM analysis using the NIOSH 7400 method. All results
	were less than 0.01 fibers/cc, the legal airborne fiber count limit (see air sample data form for details).
30	NSCC begins breaking down containment in the cafeteria.
15	HES off site and NSCC off site at 1530.

1 of 1

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 10/2/98 M T W T (F) S S

ect Name Area 2 & 4 Project Number 1117.001
ation 114 Drinkwater RD, NH Client Contact Robert Conner
nt Name Unitil Exeter & Hampton Elec.

ntractor WSCC Supervisor Wilson Soto

ipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle (Yes) or No If NO explain:

rk area secured	(Y) N N/A	*Removal*	
rning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
AC shut down	(Y) N N/A	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
vable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects covered with poly	(Y) N N/A	• Airless sprayer used	Y N (N/A)
lation of work area		• Applied in layers	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Applied without disturbing asbestos	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
ors and walls		*Clean up*	
Floors w/2 layers	(Y) N (N/A)	• No visible debris prior to post test	(Y) N N/A
(12" overlap)	(Y) N N/A	• Waste removed from work area	(Y) N N/A
Walls w/2 layers of 4-mil	Y N (N/A)	*Type of Respirator Protection*	
No seams @ floor-wall joints	(Y) N N/A	• 1/2 face ✓	
		• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces n/a
mments: Glove bag w/ primary containment, walls & floors have 1 layer, Decon floor has 2 layers of 6 mil poly.

ork Area:
Containment size: 1400 feet²
% of work done: 100%
Amt. of material: 100 linear feet
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: yes
4. No. of workers: 7
6. Mini-enclosures: No
8. Project oversight: yes

ygienist info:
me on-site: [redacted]0715
me left site: 1515

Lunch break: —
Total time on-site:

ygienist Name: Andrew Technet
LWD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed: 25 bags

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ite: 10-5-98 Hygienist: ANDREW TECHET
o #: 1117001 Project Manager: STEVE MINASSIAN
o site: Unitil Exeter / HAMPTON

Time	Comments
7:00	Hygienetics Environmental Services, INC Arrived on Site.
	NSCC Seven employee crew is beginning to set up containment Area.
1:30	NSCC crew has decontamination Area setup and they are still prepping the containment area.
3:00	NSCC told Unitil and Hygienetics that the pipe in area 4 ~~cabage~~ would be completed in a timely fashion so that clearance samples can be obtained.
8:30	NSCC ~~are~~ prepping the containment Area
9:00	NSCC is prepping the containment Area. At this time they are connecting the decon to the containment wall.
9:30	NSCC is prepping the floor of the containment area by laying down a sheet of poly.
1:30	NSCC has finished prepping the containment area. Negative air has been established and NSCC crew is checking for leaks along the perimeter.
:00	Half of NSCC's crew is attaching glove bags and beginning removal. The other half of the crew is beginning to prep the pipe in area 3. Hygienetics set up area monitoring pumps outside the decon and in area 3.
2:00	NSCC's crew was removing asbestos from pipe as we walked through the containment area.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te: 10-5-98 Hygienist: ANDREW TECHET
#: 1117001 Project Manager: STEVE MINASCIAN
site: Unitil Exeter & Hampton

Time	Comments
13:00	Brought air sample from area 4 (garage) back to the office in order to count its fiber content.
3:30	Conducted a visual inspection of the pipe from which the asbestos was removed. Then we set up three clearance samples inside the containment area.
1:55	We removed clearance samples from the containment area brought them back to the office and read their fiber content.
5 10	HES cleared containment. All samples were less than 0.010 fibers/cc.
5 30	HES off Site.
	Note: HES discussed work methodology w/ NSCC. HES is concerned that the fiber count in the containment during air clearance sampling is too high for glove bag work. HES said that NSCC must make glove bag seal tighter and use more water during removal process. NSCC understood and agreed to employ better work methodology

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

:e 10/5/18 (M) T W T F S S

ject Name AREA 4 Gauge
cation 114 Drinkwater Rd, NH
ent Name Unitil Exeter & Hampton Elec.

Project Number 1117.001
Client Contact Robert Conner

ntractor NSCC

Supervisor Wilson Soto

uipment Used On-Site: Standard

ork Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

ork area secured	Y N N/A	*Removal*	
arning signs posted	Y N N/A	• Proper Wetting of asbestos	Y N N/A
/AC shut down	Y N N/A	• Double bagged/drums and properly labeled	Y N N/A
CI protection	Y N N/A	• Large components properly wrapped/labeled	Y N N/A
ovable objects covered with 6-mil poly	Y N N/A	*Encapsulation*	
on-movable objects covered with poly	Y N N/A	• Airless sprayer used	Y N N/A
olation of work area		• Applied in layers	Y N N/A
Openings sealed w/ 6-mil	Y N N/A	• Applied without disturbing asbestos	Y N N/A
Large openings with critical barriers	Y N N/A	• Encapsulation dry (post test)	Y N N/A
oors and walls		*Clean up*	
Floors w/2 layers	Y N N/A	• No visible debris prior to post test	Y N N/A
(12" overlap)	Y N N/A	• Waste removed from work area	Y N N/A
Walls w/2 layers of 4-mil	Y N N/A	*Type of Respirator Protection*	
No seams @ floor-wall joints	Y N N/A	• 1/2 face Yes	
		• PAPR	
		• Type C	

heck Exceptions: • Glove Bag: Yes • Impervious surfaces

omments: Glove bag with primary containment,

ork Area:
Containment size: 1000 ft²
% of work done:
Amt. of material: 100 linear feet
Barriers (poly): Yes
Plywood (critical): Cobtex

2. Glove bag removal: Yes
4. No. of workers: 7
6. Mini-enclosures: NO
8. Project oversight: Yes

ygienist info:
ime on-site: 0700
ime left site: 1500

Lunch break: —
Total time on-site: 8 hr

ygienist Name: ANDREW Techet
LWD#: AM 53298

Project Manager: Steve Minassian
No. of Waste Bags Removed:

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate:	October 7, 1998	Hygienist:	Andrew Techet
b #:	1117.001	Project Manager:	Steve Minassian
b Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
'00	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	Supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	NSCC is prepping Area 5 for ACM pipe insulation removal, the main containment is in place now all NSCC has to do is
	hang the glove bags. Work should be finished by lunch time. NSCC has negative air units set up and running.
:00	HES begins ambient air monitoring in the warehouse area. HES notes that the negative air units are ventng into the
	garrage area, therefore HES set up a ambient air sample in the exhaust stream of the negative air units as per New
	Hampshire Code of Administrative Rules Env-A 1805.04(d)(2).
:30	HES inspects work area containment, both outside and inside, for breaches and proper glovebag hanging/sealing. HES
	notes that all seals are air tight and that the glove bags are hung properly.
:00	HES and NSCC discuss the work plan for the day and NSCC plans to remove in area 5 in two separate locations. NSCC
	is planning to finish with all pipe work in Area 5 by 6/8/98 and do not plan to work on 6/9/98. The trasite office space
	has been pushed back to 10/13/98 or 10/14/98, because Unitil cannot move the materials out of the area until that time.
	HES notes that all of NSCC's workers are wearing all proper personal protective gear.
:00	HES informed Unitil that all air filters in the HVAC system must be replaced and disposed of as asbestos waste because
	of the asbestos work that was performed and in accordance with New Hampshire Code of Administrative Rules Env-A
	1805.03(f).
:15	HES performs a visual inspection of the containment and found no visible debris on the floors, pipes or pipe threads.
	HES notes that all surfaces in the containment had been wet wiped and or HEPA vacuumed. HES began aggressive
	air clearance tests and is running 2 clearance samples throughout the containment (see sample data form for details).
	HES notes that waste removed was sufficiently wet and that NSCC practiced safe glovebag removal techniques.
:00	NSCC has finished preping the second containment in area 5 and has begun removing ACM pipe insulation. HES
	inspected the containment for breaches and proper glovebag hanging. HES found no problems with the containment
	area.
:50	HES stoped final clearance air samples and prepared them for Phase Contrast Microscopy (PCM) analysis using the
	NIOSH 7400 method. All results were greater than 0.010 fibers/cc (see air sample data form for details). NSCC
	containment failed HES discussed this issue with NSCC supervisor W. Soto and informed him of the situation. HES
	instructed NSCC to wet wipe the area again and that HES would run a second set of clearance samples.
	NSCC wet wiped the containment again.
:20	HES began a second round of cearance air samples in the first containment in area 5. NSCC contiues to remove pipe
	insulation in the second containment area. HES inspected containment for breaches and found none. HES notes that
	NSCC is using sufficient amounts of water in the asbestos waste bags.
:30	NSCC contiues removal in the second containment and the clearace samples are running still in the first containment.
	NSCC will be finished with pipe insulation removal by 10/8/98 and will not be able to work until 10/14/98.
:30	HES stoped second round of final clearance air samples and prepared them for PCM analysis using the NIOSH7400
	method. All results were less than 0.010 fibers/cc (see air sample data form for details). NSCC broke down the

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate: October 7, 1998 Hygienist: Andrew Techet
ob #: 1117.001 Project Manager: Steve Minassian
ob Site: Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road

Time	Comments
	Containment.
500	NSCC contiues to remove the ACM pipe insulation in the second containment and will be finished today. HES will run a final clearance and visual in the morning on 10/8/98.
530	NSCC finished the removal of the ACM pipe insulation and NSCC sealed the containment for the evening.
	HES and NSCC personnel off site.
	NSCC generated 68 bags of ACM waste.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 10/7/98 M T (W) T F S S

ject Name Area 3 Project Number 1117.001
ation 114 Drinkwater RD Client Contact Robert Conner
ent Name Unitil Exeter & Hampton Elec.

ntractor NSCC Supervisor Wilson Soto

ipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

rk area secured	Y N N/A	*Removal*	
rning signs posted	Y N N/A	• Proper Wetting of asbestos	Y N N/A
AC shut down	Y N N/A	• Double bagged/drums and properly labeled	Y N N/A
CI protection	Y N N/A	• Large components properly wrapped/labeled	Y N N/A
vable objects covered			
ith 6-mil poly	Y N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N N/A
overed with poly	Y N N/A	• Applied in layers	Y N N/A
lation of work area		• Applied without disturbing asbestos	Y N N/A
Openings sealed w/ 6-mil	Y N N/A	• Encapsulation dry (post test)	Y N N/A
arge openings with		*Clean up*	
critical barriers	Y N N/A	• No visible debris prior to post test	Y N N/A
ors and walls		• Waste removed from work area	Y N N/A
floors w/2 layers	Y N N/A	*Type of Respirator Protection*	
(12" overlap)	Y N N/A	• 1/2 face	
Walls w/2 layers of 4-mil	Y N N/A	• PAPR	
No seams @ floor-wall joints	Y N N/A	• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces
mments: glove bag w/ primary containment

ork Area:
Containment size: ~800 ft²
% of work done: 100%
Amt. of material: 400 linear feet
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: yes
4. No. of workers: 7
6. Mini-enclosures: N/A
8. Project oversight: yes

gienist info:
ne on-site: 0700 Lunch break: —
ne left site: 0300 Total time on-site: [redacted]

gienist Name: Andrew Techer Project Manager: Steve Minassian
WD#: 53298 No. of Waste Bags Removed: [redacted] bags [redacted]68

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ıte:	October 8, 1998	Hygienist:	Andrew Techet
b #:	1117.001	Project Manager:	Steve Minassian
b Site:	Unitil Exeter Hampton Electric Utility, 114 Drinkwater Road		

Time	Comments
00	Andrew Techet of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site
	with seven workers A. Batista, J. Batista, F. Mendez, L. Mendez, R. Orellana, D. Pantoja and M. Roldan and one
	Supervisor Wilson Soto. HES inspected paper work and licenses, everything is current and up to date.
	NSCC is wet wiping Area 5 in preparation for fnal air clearance testing.
30	HES dscusses with Bob Conner a breach in the containment that occurred during the evening. HES ensured Unitil that
	the negative air units were running all night and even if a breach in the containment occurred air would be pulled through
	the breach. HES said it would run ambient air samples to be sure that there was not an excess amount of fibers in the air.
15	HES begins two ambient air monitoring in the warehouse area. HES notes that the negative air units have been running
	all night and are ventng into the garrage area. HES set up a ambient air sample in the exhaust stream of the negative air
	units as per New Hampshire Code of Administrative Rules Env-A 1805.04(d)(2).
20	HES performs a visual inspection of the Area 5 containment surrounding the stock room portion of the warehouse and
	found no visible debris on the floors, pipes or pipe threads. HES notes that all surfaces in the containment had been
	wet wiped and or HEPA vacuumed.
50	HES began aggressive air clearance tests and is running 2 clearance samples throughout the containment (see sample
	data form for details).
00	HES and NSCC discuss the work plan for the transite office area in the warehouse. NSCC will not have access until
	10/14/98 for demo purposes. HES and NSCC dicuss with Dave O'Brien about working a double shift on 10/14/98
	because once the work has begun it is much easier to continue and finish instead of stopping and starting.
00	NSCC seals the work area around the transite office to remove ACM pipe insulation. NSCC has sealed all criticals and
	has negative air units in place and running. NSCC has properly hung glovebags and is comencing with wet removal in
	the area. NSCC has all appropriate signs and materials posted.
	HES notes that all of NSCC's workers are wearing all proper personal protective gear.
50	HES stops air clearance samples and prepares the samples for Phase Contrast Microscopy (PCM). Sample results were
	less than 0.010 fibers/cc (see air sample data sheet for details).
20	NSCC has finished pipe insulation removal by meter department office. HES performs a visual inspection of the
	containment and found no visible debris on the floors, pipes or pipe threads. HES notes that all surfaces in the
	containment had been wet wiped and or HEPA vacuumed. HES began aggressive air clearance tests and is running
	2 clearance samples throughout the containment (see sample data form for details). HES notes that waste removed
	was sufficiently wet and that NSCC practiced safe glovebag removal techniques.
25	HES stoped final clearance air samples and prepared them for Phase Contrast Microscopy (PCM) analysis using the
	NIOSH 7400 method. All results were less than 0.010 fibers/cc (see air sample data form for details).
30	HES and NSCC personnel off site.
	NSCC generated 70 bags of ACM waste.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 10/8/98 M T W (T) F S S

ject Name Area 5/3 Project Number 1117.001
ation 114 Drinkwater RD, NH Client Contact Bob Conner
ent Name Unitil Exeter & Hampton Elec.

ntractor NSCC Supervisor Wilson Soto

uipment Used On-Site: Standard

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
cle (Yes) or No If NO explain:

rk area secured	(Y) N N/A	*Removal*	
rning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
AC shut down	Y N ~~N/A~~	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N (N/A)
vable objects covered			
ith 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N (N/A)
overed with poly	(Y) N N/A	• Applied in layers	Y N (N/A)
lation of work area		• Applied without disturbing asbestos	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
Large openings with		*Clean up*	
critical barriers	(Y) N N/A	• No visible debris prior to post test	(Y) N N/A
ors and walls		• Waste removed from work area	(Y) N N/A
Floors w/2 layers	Y [redacted] N/A	*Type of Respirator Protection*	
(12" overlap)	[redacted]	• 1/2 face	
Walls w/2 layers of 4-mil	Y N (N/A)	• PAPR	
No seams @ floor-wall joints	(Y) N N/A	• Type C	

eck Exceptions: • Glove Bag: yes • Impervious surfaces N/A
mments:

ork Area:
Containment size: 1000 ft²
% of work done: 100 %
Amt. of material: —
Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: yes
4. No. of workers: 7
6. Mini-enclosures: N/A
8. Project oversight: yes

ygienist info:
me on-site: 0700 Lunch break: —
ime left site: 1300 Total time on-site:

ygienist Name: Andrew Teclot Project Manager: Steve Minassian
LWD#: AM 53298 No. of Waste Bags Removed: [redacted] 17 Bags

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

e: October 14, 1998 Hygienist: Andrew Techet
#: 1117.001 Project Manager: Steve Minassian
site: Unitil Exeter Hampton Electric Utility, 114 Drinkwater Rd

Time	Comments
:00	Andrew Techet & Todd DAUWKINS of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site with workers.
:00	HES along with NSCC discussed removing floor tiles with Bob Conners the area in question measures out at 2900 ft^2 ±10%. NSCC is applying the final touches to the containment structure surrounding the meter room.
:00	NSCC has started removal of the ACM wall board located in the meter room - HES notes that containment area has negative air and that the containment structure has no visible breaches.
	NSCC workers are wearing appropriate personal protective equipment: half face respirators and two Tyvek suits. HES notes that all proper signs are posted and has two ambient pumps running (see air sample data form for details).
:00	NSCC is in the process of removing the ACM wallboard from the meter room.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te: October 14, 1998 Hygienist: Andrew Techet
#: 1117-001 Project Manager:
site: Unitil Exeter NH.

Time	Comments
:00	Carpet removal company loosens three floor tiles. HES notifies NSCC and they remove the tiles in a bag.
:30	HES stops ambient air samples #3+4 and prepares them for Phase Contrast Microscopy analysis using the NIOSH 7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit (see sample data form for details).
7:30	HES replaces PCM cassettes and begins to run two new ambient air samples (see air sample data form for details. NSCC breaks for lunch.
3:30	NSCC continues to remove ACM wallboard and dismantle meter room. HES brings to NSCC attention that there are several small breaks in the critical barrier. NSCC duct tapes over the breaks to correct the problem.
:30	HES stops ambient air samples #5+6 and prepares them for Phase Contrast Microscopy analysis using NIOSH 7400 method. All results were less than 0.01 fibers/cc. (see air sample data sheet for details).

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te: October 14, 1996 Hygienist: ANDREW
#: 1117.001 Project Manager:
site:

Time	Comments
:30	NSCC has stopped for the day work on the meter room is
	50% complet
	HES offsite.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

Date 10/14/98 M T (W) T F S S

Project Name Area 3 Project Number 1117.001
Location 114 Drinkwater RD Client Contact Bob Conners
Client Name Unitil Exeter/Hampton Elec.

Contractor NSC Supervisor Wilson Soto

Equipment Used On-Site: Standard

Work Requirements/Procedures: All proper paper work, certifications and records on-site.
Circle Yes or No If NO explain:

Work area secured	(Y) N N/A	*Removal*	
Warning signs posted	(Y) N N/A	• Proper Wetting of asbestos	Y N N/A
HVAC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	Y N N/A
GFCI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N N/A
Movable objects covered with 6-mil poly	Y N (N/A)	*Encapsulation*	
Non-movable objects covered with poly	Y N (N/A)	• Airless sprayer used	Y N (N/A)
Isolation of work area		• Applied in layers	Y N (N/A)
• Openings sealed w/ 6-mil	(Y) N N/A	• Applied without disturbing asbestos	Y N (N/A)
• Large openings with critical barriers	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
Floors and walls		*Clean up*	
• Floors w/2 layers	Y N (N/A)	• No visible debris prior to post test	Y N N/A
(12" overlap)	Y N (N/A)	• Waste removed from work area	Y N N/A
• Walls w/2 layers of 4-mil	Y (N) N/A	*Type of Respirator Protection*	
• No seams @ floor-wall joints	(Y) N N/A	• 1/2 face ✓	
		• PAPR	
		• Type C	

Check Exceptions: • Glove Bag: N/A • Impervious surfaces N/A
Comments:

Work Area:
1. Containment size:
2. Glove bag removal: N/A
3. % of work done:
4. No. of workers:
5. Amt. of material:
6. Mini-enclosures: N/A
7. Barriers (poly): Yes
   Plywood (critical): Celotex
8. Project oversight: Yes

Hygienist info:
Time on-site: Lunch break: —
Time left site: Total time on-site:

Hygienist Name: Andrew Tedut Project Manager: Stephen Menassian
DLWD#: AM 53298 No. of Waste Bags Removed: Ø

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

e: October 15, 1998 Hygienist: Andrew Techet
#: 1117.001 Project Manager: Steve Minassian
site: Until Exeter Hampton Electric Utility, 114 Drinkwater Road Pg 1 of 3

Time	Comments
27:00	Andrew Techet & Todd DAWKINS of Hygienetics Environmental Services, Inc. (HES) on site, National Surface Cleaning Corp on site supervisor Wilson Soto.
1:35	HES has two ambient pumps running (see air sample data form for details). NSCC has started dismantling the meter room and the removal of the ACM wallboard. NSCC is also prepping a hallway and office so the ACM floor tiles can be removed.
:00	NSCC is still prepping the office and hallway area. HES notes that all heating & ventilation openings are covered and that a splash guard has been erected.
:00	NSCC has completed the construction of its critical barrier. HES performs a visual inspection of the critical barrier no breaks were found and negative air has been established.
:30	NSCC has started removal of the ACM floor tile. HES has set up one ambient pump out side the decon (see air sample data form for details).

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

ate: October 16, 1998 Hygienist: ANDREW Techet
b #: 1117.001 Project Manager: STEVE MINASSIAN
b site: Unit 1 Exeter NH Pg 2 of 3

Time	Comments
0:20	NSCC has completed ACM floor tile removal in area 1+2 (conference room / hallway).
	HES performs a visual inspection of the conference room / hallway containment and found containment free of any visual debris. (both floors have been wet wiped with damp rags).
:40	HES began aggressive air clearance tests and is running 2 clearance samples throughout the containment (see sample data sheet for details), located in area 1+2.
:40	HES stops outside work area sampling and prepares cassette filter for Phase Contrast Microscopy analysis using the NIOSH 7400 method. All results were less than 0.01 fibers/cc, the legal airborne fiber count limit (see air sample data sheet for details).
:00	NSCC has completed ACM wallboard removal and demolition of the meter room. HES performs a visual inspection of the meter room containment and found the containment free of any visual debris (all surfaces have been wet wiped with damp rags). HES began aggressive air clearance tests and is running 2 clearance samples throughout the meter room containment (see sample data form for details).

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

te: October 16, 1998 Hygienist: ANDREW TECHET
#: 1117.001 Project Manager: STEVE MINASSIAN
site: Unitil Exeter NH Pg 3 of 3

Time	Comments
13:30	HES stops air clearance testing samples and prepares them for Phase Contrast Microscopy analysis using the NIOSH 7400 method. All results from the meter room were less than 0.01 fibers/cc, (see air sample data form for details).
4:30	NSCC has finished tearing down both the conference room/hallway and meter room containment.
5:00	HES off site

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

:e 10/15/98 M T W (T) F S S

ject Name Area 3 / Area 2&1 carpet & tile
cation 114 Drinkwater
ent Name Unitil ~~Axelbert~~ & Hampton Elec.

Project Number 1117.001
Client Contact Bob Conner

ntractor NSCC

Supervisor Wilson Soto

uipment Used On-Site: Standard

ork Requirements/Procedures: All proper paper work, certifications and records on-site.
cle Yes or No If NO explain:

ork area secured	(Y) N N/A	*Removal*	
arning signs posted	(Y) N N/A	• Proper Wetting of asbestos	Y N N/A
/AC shut down	Y N (N/A)	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	Y N N/A
ovable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
on-movable objects covered with poly	(Y) N N/A	• Airless sprayer used	Y N (N/A)
olation of work area		• Applied in layers	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Applied without disturbing asbestos	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
oors and walls		*Clean up*	
Floors w/2 layers (12" overlap)	Y N (N/A)	• No visible debris prior to post test	Y N N/A
Walls w/2 layers of 4-mil	(Y) N N/A	• Waste removed from work area	Y N N/A
No seams @ floor-wall joints	(Y) N N/A	*Type of Respirator Protection*	
		• 1/2 face 0	
		• PAPR	
		• Type C	

heck Exceptions: • Glove Bag: N/A • Impervious surfaces N/A
omments:

'ork Area:
Containment size: 800 sqft / 500 sqft
% of work done:
. Amt. of material:
. Barriers (poly): yes
Plywood (critical): Celotex

2. Glove bag removal: N/A
4. No. of workers:
6. Mini-enclosures: N/A
8. Project oversight: yes

lygienist info:
'ime on-site:
'ime left site:
Lunch break: —
Total time on-site:

lygienist Name: Andrew Techer
)LWD#: AM 53298
Project Manager: Stephen Minassian
No. of Waste Bags Removed:

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

10/15/98 — Hygienist: MIKE LANE
: 1117-001 — Project Manager: STEVE MIRASSIAN
ite: UNITIL DRINKWATER RD. EXETER, N.H.

Time	Comments
'00	HYGIENETICS ENV. SERVICES (HES) ARRIVES ON SITE. NSC ON SITE w/ SUPERVISOR WILSON SOLD & 9 WORKERS. NSC'S WORK SCOPE: REMOVE ~ 2,400 SF OF VAT NO MASTIC IN RADIO ROOM OFFICE AREA. NSC HAS COMPLETED CONSTRUCTION OF CONT. COMPLETE w/ NEG. AIR, 3 STAGE DECON, H_2O & GFI. NSC WILL FIRST REMOVE w/w CARPET OVER VAT.
'30	HES SETS UP FIRST ROUND AIR SAMPLES. SEE ASBESTOS AIR SAMPLE DATA FORM FOR DETAILS. NSC WORKERS ROLLING UP CARPET AND DISPOSING AS NON-ACM. NOTE HES HAS OBSERVED NO DAMAGED VAT. CARPET APPEARS TO BE COMING UP FAIRLY WELL.
900	NSC HAS FINISHED PULLING UP CARPET, CONCENTRATE ON ROLLING UP & REMOVING FROM WORK AREA.
'30	NSC HAS FINISHED REMOVING CARPET FROM WORK AREA. WORKERS SUIT UP — FULL BODY SUITS & ½ MASK RESP. w/ HEPA. NSC STARTS VAT REMOVAL.
0/1130	HES ENTERS CONT. OBSERVES VAT REMOVAL — NSC WORKERS WEARING PROPER PPE, USING SUFFICIENT WATER AND LOAD WASTE ACM INTO FIBER DRUMS LINED w/ ACM BAGS. HES STARTS ROUND 2 AIR SAMPLING.
2/1240	NSC BREAKS FOR LUNCH

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

10/19/98 — Hygienist: MIKE LANE
1117-001 — Project Manager: STEVE MINASSIAN
te: UNITIL, DRINKWATER RD. EXETER, N.H.

Time	Comments
20	NSC WORKERS START LOADING OUT WASTE MAT IN FIBER DRUMS.
0	NSC WORKERS LOAD WASTE DRUMS INTO NSC TRUCK. WORKERS IN CONT. HAVE COMPLETED MAT REMOVAL AND 90% OF BULK WASTE CLEAN UP & REMOVAL.
0	NSC WORKERS CONCENTRATE ON FINE CLEANING AREA. NSC & HES SCHEDULE POST TEST FOR FIRST THING TUES 10/20 AM.
2/1200	4 NSC WORKERS LEAVE SITE - TOTAL NOW 4. HES PULLS MAT BOUND AIR SAMPLES. PERFORMS ON SITE PCM ANALYSIS. ALL SAMPLE RESULTS <-01 F/CC. SAMPLE # 101998919-04 VOID DUE TO OVERLOAD OF DUST.
2	HES & REMAINING NSC CREW OFF SITE.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

e 10/19/88 (M) T W T F S S

ect Name UNITIL
ation EXETER, N.H.
nt Name UNITIL

Project Number 1117-001
Client Contact BOB CONNOR

tractor NSC

Supervisor WILSON SOTO

ipment Used On-Site: STANDARD

rk Requirements/Procedures: All proper paper work, certifications and records on-site.
le Yes or No If NO explain:

rk area secured	Y N N/A	*Removal*	
rning signs posted	Y N N/A	• Proper Wetting of asbestos	Y N N/A
AC shut down	Y N N/A	• Double bagged/drums and properly labeled	Y N N/A
CI protection	Y N N/A	• Large components properly wrapped/labeled	Y N N/A
vable objects covered ith 6-mil poly	Y N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N N/A
vered with poly	Y N N/A	• Applied in layers	Y N N/A
lation of work area		• Applied without disturbing asbestos	Y N N/A
Openings sealed w/ 6-mil	Y N N/A	• Encapsulation dry (post test)	Y N N/A
Large openings with critical barriers	Y N N/A	*Clean up*	
ors and walls		• No visible debris prior to post test	Y N N/A
Floors w/2 layers	Y N N/A	• Waste removed from work area	Y N N/A
(12" overlap)	Y N N/A	*Type of Respirator Protection*	
Walls w/2 layers of 4-mil	Y N N/A	• 1/2 face X	
No seams @ floor-wall joints	Y N N/A	• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: ____ • Impervious surfaces ____
mments:

rk Area:
Containment size: ~ 2,400 SF
% of work done:
Amt. of material: ~ 2,400 SF
Barriers (poly): YES
Plywood (critical): NA

2. Glove bag removal: NO
4. No. of workers: 10
6. Mini-enclosures: NO
8. Project oversight: YE

gienist info:
me on-site: 0800
me left site: 1530

Lunch break: —
Total time on-site: 7.5 HRS

gienist Name: MIKE LANE
WD#: AM 30625

Project Manager: STEVE MIRANDA
No. of Waste ~~Bags~~ Drums Removed: 20

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

10/20/98 — Hygienist: MIKE LANE
H17-001 — Project Manager: STEVE WHITSHAN
e: WHITE, DRINKWATER RD. EXETER, N.H.

ime	Comments
0 /0740	HYGIENETICS ENV. SERVICES (HES) ARRIVES ON SITE. NSCC ON SITE w/ SUPERVISOR WILSON SUTD & WORKERS. DAY'S WORK SCOPE: HES TO POST TEST IN LOBBY / RADIO RM AREA. NSC COMPLETED REMOVAL OF ~ 2,500 SF OF VAT (NO MASTIC). NSC WILL FINISH PREP IN CONFERENCE & REMOVE ~ 900 SF OF VAT NO MASTIC. NSC ANTICIPATES COMPLETING CONF. RM. REMOVAL TODAY. HES PERFORMS & PASSES VISUAL INSP. IN LOBBY AREA. NSC HAS ALREADY CONTINUED PREP WORK IN CONF. RM.
0	HES STARTS FINAL AIR CLEARANCE TEST IN LOBBY AREA CONT. SEE ASBESTOS AIR SAMPLE DATA FORM FOR DETAILS.
30	NSC STARTS REMOVAL OF VAT IN CONF. RM.
00	HES ~~ENTERS~~ CONF. RM. CONT., NSC WORKERS ALMOST DONE REMOVAL. WASTE VAT IS BEING LOADED INTO LINED FIBER DRUMS FOR DISPOSAL.
30/1015	HES PULLS FINAL AIR CLEARANCE SAMPLES FROM CONF. RM AND PERFORMS ON SITE PCM ANALYSIS. HES INFORMS NSC THAT ALL SAMPLES <.01 F/cc AREA HAS PASSED. NSC WORKERS START CONT. TEAR DOWN.
0/1045	HES PERFORMS & PASSES VISUAL INSP. IN CONF. RM. CONT. AND STARTS COLLECTION OF FINAL AIR CLEARANCE SAMPLES.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE LOG

10/20/98 — Hygienist: MIKE LANE
1117-001 — Project Manager: STEVE MINASSIAN
e: UNITIL DRINKWATER RD. EXETER, N.H.

ime	Comments
-/1300	HES PULLS FINAL AIR CLEARANCE SAMPLES, PERFORMS ON-SITE PCM ANALYSIS. HES INFORMS NSC THAT ALL SAMPLE RESULTS ARE <.01 F/CC. AREA PASSES. NSC STARTS TEAR DOWN.
0	HES, NSC & UNITIL REP. BOB CONNOR WALK THROUGH WORK AREA AFTER TEAR DOWN - ALL OK.
	HES OFF SITE. NSC LOADING TRUCK.

HYGIENETICS ENVIRONMENTAL SERVICES, INC.
SITE CHECK LIST

te 10/20/98 M (T) W T F S S

ject Name UNITIL
cation DRINKWATER RD. EXETER, N.H.
ent Name UNITIL

Project Number 1117-001
Client Contact BOB COUNCIL

ntractor NSC

Supervisor WILSON SOTO

uipment Used On-Site: STANDARD

ork Requirements/Procedures: All proper paper work, certifications and records on-site.
cle (Yes) or No If NO explain:

ork area secured	(Y) N N/A	*Removal*	
arning signs posted	(Y) N N/A	• Proper Wetting of asbestos	(Y) N N/A
/AC shut down	(Y) N N/A	• Double bagged/drums and properly labeled	(Y) N N/A
CI protection	(Y) N N/A	• Large components properly wrapped/labeled	(Y) N N/A
ovable objects covered with 6-mil poly	(Y) N N/A	*Encapsulation*	
n-movable objects		• Airless sprayer used	Y N (N/A)
overed with poly	(Y) N N/A	• Applied in layers	Y N (N/A)
lation of work area		• Applied without disturbing asbestos	Y N (N/A)
Openings sealed w/ 6-mil	(Y) N N/A	• Encapsulation dry (post test)	Y N (N/A)
Large openings with critical barriers	(Y) N N/A	*Clean up*	
oors and walls		• No visible debris prior to post test	(Y) N N/A
Floors w/2 layers	Y N (N/A)	• Waste removed from work area	(Y) N N/A
(12" overlap)	Y N (N/A)	*Type of Respirator Protection*	
Walls w/2 layers of 4-mil	Y N (N/A)	• 1/2 face X	
No seams @ floor-wall joints	Y N (N/A)	• PAPR	
		• Type C	

eck Exceptions: • Glove Bag: NO • Impervious surfaces N/A
mments:

ork Area:

Containment size:	~2,500 SF	~500 SF
% of work done:	100	100
Amt. of material:	~2,500 SF	~500 SF
Barriers (poly):	YES	YES
Plywood (critical):	N/A	N/A

2. Glove bag removal: NO
4. No. of workers:
6. Mini-enclosures: NO
8. Project oversight: YES

/gienist info:
me on-site: 0730
me left site: 1330
Lunch break: —
Total time on-site: 6 HRS

/gienist Name: MIKE LAVIE
WD#: AM 30605
Project Manager: STEVE MINASSIAN
No. of Waste Bags Removed: 8
" " Drums " 8

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Response: 10/22/2021
Request No. Energy 6-31 Witness: John F. Closson

REQUEST:

Reference DOE 4-68, h., and Exhibit JFC-2 at Bates 295-296: Given the presence of asbestos at the Kensington facility, describe the remediation efforts undertaken by the Company to prepare the site for sale. How much asbestos was discovered at the site? What was the final cost of remediation?

RESPONSE:

No asbestos remediation efforts were undertaken by the Company specifically to prepare for the property for the sale. The Company intends to disclose the presence of the asbestos to prospective buyers. Extensive asbestos abatement was undertaken during an office renovation in the fall of 1998. A report was issued by Hygienetics Environmental Services, Inc. (HESI), on December 7, 1998, following the completion of the abatement work. The report noted areas where asbestos was known or suspected to still be present. Please see Section V (page 5) of HESI's report (Energy 6-31 Attachment 1).

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 6

Date Request Received: 10/07/2021 Date of Response: 11/10/2021
Request No. Energy 6-32 Revised Witness: C. Goulding / D. Nawazelski

REQUEST:

Reference DOE 4-68: Please provide the following:

a. What were the 2019 and 2020 property tax bills for the Kensington facility? What is the current annual property tax for the Exeter DOC facility?
b. A list of the towns/cities of residence for all executive officers of Unitil (including Board members).

REVISED RESPONSE:

a. The property tax bills for the Kensington facility in 2019 and 2020 were $17,840 and $18,895. The most recent property tax bill from the town of Exeter (first installment 2021) received in May 2021 provides an annual property tax for the Exeter DOC facility of $153,287.81. The Company expects to receive the second 2021 Exeter property tax bill installment in November 2021.

b. Please refer to the table below.

City/State	Number of Executive Officers
Florida	1
Massachusetts	6
Missouri	1
Dover, New Hampshire	3
Exeter, New Hampshire	1
Greenland, New Hampshire	1
Hampton, New Hampshire	2
Hopkinton, New Hampshire	1
Laconia, New Hampshire	1
North Hampton, New Hampshire	1
Newmarket, New Hampshire	2
Portsmouth, New Hampshire	3
Ohio	1
Pennsylvania	1

Energy TS 1-24 Attachment 1
DE 21-030
DOE Data Requests - Tech Session
Set 1

UES Seacoast

Construction Authorization

AUTH: **191060**
Date: **8/22/2019**
Budgeted Amount: **$5,000,000.00**

Budget Item No: **GPBE02**
Budget Year: **2019**
Description: **Construction - New DOC Facility**
Project Supervisor: **Agel, Jacquie**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **8/22/2019 11:47:27 AM**
Initiated By: **Doucette, George**
Finalized Date: **9/12/2019 9:46:20 AM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
9/10/2019	YES	**Lydon, Lisa** *Plant Accountant*
9/10/2019	YES	**Bickford, Tressa** *Manager Utility Accounting and Budgeting*
9/10/2019	YES	**Agel, Jacquie** *Manager, Fleet & Facilities*
9/11/2019	YES	**Closson, John** *VP, People, Shared Services & Org. Effectiveness*
9/11/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
9/11/2019	YES	**Sprague, Kevin** *VP, Engineering*
9/11/2019	YES	**Main, Dan** *Manager of Regulatory Services and Corporate Compliance*
9/12/2019	YES	**Brock, Laurence** *Senior Vice President & Chief Financial Officer*
9/12/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$15,931,474.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$15,931,474.00
Retirement:	$0.00
Cost Of Removal:	$0.00
Salvage:	$0.00
CWO Total:	$15,931,474.00

DESCRIPTION/SCOPE

Construct a new NH Seacoast Region Facility, in Exeter NH, to include space for the following business needs; NH Seacoast's Electric Distribution Operations Center (DOC), Business Continuity for Gas Control & Field Services, System Emergency Operating Center (S-EOC), Central Electric Dispatch (CED), OQ Testing, Training, Offices and lab for Electric Engineering Department.

Scope to include:

Preliminary Survey cost including:
- Preconstruction, engineering & design, construction management pre-construction services, geo-tech, civil/survey, environmental survey, legal fees, permitting, insurance, etc.

Construction: site work, utilities (electric, gas, comm, sewer/water), construction to include:
- 53,940 sf +/- sf for office areas, warehouse, enclosed vehicle storage area with a wash bay, etc.
- Bermed outside transformer & other storage
- Outside material laydown areas
- Emergency back-up Generator
- Construction Administration: Construction Manager and engineers & designers field observations, RFIs, Submittals review and other miscellaneous construction phase documentation.
- Project Close Out: Commissioning, As-Builts, etc.
- Furniture/Furnishings/Equipment: Office, warehouse, operations areas, building electronic access control and security systems, and Information Technology infrastructure.
- Move

This is a multi-year project:
Q3 2019 Break ground/begin construction
2020 Completion, Commissioning and Occupancy

JUSTIFICATION

The current Distribution Operations Center (DOC) is 60+ years old and no longer adequately supports the present day operational needs of UES/Seacoast. The current DOC was constructed in the 1950s. Since that time the customer base has grown as has the requirement to stock more materials (inside and out) including transformers and poles. The transformers take up a great deal of space in a stockyard that was designed for operations 60+ years ago when utility trucks were much smaller. The current day line trucks barely fit into the 1950s garage. In addition, this building will solve space constraints at other company facilities, in connection with business continuity for the company's Gas Control, Field Services and Central Electric Dispatch (CED) functions , Electric Engineering department including lab space for functional testing of equipment as well as, provide space for a Prometric certified Operator Qualifications (OQ) testing.

NOTES

Preliminary Survey costs need to be transferred into individual CWO's.

AUTHORIZATION COMMENTS

CWO Summary

CWO	Description	Amount
20192718	Construction - New DOC Facility	$13,681,559.00
20192719	Engineering & Architectural Services	$933,415.00
20192720	Legal . Insurance, Permitting & Misc	$36,500.00
20192721	Internal Project Management	$150,000.00
20192722	Office: Furniture/Equip./Appliances & Furnishings	$825,000.00
20192723	Warehouse & Ops: Equipment & Furnishings	$20,000.00
20192724	IT / Data / Tel / Misc Equipment & Travel	$160,000.00
20192725	Move to 20 Continental Drive & Clean Out of 114 DWR Building	$125,000.00
	Total	$15,931,474.00

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 1

Date Request Received: 09/28/2021 Date of Response: 10/12/2021
Request No. Energy TS 1-24 Witness: John F. Closson

REQUEST:

Reference DOE 5-17: Artwork at Exeter DOC. Under what project/budget number is the artwork included? Please provide the relevant capital authorization form if not previously submitted.

RESPONSE:

The artwork at the Exeter DOC is included in Unitil Energy System's project authorization number 091060 and construction work order (CWO) 2019 2722. The description for CWO 2019 2722 is Office Furniture/Equipment/Furnishings. The furnishings include artwork. The relevant capital authorization form is Attachment 1 to this response (Energy TS 1-24 Attachment 1). In addition, the previous artwork total ($38,082.59), that was submitted in DOE 5-17, was incorrect. The correct amount is $34,973.00. The previous artwork total included AFUDC financing costs ($3,109.59). Those costs should have been applied against the furniture costs, and not the artwork.

Unitil Energy Systems, Inc.

Company	Work Order	Utility Account Description	Long Description	Posting Amount	Work Performed Start Date	Work Performed End Date	Notes
10 Unitil Energy Systems	E-191060-20192718	390-00 Structures-E	Construction - New DOC Facility	291,526.93	See Note	See Note	This amount is in connection with the overall construction project. The project started in August 2019 and was substantially complete in November 2020. All invoicing had not been received or paid in 2020 and carried over to 2021.
10 Unitil Energy Systems	E-191060-20192718	390-00 Structures-E	Construction - New DOC Facility	(246.17)	See Note	See Note	This amount is in connection with the overall construction project. The project started in August 2019 and was substantially complete in November 2020.
10 Unitil Energy Systems	E-191060-20192719	390-00 Structures-E	Engineering & Architectural Services	80,215.32	See Note	See Note	This amount is in connection with the overall construction project. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192719	390-00 Structures-E	Engineering & Architectural Services	2,197.50	See Note	See Note	This amount is in connection with the overall construction project. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192720	390-00 Structures-E	Legal . Insurance, Permitting & Misc	2,340.00	See Note	See Note	This amount is in connection with the overall construction project. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192720	390-00 Structures-E	Legal . Insurance, Permitting & Misc	4,453.50	See Note	See Note	This amount is in connection with the overall construction project. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192721	390-00 Structures-E	Internal Project Management	21,830.06	See Note	See Note	This amount is in connection with the overall construction project. The internal project management team continued to charge hours into 2021 for post-move and occupancy punch list work, etc.
10 Unitil Energy Systems	E-191060-20192721	390-00 Structures-E	Internal Project Management	10,890.19	See Note	See Note	This amount is in connection with the overall construction project. The internal project management team continued to charge hours into 2021 for post-move and occupancy punch list work, etc.
10 Unitil Energy Systems	E-191060-20192725	390-00 Structures-E	Move to 20 Continental Drive & Clean Out of 114 DWR Building	79,443.43	See Note	See Note	The moves occurred in December 2020. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192725	390-00 Structures-E	Move to 20 Continental Drive & Clean Out of 114 DWR Building	3,650.02	See Note	See Note	The moves occurred in December 2020. All services were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192722	391-01 Office Furniture & Fixtur-E	Office: Furniture/Equip./Appliances & Furnishings	73,069.62	See Note	See Note	All materials were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192722	391-01 Office Furniture & Fixtur-E	Office: Furniture/Equip./Appliances & Furnishings	3,237.58	See Note	See Note	All materials were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192723	393-00 Stores Equipment-E	Warehouse & Ops: Equipment & Furnishings	2,006.37	See Note	See Note	All materials were not fully invoiced or paid for in 2020.
10 Unitil Energy Systems	E-191060-20192723	393-00 Stores Equipment-E	Warehouse & Ops: Equipment & Furnishings	2,529.21	See Note	See Note	All materials were not fully invoiced or paid for in 2020.
			Total	**577,143.56**			

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 1

Date Request Received: 09/28/2021 Date of Response: 10/12/2021
Request No. Energy TS 1-28 Witness: John F. Closson

REQUEST:

Reference DOE 5-34: Construction – New DOC Facility. Please provide an updated version of Attachment 1 that includes the dates in which the work under each work order was performed, both start date and end date.

RESPONSE:

An updated version of Attachment 1 to DOE 5-34 is included with this response. The Company received a temporary certificate of occupancy from the town of Exeter in November 2020. The Company moved from its existing facility to the new facility in December of 2020. The notes added to Attachment 1 indicate that the costs recorded after the end of December 2020 were due to timing of the receipt and payment of invoices in 2021 for work performed in 2020 with the exception of internal project management.

Unitil Energy Systems, Inc.

Line #	2020 Town	Description	Rate	Assessed Value	Property Tax	Source	RevReq 3-19 Source
1	Kensington 2020 (2nd Bill)	Invoice 2020P02013904	$ 18.61	$ 168,300	$ 3,132	Energy TS 2-4 Attachment 2, Page 1	
2	Kensington 2020 (2nd Bill)	Invoice 2020P02013905	$ 18.61	$ 9,891,984	$ 184,090	Energy TS 2-4 Attachment 2, Page 2	
3	Building (See Page 2)		$ 18.61	$ 1,015,306	$ 18,895	Page 2 (Office Building + Land)	RevReq 3-19 Line 38
4	Utility Property (See Page 2)		$ 18.61	$ 8,876,678	$ 165,195	Page 2 (Utility Property)	
5					$ 187,222	Line 1 + Line 2	RevReq 3-19 Line 23
6							
7	**2019**						
8	**Town**	**Description**	**Rate**	**Assessed Value**	**Property Tax**		
9	Kensington 2019 (2nd Bill)	Invoice 2020P02013904	$ 17.57	$ 168,300	$ 2,957	Energy TS 2-4 Attachment 2, Page 3	
10	Kensington 2019 (2nd Bill)	Invoice 2020P02013905	$ 17.57	$ 9,253,533	$ 162,585	Energy TS 2-4 Attachment 2, Page 4	
11	Building (See Page 2)		$ 17.57	$ 1,015,355	$ 17,840	Page 2 (Office Building + Land)	
12	Utility Property (See Page 2)		$ 17.57	$ 8,876,678	$ 155,963	Page 2 (Utility Property)	
					$ 165,542	Line 9 + Line 10	

Line #	2020 Town	Description	Rate	Assessed Value	Property Tax	Source	RevReq 3-19 Source
13	Exeter 2020 (2nd Bill)	30 Energy Way	$ 24.49	$ 613,300	$ 15,020	Energy TS 2-4 Attachment 3, Page 1	RevReq 3-19 Line 15
14	New Exeter DOC Adjustment (3)	30 Energy Way	$ 24.49	$ 15,517,171	$ 380,016	December 31 Plant in Service - 2020 Assessed Value	RevReq 3-19 Line 37
15	Exeter 2020 (2nd Bill)	159 Portsmouth Ave	$ 22.50	$ 22,952,000	$ 516,420	Energy TS 2-4 Attachment 3, Page 2	
16	Exeter 2020 (2nd Bill)	18 River St	$ 22.50	$ 123,300	$ 2,774	Energy TS 2-4 Attachment 3, Page 3	
17	Exeter 2020 (2nd Bill)	33 Gilman Ln	$ 22.50	$ 134,400	$ 3,024	Energy TS 2-4 Attachment 3, Page 4	
18	Exeter 2020 (2nd Bill)	0 Charter St	$ 22.50	$ 167,200	$ 3,762	Energy TS 2-4 Attachment 3, Page 5	
19	Exeter 2020 (2nd Bill)	38-R Hampton Rd	$ 22.50	$ 11,000	$ 248	Energy TS 2-4 Attachment 3, Page 6	
20					$ 526,228	Line 15 + Line 16 + Line 17 + Line 18 + Line 19	RevReq 3-19 Line 16
21							
22	**2019**						
23	**Town**	**Description**	**Rate**	**Assessed Value**	**Property Tax**		
24	Exeter 2019 (2nd Bill)	30 Energy Way	$ 23.27	$ 386,700	$ 8,999	Energy TS 2-4 Attachment 3, Page 7	
25	Exeter 2019 (2nd Bill)	159 Portsmouth Ave	$ 21.29	$ 16,703,200	$ 355,611	Energy TS 2-4 Attachment 3, Page 8	
26	Exeter 2019 (2nd Bill)	18 River St	$ 21.29	$ 123,300	$ 2,625	Energy TS 2-4 Attachment 3, Page 9	
27	Exeter 2019 (2nd Bill)	33 Gilman Ln	$ 21.29	$ 134,400	$ 2,861	Energy TS 2-4 Attachment 3, Page 10	
28	Exeter 2019 (2nd Bill)	0 Charter St	$ 21.29	$ 167,200	$ 3,560	Energy TS 2-4 Attachment 3, Page 11	
29	Exeter 2019 (2nd Bill)	38-R Hampton Rd	$ 21.29	$ 11,000	$ 234	Energy TS 2-4 Attachment 3, Page 12	
30					$ 364,891	Line 25 + Line 26 + Line 27 + Line 28 + Line 29	

Notes:
(1) Estimated Exeter DOC valuation to be updated with actual town valuation during proceeding

2020

Company	Map/Lot	Address	Land	Building	Other	Doors OVH	SHED-Wood	SHED-Equipment	LEAN-TO	UTILITIES	Office Building	Land	Utility Property	Total
Unitil Energy Systems, Inc	18-31-00	114 Drinkwater Road Kensington	$ 364,084	$ 447,900	$ 188,800	$ 4,680	$ 2,754	$ 4,368	$ 2,720	$ 8,876,678	**$ 651,222**	**$ 364,084**	**$ 8,876,678**	**$ 9,891,984**
Tax Bill Allocation											**$ 12,119**	**$ 6,776**	**$ 165,195**	**$ 184,090**

2019

Company	Map/Lot	Address	Land	Building	Other	Doors OVH	SHED-Wood	SHED-Equipment	LEAN-TO	UTILITIES	Office Building	Land	Utility Property	Total
Unitil Energy Systems, Inc	18-31-00	114 Drinkwater Road Kensington	$ 364,133	$ 447,900	**$ 188,800**	**$ 4,680**	**$ 2,754**	**$ 4,368**	**$ 2,720**	**$ 8,238,178**	**$ 651,222**	**$ 364,133**	**$ 8,238,178**	**$ 9,253,533**
Tax Bill Allocation											**$ 11,442**	**$ 6,398**	**$ 144,745**	**$ 162,585**

https://data.avitarassociates.com/default.ASPX#

Remit To	2020 KENSINGTON PROPERTY TAX – BILL 2 OF 2			
TOWN OF KENSINGTON Carlene Wiggin, Tax Collector 95 Amesbury Road Kensington, NH 03833-5620 Temp - Return Service Requested	UNITIL ENERGY SYSTEMS, INC			
	Map	Lot	Sub	Net Value
	000018	000031	000000	$ 9,891,984
	Property Location			Acres
	114 DRINKWATER ROAD			26.900
8% APR Charged After 12/21/2020	Invoice		Summary of Taxes	
Please visit the town's website for any notices. WWW.TOWN.KENSINGTON.NH.US	2020P02013905		Total Tax:	$ 184,090.00
Billed To	Billing Date		- 1st Bill:	$ 81,338.00
UNITIL ENERGY SYSTEMS, INC **CAPITAL DISTRIB. OPERATIONS CE** **6 LIBERTY LANE WEST** **HAMPTON, NH 03842-1720**	11/16/2020		- Abated/Paid:	$ 0.00
	Payment Due Date		- Vet. Credits:	$ 0.00
	12/21/2020			
	Amount Due:		$ 102,752.00	
	Amount Enclosed:		102,752 –	
Please return top copy with your payment.	Other Due Amount(s):			

Tax Collector Office Hours	2020 KENSINGTON PROPERTY TAX – BILL 2 OF 2			
TOWN OF KENSINGTON Mon, Wed & Thursday 9 am - 12:00 pm Wed evening 6:30 pm - 8:00 pm 603-772-5423 Tax Collector: Carlene Wiggin Please visit the town's website for any notices. WWW.TOWN.KENSINGTON.NH.US	UNITIL ENERGY SYSTEMS, INC			
	Map	Lot	Sub	Pg-Line
	000018	000031	000000	0139-05
	Property Location			Acres
	114 DRINKWATER ROAD			26.900

Tax Rates		Assessments		Invoice	Summary Of Taxes	
County:	$ 0.88	Taxable Land:	364,084	2020P02013905	Total Tax:	$ 184,090.00
School:	$ 14.06	Buildings:	9,527,900	Billing Date	- 1st Bill:	$ 81,338.00
Town:	$ 3.67	Total:	9,891,984	11/16/2020	- Abated/Paid:	$ 0.00
		Taxable Land Includes Current Use		Payment Due Date	- Vet. Credits:	$ 0.00
				12/21/2020		
				Interest Rate	Amount Due:	$ 102,752.00
				8% APR After 12/21/2020		
					Other Due Amount(s):	$

Total Tax Rate:	$ 18.61	Net Value:	9,891,984

Keep this copy for your records.

Remit To	2020 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
TOWN OF KENSINGTON Carlene Wiggin, Tax Collector 95 Amesbury Road Kensington, NH 03833-5620 Temp - Return Service Requested	UNITIL ENERGY SYSTEMS, INC			
	Map	Lot	Sub	Net Value
	000014	000013	000000	$ 168,300
	Property Location			Acres
	3 SHAWS HILL RD			1.000
8% APR Charged After 12/21/2020	Invoice		Summary of Taxes	
Please visit the town's website for any notices. WWW.TOWN.KENSINGTON.NH.US	2020P02013904		Total Tax:	$ 3,132.00
Billed To	Billing Date		- 1st Bill:	$ 1,479.00
UNITIL ENERGY SYSTEMS, INC CAPITAL DISTRIB. OPERATIONS CE 6 LIBERTY LANE WEST HAMPTON, NH 03842-1720	11/16/2020		- Abated/Paid:	$ 0.00
	Payment Due Date		- Vet. Credits:	$ 0.00
	12/21/2020			
	Amount Due:		$ 1,653.00	
	Amount Enclosed:		1,653.00	

Please return top copy with your payment.

Tax Collector Office Hours	2020 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
TOWN OF KENSINGTON Mon, Wed & Thursday 9 am - 12:00 pm Wed evening 6:30 pm - 8:00 pm 603-772-5423 Tax Collector: Carlene Wiggin Please visit the town's website for any notices. WWW.TOWN.KENSINGTON.NH.US	UNITIL ENERGY SYSTEMS, INC			
	Map	Lot	Sub	Pg-Line
	000014	000013	000000	0139-04
	Property Location			Acres
	3 SHAWS HILL RD			1.000

Tax Rates		Assessments		Invoice	Summary Of Taxes	
County:	$ 0.88	Taxable Land:	168,300	2020P02013904	Total Tax:	$ 3,132.00
School:	$ 14.06	Buildings:	0	Billing Date	- 1st Bill:	$ 1,479.00
Town:	$ 3.67	Total:	168,300	11/16/2020	- Abated/Paid:	$ 0.00
				Payment Due Date	- Vet. Credits:	$ 0.00
				12/21/2020		
				Interest Rate	Amount Due:	$ 1,653.00
				8% APR After 12/21/2020		

Total Tax Rate:	$ 18.61	Net Value:	168,300

Keep this copy for your records.

Remit To	2019 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
	UNITIL ENERGY SYSTEMS, INC			
TOWN OF KENSINGTON Carlene Wiggin, Tax Collector 95 Amesbury Road Kensington, NH 03833-5620 Temp - Return Service Requested	Map	Lot	Sub	Net Value
	000018	000031	000000	$ 9,253,533
	Property Location			Acres
	114 DRINKWATER ROAD			26.900

8% APR Charged After 12/09/2019	Invoice	Summary of Taxes	
	2019P02013905	Total Tax:	$ 162,585.00
Billed To	Billing Date	- 1st Bill:	$ 76,804.00
UNITIL ENERGY SYSTEMS, INC CAPITAL DISTRIB. OPERATIONS CE 6 LIBERTY LANE WEST HAMPTON, NH 03842-1720	11/06/2019	- Abated/Paid:	$ 0.00
	Payment Due Date	- Vet. Credits:	$ 0.00
	12/09/2019		
	Amount Due:	$ 85,781.00	
	Amount Enclosed:		

Please return top copy with your payment.

Tax Collector Office Hours	2019 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
TOWN OF KENSINGTON	UNITIL ENERGY SYSTEMS, INC			
Mon, Wed & Thursday 9 am - 12:00 pm	Map	Lot	Sub	Pg-Line
Wed evening 6:30 pm - 8:00 pm	000018	000031	000000	0139-05
603-772-5423	Property Location			Acres
Tax Collector: Carlene Wiggin	114 DRINKWATER ROAD			26.900

Tax Rates		Assessments		Invoice	Summary Of Taxes	
County:	$ 0.90	Taxable Land:	364,133	2019P02013905	Total Tax:	$ 162,585.00
School:	$ 13.37	Buildings:	8,889,400	Billing Date	- 1st Bill:	$ 76,804.00
Town:	$ 3.30	Total:	9,253,533	11/06/2019	- Abated/Paid:	$ 0.00
		Taxable Land Includes Current Use		Payment Due Date	- Vet. Credits:	$ 0.00
				12/09/2019		
				Interest Rate	Amount Due:	$ 85,781.00
				8% APR After 12/09/2019		

Total Tax Rate:	$ 17.57	Net Value:	9,253,533

Keep this copy for your records.

Remit To	2019 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
	UNITIL ENERGY SYSTEMS, INC			
TOWN OF KENSINGTON Carlene Wiggin, Tax Collector 95 Amesbury Road Kensington, NH 03833-5620 Temp - Return Service Requested	Map	Lot	Sub	Net Value
	000014	000013	000000	$ 168,300
	Property Location			Acres
	3 SHAWS HILL RD			1.000

8% APR Charged After 12/09/2019	Invoice	Summary of Taxes	
	2019P02013904	Total Tax:	$ 2,957.00
Billed To	Billing Date	- 1st Bill:	$ 1,397.00
UNITIL ENERGY SYSTEMS, INC CAPITAL DISTRIB. OPERATIONS CE 6 LIBERTY LANE WEST HAMPTON, NH 03842-1720	11/06/2019	- Abated/Paid:	$ 0.00
	Payment Due Date	- Vet. Credits:	$ 0.00
	12/09/2019		
	Amount Due:	$ 1,560.00	
	Amount Enclosed:		

Please return top copy with your payment.

Tax Collector Office Hours	2019 KENSINGTON PROPERTY TAX -- BILL 2 OF 2			
TOWN OF KENSINGTON Mon, Wed & Thursday 9 am - 12:00 pm Wed evening 6:30 pm - 8:00 pm 603-772-5423 Tax Collector: Carlene Wiggin	UNITIL ENERGY SYSTEMS, INC			
	Map	Lot	Sub	Pg-Line
	000014	000013	000000	0139-04
	Property Location			Acres
	3 SHAWS HILL RD			1.000

Tax Rates		Assessments		Invoice	Summary Of Taxes	
County:	$ 0.90	Taxable Land:	168,300	2019P02013904	Total Tax:	$ 2,957.00
School:	$ 13.37	Buildings:	0	Billing Date	- 1st Bill:	$ 1,397.00
Town:	$ 3.30	Total:	168,300	11/06/2019	- Abated/Paid:	$ 0.00
				Payment Due Date	- Vet. Credits:	$ 0.00
				12/09/2019		
				Interest Rate	Amount Due:	$ 1,560.00
				8% APR After 12/09/2019		

Total Tax Rate:	$ 17.57	Net Value:	168,300

Keep this copy for your records.

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	30 ENERGY WAY

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
46-3	2020	11/16/2020	6197	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
1.990	15.670	5.910	0.920	24.490

Valuations	
Land	399,800
Buildings	213,500

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	613,300

Total Gross Tax	$15,019.72
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$7,135.75
Plus Interest	$0.00
Total Due This Bill	**$7,883.97**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, LEFT IN BLACK DROPBOX AT TOWN OFFICE (CHECKS ONLY), BY MAIL, OR ONLINE AT https://selfservice.exeternh.gov/MSS. WE ACCEPT eCHECKS, MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS ONLINE - FEES APPLY. CALL 773-6108 FOR PAYMENT QUESTIONS.

Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6197	11/16/2020	46-3	30 ENERGY WAY	12/28/2020	$7,883.97

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:
TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820206000061978000078839 78

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	159 PORTSMOUTH AVE

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
51-11	2020	11/16/2020	6195	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	15.670	5.910	0.920	22.500

Valuations	
Land	36,700
Buildings	22,915,300

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	22,952,000

Total Gross Tax	$516,420.00
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$181,485.54
Plus Interest	$0.00
Total Due This Bill	**$334,934.46**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, LEFT IN BLACK DROPBOX AT TOWN OFFICE (CHECKS ONLY), BY MAIL, OR ONLINE AT https://selfservice.exeternh.gov/MSS. WE ACCEPT eCHECKS, MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS ONLINE - FEES APPLY. CALL 773-6108 FOR PAYMENT QUESTIONS.

Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6195	11/16/2020	51-11	159 PORTSMOUTH AVE	12/28/2020	$334,934.46

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820206000061952003349344 60

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	18 RIVER ST

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
72-87	2020	11/16/2020	6199	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	15.670	5.910	0.920	22.500

Valuations	
Land	123,300
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	123,300

Total Gross Tax	$2,774.25
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,312.53
Plus Interest	$0.00
Total Due This Bill	**$1,461.72**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, LEFT IN BLACK DROPBOX AT TOWN OFFICE (CHECKS ONLY), BY MAIL, OR ONLINE AT https://selfservice.exeternh.gov/MSS. WE ACCEPT eCHECKS, MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS ONLINE - FEES APPLY. CALL 773-6108 FOR PAYMENT QUESTIONS.

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6199	11/16/2020	72-87	18 RIVER ST	12/28/2020	$1,461.72

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820206000061994000001461722

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020
Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	33 GILMAN LN

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
72-88	2020	11/16/2020	6200	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	15.670	5.910	0.920	22.500

Valuations	
Land	134,400
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	134,400

Total Gross Tax	$3,024.00
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,430.69
Plus Interest	$0.00
Total Due This Bill	**$1,593.31**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, LEFT IN BLACK DROPBOX AT TOWN OFFICE (CHECKS ONLY), BY MAIL, OR ONLINE AT https://selfservice.exeternh.gov/MSS. WE ACCEPT eCHECKS, MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS ONLINE - FEES APPLY. CALL 773-6108 FOR PAYMENT QUESTIONS.

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020
Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6200	11/16/2020	72-88	33 GILMAN LN	12/28/2020	$1,593.31

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:
TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

7013208202060000620000000159331 8

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	0 CHARTER ST

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
73-54	2020	11/16/2020	6196	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	15.670	5.910	0.920	22.500

Valuations	
Land	167,200
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	167,200

Total Gross Tax	$3,762.00
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,779.84
Plus Interest	$0.00
Total Due This Bill	**$1,982.16**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6196	11/16/2020	73-54	0 CHARTER ST	12/28/2020	$1,982.16

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:
TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820206000061960000001982164

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	38-R HAMPTON RD

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
87-7	2020	11/16/2020	6198	12/28/2020	8%	12/28/2020

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	15.670	5.910	0.920	22.500

Valuations	
Land	11,000
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	11,000

Total Gross Tax	$247.50
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$117.10
Plus Interest	$0.00
Total Due This Bill	**$130.40**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, LEFT IN BLACK DROPBOX AT TOWN OFFICE (CHECKS ONLY), BY MAIL, OR ONLINE AT https://selfservice.exeternh.gov/MSS. WE ACCEPT eCHECKS, MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS ONLINE - FEES APPLY. CALL 773-6108 FOR PAYMENT QUESTIONS.

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2020

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6198	11/16/2020	87-7	38-R HAMPTON RD	12/28/2020	$130.40

☐ Please See Change of Address on Back

Amount Enclosed
$

5810
173

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820206000061986000001304 01

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	30 ENERGY WAY

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to	
					Interest at	Interest After
46-3	2019	11/8/2019	2434	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
1.98	14.64	5.71	0.94	23.27

Valuations	
Land	386,700
Buildings	0
Exemptions	
Total Exemptions	0
Taxable Valuation	
Net	386,700

Total Gross Tax	$8,998.51
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$4,350.50
Plus Interest	$0.00
Total Due This Bill	**$4,648.01**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, BY MAIL, OR ONLINE AT WWW.EXETERNH.GOV. WE ACCEPT MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS IN PERSON AND ONLINE - FEES APPLY.

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
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Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
2434	11/8/2019	46-3	30 ENERGY WAY	12/9/2019	$4,648.01

☐ **Please See Change of Address on Back**

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820198000024349000046480 10

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	159 PORTSMOUTH AVE

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to	
					Interest at	Interest After
51-11	2019	11/8/2019	6047	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	14.64	5.71	0.94	21.29

Valuations	
Land	36,700
Buildings	16,666,500

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	16,703,200

Total Gross Tax	$355,611.13
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$184,937.66
Plus Interest	$0.00
Total Due This Bill	**$170,673.47**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, BY MAIL, OR ONLINE AT WWW.EXETERNH.GOV. WE ACCEPT MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS IN PERSON AND ONLINE - FEES APPLY.

Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6047	11/8/2019	51-11	159 PORTSMOUTH AVE	12/9/2019	$170,673.47

☐ Please See Change of Address on Back

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

70132082019800006047500170673479

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019
Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	18 RIVER ST

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to	
					Interest at	Interest After
72-87	2019	11/8/2019	6048	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	14.64	5.71	0.94	21.29

Valuations	
Land	123,300
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	123,300

Total Gross Tax	$2,625.06
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,136.23
Plus Interest	$0.00
Total Due This Bill	**$1,488.83**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, BY MAIL, OR ONLINE AT WWW.EXETERNH.GOV. WE ACCEPT MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS IN PERSON AND ONLINE - FEES APPLY.

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Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019
Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6048	11/8/2019	72-87	18 RIVER ST	12/9/2019	$1,488.83

☐ Please See Change of Address on Back

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820198000060483000014888 32

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	33 GILMAN LN

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to	
					Interest at	Interest After
72-88	2019	11/8/2019	6049	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	14.64	5.71	0.94	21.29

Valuations	
Land	134,400
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	134,400

Total Gross Tax	$2,861.38
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,360.96
Plus Interest	$0.00
Total Due This Bill	**$1,500.42**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, BY MAIL, OR ONLINE AT WWW.EXETERNH.GOV. WE ACCEPT MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS IN PERSON AND ONLINE - FEES APPLY.

Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6049	11/8/2019	72-88	33 GILMAN LN	12/9/2019	$1,500.42

☐ **Please See Change of Address on Back**

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820198000060491000001500420

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	0 CHARTER ST

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to	
					Interest at	Interest After
73-54	2019	11/8/2019	6046	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	14.64	5.71	0.94	21.29

Valuations	
Land	167,200
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	167,200

Total Gross Tax	$3,559.69
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$1,709.99
Plus Interest	$0.00
Total Due This Bill	**$1,849.70**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest

Total previous unpaid taxes due as of current bill due date. $0.00

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Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019

Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6046	11/8/2019	73-54	0 CHARTER ST	12/9/2019	$1,849.70

☐ **Please See Change of Address on Back**

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820198000060467000018497 02

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019
Installment 2 of 2

PROPERTY TAX BILL
Customer Copy
Keep this portion for your records

Owner(s)	Property Location
UNITIL ENERGY SYSTEMS INC	38-R HAMPTON RD

Parcel	Tax Year	Bill Date	Bill Number	Bill Due Date	Unpaid Taxes Are Subject to Interest at	Interest After
87-7	2019	11/8/2019	6050	12/9/2019	8%	12/9/2019

State School Tax	Local School Tax	Town Tax	County Tax	Total Tax Rate
	14.64	5.71	0.94	21.29

Valuations	
Land	11,000
Buildings	0

Exemptions	
Total Exemptions	0

Taxable Valuation	
Net	11,000

Total Gross Tax	$234.19
Less Veteran(s) Credit(s)	$0.00
Less Payments	-$111.74
Plus Interest	$0.00
Total Due This Bill	**$122.45**

Previous unpaid taxes due. Interest shown as of current bill due date. Please call for payoff amount.

Year	Tax Balance	Interest	Total previous unpaid taxes due as of current bill due date.
			$0.00

IMPORTANT TAXPAYER INFORMATION IS LOCATED ON BACK OF BILL. PAYMENT MAY BE MADE IN PERSON, BY MAIL, OR ONLINE AT WWW.EXETERNH.GOV. WE ACCEPT MASTERCARD, VISA, DISCOVER, AND DEBIT CARDS IN PERSON AND ONLINE - FEES APPLY.

Detach and return the below portion with your payment

Town of Exeter
Tax Collector
10 Front Street
Exeter NH 03833

2019
Installment 2 of 2

PROPERTY TAX BILL
Remit Copy
Please write parcel number on your check and enclose this portion of the bill with your payment. Make checks payable to: Town of Exeter

Bill Number	Bill Date	Parcel	Property Location	Due Date	Due This Bill
6050	11/8/2019	87-7	38-R HAMPTON RD	12/9/2019	$122.45

☐ Please See Change of Address on Back

Amount Enclosed
$

5782
177

UNITIL ENERGY SYSTEMS INC
6 LIBERTY LANE WEST
HAMPTON NH 03842

Remit To:

TOWN OF EXETER
PO BOX 9520
MANCHESTER NH 03108

701320820198000060509000001224 57

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 2

Date Request Received: 10/29/2021 Date of Response: 11/10/2021
Request No. Energy TS 2-4 Witness: C. Goulding / D. Nawazelski

REQUEST:

Reference DOE 6-32 and Goulding/Nawazelski Testimony, Schedule RevReq-3-19 at Bates 177: Please clarify and delineate the apparent discrepancies between the property tax amounts for the Kensington and Exeter properties provided in the Company's response and the amounts represented in Schedule RevReq-3-19, lines 15, 16, 23, 37, and 38.

RESPONSE:

In response to DOE 6-32, the Company inadvertently included the total amount of the property tax bill for Kensington for 2019 and 2020 and not the taxes related to the Kensington facility only. The property tax bills for the Kensington facility only for 2019 and 2020 was $17,840 and $18,895. The Company has provided a revised response to DOE 6-32 addressing this revision.

Please refer to Energy TS 2-4 Attachment 1 for a reconciliation of the 2020 property tax bills from the towns of Kensington and Exeter to the amounts included on Schedule RevReq-3-19, lines 15, 16, 23, 37, and 38. Also provided as Energy TS 2-4 Attachment 2 are the actual property tax bills for Kensington to assist in the reconciliation.

The town of Kensington provides the Company two property tax invoices for the Company's property in Kensington. The second bill listed on page 1, line 2 of Energy TS 2-4 Attachment 1 includes the valuation associated with the Kensington building as well as the Utility Property located in Kensington. The split of the bill has been provided on page 2 of Energy TS 2-4 Attachment 1.

For the town of Exeter, as shown in Energy TS 2-4 Attachment 1, the Company has included the two property tax bills on schedule RevReq-3-19, line 15 and line 16 as well as an additional adjustment of $380,016 for the Exeter facility to increase the valuation from the 2020 second bill property tax valuation of $613,300 to include the Exeter facility net plant closed to plant in December 2020 of $15,517,171. The purpose of the adjustment was to avoid a significant increase in the proforma property tax expense increase once the property taxes on Schedule RevReq-3-19 were updated for the 2021 second property tax bills.

As stated in the Testimony, the amounts included on Schedule RevReq-3-19 will be updated when the 2021 second bills are received which is expected in November 2021.

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 2

Date Request Received: 10/29/2021 Date of Response: 11/12/2021
Request No. Energy TS 2-10 Witness: John F. Closson

REQUEST:

Reference Testimony of John F. Closson, Exhibit JFC-2 at Bates 288, 290, 293, and 298-301. Please provide the possible locations and configurations considered by the Company for the building additions and the rebuilding of the DOC under Options 2 and 3 at the Kensington site. What would prevent the possible expansion of the footprint for the Kensington facility toward the northerly side of the property?

RESPONSE:

Due to risks associated with redeveloping the Kensington facility at the 114 Drinkwater Road location the Company did not incur costs for designers to develop drawings and site plans for alternate configurations. The risks for Options 2 and 3 are listed in the Decision Document, Exhibit JFC-2 at Bates 000290. The Company did engage a commercial construction subject matter expert, PROCON, Inc., to provide an opinion and estimates for potential redevelopment options (see Bates 000292 - Kensington Study). Expansion of the footprint towards the northerly side of the property would likely have been inhibited due to the presence of wetlands and the proximity to the flood zone noted on the northerly end of the property (see DOE 4-68 Attachment 2).

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 2

Date Request Received: 10/29/2021 Date of Response: 11/12/2021
Request No. Energy TS 2-12 Witness: John F. Closson

REQUEST:

Reference Exeter Facility Site Visit. During the Site Visit, and in the Testimony of John Closson at Bates 273-277 generally, Unitil references several areas where the new Exeter facility will give rise to efficiencies as compared to pre-Exeter/Kensington operations.

a. Please summarize these efficiencies, including the timing of when such efficiencies will be experienced, and indicate if such efficiencies are O&M expense related, capital related, or other.
b. Please quantify these efficiencies (expressed in dollar amounts) to the extent possible.
c. Please indicate how, if at all, any of these efficiencies are reflected in the rates proposed in this case.
d. Please indicate any other means by which these efficiencies are, or will be, reflected in Unitil's rates.

RESPONSE:

a. A summary of the efficiencies discussed during the Exeter Facility site visit include;

i. The Electrical Engineering, Substation Operations/Engineering, and Central Electric Dispatch staffs are located together in the same facility as the Company's Seacoast Electric Operations team to more efficiently support routine operations activities and when troubles occur on Unitil's electric system. These groups were formerly housed at three different New Hampshire locations - Hampton, Portsmouth, and Kensington respectively. This efficiency is operational and may benefit capital or O&M expense work depending on the scenario.

ii. The ability to stage a greater number of emergency response contract Line and Tree crews at the Exeter facility will h reduce reliance on staging sites and third party facilities to manage restoration efforts. Any efficiencies related to storm restoration may benefit capital or O&M expense work.

iii. The availability of a vehicle cleaning bay onsite at Exeter will reduce time away from planned work for the Electric Operations and Metering staff. Costs associated with "unproductive time" are captured as O&M expense.

iv. A Prometrics compliant testing and training room located at the Exeter

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Tech Session Set 2

Date Request Received: 10/29/2021 Date of Response: 11/12/2021
Request No. Energy TS 2-12 Witness: John F. Closson

building allows for less down time for Gas workers that need to complete their required certifications. Furthermore, because Gas workers are not reporting to a Prometrics compliant testing center managed by a third party there is more flexibility changing which employees report for testing (i.e., employees scheduled for training/testing can be swapped out as operational needs dictate last minute).

b. The Company does not believe that it is possible to accurately quantify these efficiencies in dollar amounts.

c. Please see the Company's response to subpart b.

d. Please see the Company's response to subpart b.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 1

Received: May 20, 2020 Date of Response: June 4, 2020
Request No. Staff 1-2 Witness: Jacob Dusling

Request:

Reference Company Least Cost Integrated Resource Plan at Page 18-19 of 590, describing the Concord Downtown Conversion project as necessary to accommodate unforeseen customer load additions in the downtown area. Please provide a narrative describing the unforeseen load additions and whether that load actually materialized. Please also provide any supporting documentation that is available relating to the load increases.

Response:

The below table details the unforeseen customer additions and the current status of each of these load additions. At this time the Company cannot confirm if the expected load increase for the locations in service has materialized. These loads were placed in service after typical peak load times and many of the locations are not fully occupied.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 1

Received: May 20, 2020 Date of Response: June 4, 2020
Request No. Staff 1-2 Witness: Jacob Dusling

Location	Expected Load (kVA)	Current Status of Project
16-18 South Main Street Concord Theatre	250	In-Service
20 South Main Street Restaurants and Luxury Apartments	500	Planned In-Service Late 2021/Early 2022
5-7 Pleasant Street Apartments	800	In-Service
32-34 South Main Street Retail, Restaurants, Apartments	1000	Cancelled
97 Storrs Street Retail and Luxury Apartments	500	On Hold
80 Storrs Street Restaurants	500	Company currently working with development of plan to serve
34-42 North Main Street Phoenix Hall	300	Company currently working with development of plan to serve
76-82 North Main Street Bank, Restaurant, Offices and Apartments	280	In-Service
1 Eagle Square Offices	300	Under construction
Dubois Ave South Side Lot 7 Story Mixed Use Building	700	Proposed plans received by City
8-14 Dixon Ave Retail	200	On Hold
120-146 North Main Street Mixed Used	300	On-going

In addition to projects listed above there are three other projects that Unitil has been made aware of that are expected to be placed in-service within the next five to eight years. These projects are expected to total approximately 1,000kVA of additional load in the area.

Unitil Energy Systems - Capital

Concord Downtown Area Study 2018

Prepared By:

Tyler Glueck
Unitil Service Corp.
1/7/2019

1. Executive Summary

This study is an evaluation of the Unitil Energy Systems-Capital (UES-Capital) electric system in the vicinity of downtown Concord. This study was performed separate from the annual distribution planning study, because these additional loads were brought to Unitil's attention after the annual analysis was complete.

The purpose of this study is to identify system constraints due to unanticipated customer load additions that are expected to be in service by the end of spring, 2020. In addition, this study details project options and proposes system improvement projects to resolve the identified planning violations. This study covers examines the known, expected loading within the five year period from 2019 to 2023.

The following system improvements are recommended as detailed in section 6:

1. Combine circuits 1H6 and the underground portion of 1H1
2. Convert combined circuits to 15kV construction
3. Transfer circuit 3H3 to 7X1
4. Install a new 34.5kV/13.8kV transformer at the Gulf St S/S
5. Install two new 13.8kV circuit positions at Gulf St
6. Populate one circuit position to supply the converted 1H6 and 1H1 as a new circuit, "3W4"

The following table is a comparison of capacity versus expected load in 2019.

	Present Peak Load	**Present available Capacity**	**Expected Additional Load**	**% Load over Avail. Capacity**	**Total load after Addition**
1T2	4698	3492	4750	115%	9448
1H1	2453	775	2950	167%	5403
1H6	1110	1196	1800	126%	2910

2. Study Focus

This study is an extension of the UES-Capital 2019-2023 distribution planning process. It is an area review of the downtown Concord area that is being performed due to the identification of additional customer growth that was not known when the analysis for the 2019-2023 planning process was completed.

This study is primarily focused on the planned load expected to require service by the spring of 2020. The first objective of this study is to identify the system constraints that do not meet planning criteria. The second objective is to develop options and recommendations to serve the downtown Concord area over the next five years. The final objective is to effectively develop an improvement plan that will accommodate the immediate load increases, as well as enable future system load growth. The projects proposed are based upon economy, reliability, and potential for future development.

This study does not attempt to identify or address all loading and/or voltage concerns throughout the entire downtown Concord area; however some of the recommendations within this report will provide added benefit to the overall distribution system in this area.

3. Area Description

For the purposes of this study, the UES-Capital downtown Concord area is comprised of the power transformer and distribution circuit positions at Bridge Street, Gulf Street, Storrs Street and Montgomery Street substations (S/S) and the distribution circuits they supply.

The subtransmission system was not reviewed in detail as part of this study. The anticipated load increase is not anticipated to cause subtransmission planning violations. Alternatives were reviewed to determine if subtransmission upgrades could be required for any of the options to address distribution constraints.

Load projections within this report are based on the 2019-2023 five year distribution load forecasts that were developed as part of the 2019-2023 distribution planning process. Additional details regarding the load projections can be found in the UES Capital 2019-2023 Distribution Planning Study.

The 2019 and 2023 projections were increased based upon that anticipated customer load additions. The estimated load is approximately 4.75MW, split up between 1H1 and 1H6. The projected annual load can be found in Appendix A.

4. Analysis and Findings

This section details the results from a detailed review of the UES-Capital Concord downtown Area. It describes concerns associated with the distribution substation and mainline distribution equipment. It does not attempt to identify all loading and voltage concerns throughout the area. Isolated concerns, such as low voltage on a lateral that is not associated with the customer load addition will be addressed under the UES-Capital Distribution Planning Study. The projections listed here are a summation of potential new load and the load projected in the UES-Capital Distribution Planning Study.

a. Distribution Substation Loading Concerns

Distribution substation elements which are expected to exceed their normal summer ratings are listed in the table below.

	Projected KVA	Rating of Overloaded Elements					
	2019	Element	Rating	% of rating	Element	Rating	% of rating
1T2	9448	Xfmr	8186.4	115%	-	-	-
1H1	5403	Trip	3225.6	168%	REG	3456	156%
1H6	2910	Trip	2304	126%	REG	3456	84%

	Projected KVA	Rating of Overloaded Elements					
	2019	Element	Rating	% of rating	Element	Rating	% of rating
1T2	9448	-	-	-	-	-	-
1H1	5403	Wire	3823.2	141%	Recloser	4032	134%
1H6	2910	-	-	-	-	-	-

b. Distribution Circuit Loading and Voltage Concerns

The following summarizes mainline distribution equipment which is expected to be loaded above normal ratings during the study period. It also identifies the lowest voltage on the circuit.

	Element	Projection	Rating	% of rating
1H1	336 AA	5403	3823	136%
1H6	336 AA SP	2910	3226	90%

	Element	Projection	Rating	% of rating
1H1	1/0 Al UG	1159	1080	107%
1H6	2/0 ACSR	2748	2038	135%

	Element	Projection	Rating	% of rating
1H1	#2 Al UG	1159	828	140%
1H6	#2 Cu	2748	1728	159%

	Lowest Voltage
1H1	-
1H6	112.8V

c. Other Concerns

The following additional concerns shall be considered when developing system improvement options and evaluating alternatives

i. I-93

The concord downtown area is in the close proximately of I-93. The State of NH is currently in the process of evaluating options for the widening of I-93. The widening project has the potential to impact Unitil infrastructure, including Bridge Street and Gulf Street substations.

ii. Downtown Underground

The downtown underground was built to have a primary (21W1P) and alternate (21W1A) feed to allow one of the circuits to back the other one up completely. Due to load growth in the area this is no longer the case. Depending on the fault location, portions of the downtown underground need to be restored from overhead distribution circuits. The Capital Master Plan details the future goal of returning the downtown underground to its original purpose.

iii. Space Constraints

Available land in the downtown Concord is very limited. Combined with the unknowns of the I-93 widening and the timeframe in which upgrades are required, finding locations for new substation infrastructure will be extremely difficult.

5. Improvement Options

This section details improvement options that were considered to address the identified constraints above.

5.1 Option 1 – Replace Gulf St. 3T2 with 34.5kV/13.8kV Transformer
5.2 Option 2 – Create a 13.8kV Transformer "Grid"
5.3 Option 3 – Upgrade the Bridge St. S/S or Build a New S/S
5.4 Option 4 – Add Transformation at the Iron Works S/S
5.5 Option 5 – Upgrade 21W1A and 21W1P

All projects detailed below address the identified constraints for the duration of the five-year planning horizon.

5.1 Option 1 – Replace Gulf St. 3T2 with 34.5kV/13.8kV Transformer

The main portion of this plan is to install a new 13.8kV transformer, build two new circuit positions, and run two 13.8kV circuits from the new transformer to connect one with 1H1 and the other 1H6. Both of these 4kV circuits will be converted to 13.8kV. The following options are proposed to eliminate one of the 4kV transformers at Gulf St.

Option 1A – Transfer 3H2

The first option is to transfer 3H2 to the Langdon S/S using 14H1. 14H1 will be extended for four spans to tie in to 14H2 at a new location, removing load from 14H2. 14H2 will now close the tie with 3H2 and assume its load. 3H2 will be removed from the Gulf St S/S. 3H3 will be transferred from 3T2 to 3T1. 3T2 will be replaced with a new 13.8kV transformer.

Option 1B – Transfer 3H3

The second option is to transfer 3H3 to Bow Junction S/S using 7X1. 3H3 will be connected to new step down transformers at the junction of 3H3 and 7X1. 3H3 will be removed from Gulf St S/S. An alternative is to convert 3H3 to 34.5kV and create a 34.5kV position at Gulf St, as well as a tie with 7X1. The 3T2 transformer will be replaced with a 13.8kV transformer.

5.2 Option 2 – Create a 13.8kV Transformer "Grid"

The 374 and 34 corridor through Concord may allow enough space to create several new 34.5-13.8 kV transformer locations. Instead of trying to rebuild an entire substation or trying to find space to locate a new substation, several "substation-style" padmount transformers can be installed along the 374/34 corridor. There are four locations where existing circuits extend out of the transmission corridor to serve load in the city. This project would involve installing one 12,400 kVA transformer at each of these locations and converting the existing 4.16 kV distribution infrastructure in the area to 13.8 kV operations. A one-line is located in Appendix A. Bridge St can be used as a switching station.

Distribution upgrade information is located in the following table:

	1H6	**1H2**	**1H1**
Transformers	33	25	29
Poles	57	30	27
Conversion (ft)	6,300	9,300	7,000
Reconductor (ft)	2,050	3,500	700

Benefits

New property rights would be minimal. This proposal can easily be done in pieces, as needed. This proposal fits the timeline set forth by incoming load.

Constraints

There are many unknowns related to a newer type of project like this. I-93 expansion is an unknown at this time. Other constraints include the purchase of land and/or easement rights.

Open Questions

Would transmission poles need to be replaced? Can power transformers fit in the ROW? What else would be needed to complete this project?

What would be needed for regulation? High-side regulation or should we consider low-side regulators or LTCs?

Long-term Plan

This would ultimately accommodate the removal or conversion of the 4.16 kV portions of Bridge Street, Gulf Street and West Concord substations and the conversion of all the 4.16 kV downtown

circuits to 13.8 kV operations. An alternative to converting these stations is to remove the existing 4 kV infrastructure and install padmounted transformers.

5.3 Option 3 – Upgrade an existing S/S to 13.8 kV or Build a new 13.8kV S/S

Option 2 involves the conversion of an existing substation to 13.8 kV or constructing a new 34.5-13.8 kV substation in the downtown area. . The following sections discuss various options where the construction would take place.

This option sets the stage for converting/rebuilding all the substations (Gulf Street, Bridge Street and West Concord) and distribution circuits in the downtown area to 13.8 kV.

Option 3A –Bridge Street S/S

Upgrade the 1T2, 1H1, 1H2, 1H1 portion of Bridge St S/S from 4kV to 13.8kV. The new equipment ratings shall be set to accommodate the existing load, switching capabilities, and leave room for growth. The peak amp load is expected to be 395A. Therefore, the transformer size will need to be 12,400 kVA. To accommodate the rebuild of this portion of Bridge Street S/S circuits, 1H1, 1H2 and 1H6 will be converted to 13.8 kV operations.

Distribution upgrade information is located in the following table:

	1H6	**1H2**	**1H1**
Transformers	33	25	29
Poles	70	30	27
Conversion (ft)	8,600	9,500	7,000
Reconductor (ft)	2,050	3,500	700

Benefits

No new substation locations would need to be found. The affected circuits would be immediately targeted. Bridge St is an ideal location, being right in the middle of the north and south ends of Concord. There are right-of-ways and easements established, eliminating the immediate need for more land access. The three affected circuits are on one transformer, so only half of Bridge St would need to be upgraded within the shorter timeframe.

Constraints

There may not be enough space in the current S/S footprint to upgrade. How to serve existing load while upgrades are completed? Can the 1T1, 1H3, 1H4, 1H5 remain until future load deems upgrades are required? How do we back-up / install mobile for failure of 1T1 or new transformer? I-93 expansion is an unknown at this time.

Open Questions

Rights granted by easements or Rights of Way need to be investigated

Option 3B– Construct a New S/S

Due to space limitations at Bridge St, it may be preferable to find a new location for a substation. Space for a new S/S in Concord is limited and would require purchase of land or rights. The S/S would be built for 13.8kV and three circuits. The distribution equipment would need to be upgraded to 13.8kV as well.

This option is not viable due to land space and timeframe.

5.4 Option 4 – Add Transformation at Iron Works S/S

Install a 2nd 7.5/10.5 MVA, 34.5-13.8 kV transformer at Iron Works S/S, construct a fourth circuit position and upgrade the existing circuit regulators at Iron Works S/S. 22W3 will be split into two circuits and significant reconstruction of multiple distribution circuits will be required as part of this project.

Distribution upgrade information is located in the following table:

	1H6	**1H2**	**1H1**	**22W1**	**22W2**	**3H1**
Transformers	33	25	29	-	-	34
Poles	57	30	27	-	-	65
Conversion (ft)	6,300	9,300	7,000	-	-	6,800
Reconductor (ft)	2,050	3,500	700	5,000	12,500	6,800

The combination of 22W1, 21W1P (OH portion), 1H2, and half of 1H1 will cause the new 22W1 circuit to be loaded at 10.5MW, which is the upper rating of the new transformer. The other three circuits, 22W2 (and part of 7W4, 3H1, 1H6, and half of 1H1) and 22W3 will overload the original transformer. The total loading at this location will be 22.3 MW. For these reasons, the Ironworks option is not viable.

5.5 Option 5 – Upgrade 21W1P and 21W1A

Upgrading 21W1P and 21W1 and transferring additional load to the downtown underground was considered as an option to address the identified constraints. The issue is that the purpose of the downtown circuits is to back each other up. The max rating we can achieve in the existing infrastructure is 300A per cable. There is already 200A on the underground circuits. The new and transferred load will total about 400A. This would leave the circuits both fully loaded to their rating, eliminating tie capability completely and leaving no room for growth. There are not spares enough to run more circuits. The additional load would also require a new substation transformer and a location for it, as well as a place to tie it in, but there are not enough empty conduits to utilize another circuit configuration.

6. Selected Proposal Details

The selected proposal is a reduced version of option 1 (outlined in section 5.1.B), which is converting part of the Gulf St S/S. The planned project will convert part of Gulf St and re-organize the leftover 4kV portion. Note that the second load transfer, option B, has been selected. Therefore, 3H3 will be shifted to 7X1 with a set of step down transformers. 1H6 and half of 1H1 will be converted to 13.8kV and fed from a single new circuit at Gulf St.

Distribution Plan:

1. Install stepdown transformers on 7X1 and transfer 3H3 to 7X1. Consider adding a recloser on the low side of the step down transformers.
2. Install stepdown transformers on 1H6 at the intersection of Pleasant St. and S. State St. in the western direction on Pleasant St. This is due to a customer owned transformer on this lateral.
3. Rebuild 1H6 from P.13 S. Main St. to P.4 Warren St. to 15kV insulation and 336AAC conductor. The portion from P.13 S. Main St. to P.1 N. State St. must be completed by summer 2019 to meet loading and voltage requirements. It will remain 4kV until the substation work is complete.
4. Transfer a portion of 1H1 from P.13 S. Main St. to P.3 Storrs St. onto the new 13.8kV circuit (designation to be determined). This section of 1H1 is already built to 15kV standards.
5. Replace all affected distribution transformers with dual 4.16kV/13.8kV transformers.
6. Extend 3H1 and 3H2 from where they currently exist to the new 4kV circuit positions in the new 3T1 position.
7. Build a new tie between 3H1 and 3H2 right outside the substation or in the substation. The existing tie between 3H3 and 3H2 will remain.
8. Develop a plan to allow for conductor isolation in the underground portion of the new circuit.

Substation Plan:

9. Move 3T1 to the 3T2 position, removing 3T2.
10. Build a new 4kV position and re-tool the current 3H3 position. The circuits located on these two positions will be 3H1 and 3H2. The existing circuit, 3H3, will be transferred to 7X1.
11. Install new breaker/reclosers and regulators in the new 3H1 and 3H2 positions.
12. Purchase and install a new 34.5kV/13.8kV transformer, to be located in the existing 3T1 position.
13. Build one new 13.8kV bus and two new 13.8kV circuit positions with new breaker/reclosers and regulators.
14. The existing maintenance project of replacing all 34.5kV pin and cap insulators, substation fence, and a new recloser for 3H3 will be encompassed in this project.

Right of Way Plan:

15. Build one new 13.8kV circuit from a new 13.8kV position at Gulf St S/S to the crossover to Theatre St.
16. Cutover 1H6 to the new circuit (this includes the portion of 1H1 being transferred as well).
17. Build a new tie between the remnant of 1H6 (it will only go from Bridge St S/S to the crossover location) and 3H1.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 2

Received: June 11, 2020 Date of Response: June 22, 2020
Request No. Staff 2-4 Witness: Jacob Dusling

Request:

Reference Company Response to Staff 1-2 describing 5,630kVA expected load associated with customer additions necessitating the Concord Downtown Conversion project, including 1,700 kWA of expected load which has been cancelled or is on hold.

a. Please provide an update on the status of the Concord Downtown Conversion as of June 2020.

b. Please provide any planning documents associated with the Downtown Conversion project (business cases, solutions selection forms, etc.)

c. Please describe how the 1,700 kVA of expected load that has been cancelled or placed on hold impacts the need for the Concord Downtown Conversion.

d. Please provide a narrative describing the 1,000kVA project which has been cancelled.

e. Please provide the annual peak loading in the area associated with the Concord Downtown Conversion for each of the past five years.

f. Please provide the hourly loading in the area associated with the Concord Downtown Conversion on the peak day during 2019.

Response:

a. As of June 15, 2020, the Concord Downtown Conversion is essentially complete. The expansion to Gulf Street substation is in service and all conversion from 4.16kV to 13.8kV operation is complete. Some minor cleanup work remains (switching to place circuits into their new normal configurations, final signage and equipment labelling, etc.) and is expected to be complete by the end of the June.

b. Unitil's Concord Downtown Area Study is attached as Staff 2-4 Attachment 1.

c. This would have reduced the anticipated loading on substation equipment as follows:

- 1T2 transformer to approximately 95% of normal instead of 115%
- 1H1 Circuit Position to approximately 136% of normal instead of 167%
- 1H6 Circuit Position to approximately 96% of normal instead of 126%

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 2

Received: June 11, 2020 Date of Response: June 22, 2020
Request No. Staff 2-4 Witness: Jacob Dusling

Additionally, many of the distribution loading and voltage violations are expected to remain, but be less severe without the load that was cancelled or placed on hold

d. 32-34 South Main Street in Concord's Central Business District and was acquired from the State of NH by the City for the purposes of economic development. The City desires to sell the property to a private developer for redevelopment in order to expand the City's tax base, job base, housing base, and overall economic vitality.

In January of 2018, the City entered into a Purchase and Sales / Development Agreement with The Dolben Company to develop a 180,000SF, $30M mixed use building featuring 125 apartments, an internal parking garage and 5,000 SF restaurant at 32-34 South Main Street.

Unitil worked with the City and Dolben to develop a plan to relocate aerial utilities underground to support development of 32-34 South Main Street, as well as abutting properties affected by the development.

As the Dolben Company conducted its due diligence and prepared development permitting applications, it was determined that additional financial support would be required from the City, in an amount of upwards of $3.5 million, to make the developer's project economically viable.

In August of 2019, the City Council voted to not amend its Purchase and Sales / Development Agreement with The Dolben Company to provide the additional financial support for the developer's project. Consequently, The Dolben Company subsequently terminated the Purchase and Sales / Development Agreement and withdrew from the project.

The City continues to actively market the property. However, the onset of the COVID 19 "Coronavirus" Pandemic – and associated economic challenges related thereto, has complicated efforts to find a suitable partner for development of the property.

e. The table below displays the historical summer peak loading of the Concord Downtown area as defined in the attached study. Combined loading is provided for circuits 21W1A and 21W1P, because these are underground circuits that are designed to back one another up for an underground fault.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 2

Received: June 11, 2020 Date of Response: June 22, 2020
Request No. Staff 2-4 Witness: Jacob Dusling

	Load (kVA) / % or Normal Rating				
	2015	2016	2017	2018	2019
1T1 Transformer	3,868 / 47.2%	4,032 / 49.2%	no data	4,266 / 51.2%	3,055 / 37.3%
Circuit 1H3	1,505 / 64.3%	1,578 / 67.4%	1,518 / 64.8%	1,518 / 64.8%	1,429 / 61.0%
Circuit 1H4	no data	980 / 45.9%	no data	no data	620 / 29.1%
Circuit 1H5	1,536 / 51.4%	1,573 / 52.6%	1,525 / 51.0%	1,669 / 55.8%	1,189 / 39.8%
1T2 Transformer	4,323 / 52.8%	4,150 / 50.7%	4,266 / 52.1%	4,611 / 56.3%	3,747 / 45.7%
Circuit 1H1	2,435 / 81.6%	no data	2,306 / 77.2%	2,407 / 80.6%	2,024 / 67.8%
Circuit 1H2	1,153 / 49.2%	1,038 / 44.3%	1,009 / 43.1%	1,326 / 56.6%	922 / 39.4%
Circuit 1H6	1,110 / 37.2%	no data	1,052 / 35.2%	1,196 / 40.1%	893 / 29.9%
3T1 Transformer	3,094 / 61.1%	3,267 / 64.6%	2,959 / 58.5%	3,266 / 64.5%	2,613 / 51.6%
Circuit 3H1	1,815 / 81.1%	1,830 / 64.6%	1,701 / 76.0%	1,816 / 81.1%	1,499 / 66.9%
Circuit 3H2	1,254 / 56.0%	1,355 / 60.5%	1,239 / 55.3%	1,369 / 61.1%	1,023 / 45.7%
3T2 Transformer	no data	1,059 / 25.6%	949 / 23.0%	992 / 24.0%	656 / 15.9%
Circuit 3H3	no data	1,059 / 45.2%	949 / 40.5%	992/ 42.4%	656 / 28.0%
Circuits 21W1A/21W1P Combined Load (Downtown Underground)	4,064 / 103.0%	4,160 / 105.5%	4,240 / 107.5%	4,112 / 104.3%	3,298 / 83.6%

f. Hourly load data is not available for the Concord Downtown area, because Unitil does not have SCADA telemetry information for the associated circuits.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 3

Received: July 9, 2020 Date of Response: August 4, 2020
Request No. Staff 3-4 Witness:John Bonazoli

Request:

Reference Response 2-4 and related attachments describing the Concord Downtown Area Study

a. The Concord Downtown Area Study does not provide cost estimates for the various alternatives considered. Please explain how the Company arrived at an informed decision regarding the least-cost and best fitting solution for the need without this information. If the Company used its engineering and procurement expertise to approximate costs and determine which alternative provided the best-fitting, least-cost solution for the need, possible replicate those estimates in response to this request.

b. Please provide any other studies for projects considered outside the annual distribution planning study process in the past five years and a brief narrative of any projects the Company plans to consider through similar processes in the next five years.

c. Similar to Question 3-2:

   i. Please provide all of the load sheet data associated with the additional load in Downtown Concord that was utilized to justify this project.

   ii. Please provide all final load determinations that were utilized in the Circuit Analysis, Windmil or otherwise, and the incremental contribution (kW, kVA, amperage) this load had on Concord Downtown circuits.

Response:

a. Options 2 -5 listed in the Concord Downtown Area Study were presented to and discussed among the engineering and operations departments and were not selected as the recommended solution for the following reasons:

   Option 2 - Create a 13.8kV Transformer “Grid”:

   This option was outside of the Company’s distribution design practices and it was determined the required land and/or easements could not be acquired within the required timeline for the project. Additionally, it was thought some of these transformers may need to be relocated again in the near future due to the potential widening of Interstate highway I-93.

   Option 3 - Upgrade or replace Bridge St. substation:

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 3

Received: July 9, 2020 Date of Response: August 4, 2020
Request No. Staff 3-4 Witness:John Bonazoli

There were a number of concerns with the option of upgrading the existing Bridge St. substation.

1) The available space within the Bridge St. Substation would not accommodate a 15kV upgrade without rebuilding the entire substation. The scope (and cost) of rebuilding the entire substation (13.8kV and 4 kV), was much greater than building a new substation at Gulf St. because there are fewer number of circuits at the Gulf St. substation.
2) The available land at the Gulf St. location allowed a new substation to be built beside the existing one, while the existing substation was left In service. This was not an option at Bridge St. location.
3) The time required to locate and procure adequate land for a new substation was outside the required timeline for project. Additionally, a new location for the Bridge St substation would require four subtransmission lines to be re-routed.
4) It is unknown how the widening of Interstate Highway I-93 will affect the Bridge St. substation.

Option 4 – Install a second transformer at Iron Works Substation:

It was determined that the added capacity of a second transformer installed at Iron Works Substation (of the same rating as the present transformer), would not be adequate for the expected needed load. A transformer of a greater rating was not feasible, because it would not be able to be backed-up by the existing mobile substation or spare substation transformer. Therefore, a new mobile substation and spare transformer would also need to be purchased.

Option 5 – Upgrade 21W1P and 21W1A lines:

21W1A and 21W1P are underground lines located in downtown Concord. It was determined that rebuilding these lines would not be adequate to serve the required load and allow expansion for future load. There are no spare conduits in the existing conduit bank and the size of the existing conduit does not allow the installation of adequate cable size. Therefore a new a new conduit bank with underground vaults and switchgear would need to be constructed downtown Concord. With past experience of designing and constructing underground circuits in downtown Concord, it was determined that the required time to design this option, receive required approval from the City, and construct the necessary facilities would be more than the allowed timeline. The cost was also expected to be greater than the selected substation option. The final design would also allow less flexibility for future load growth in the area.

Unitil Energy Systems, Inc.
Docket No. DE 20-002
PUC Staff Information Requests – Set 3

Received: July 9, 2020 Date of Response: August 4, 2020
Request No. Staff 3-4 Witness:John Bonazoli

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b. The only other studies for projects considered outside the annual distribution planning study process in the past five years were System Impact Studies performed for specific requests to interconnect customer owned generator facilities. Please reference Staff 3-4 Attachment 1, Staff 3-4 Attachment 2, and Staff 3-4 Attachment 3 for studies that were performed for large generator interconnection requests. These studies are confidential as they include confidential customer information.

c. Staff 3-4 Attachment 4 through Staff 3-4 Attachment 8 contain load information Unitil received from customers for new load to be served.

   Staff 3-4 Attachment 4 is electrical load analysis provided by the customer indicating 374 kVA of demand.

   Staff 3-4 Attachment 5 is electrical load analysis provided by the customer indicating 1,255 kVA of demand.

   Staff 3-4 Attachment 6 is electrical load analysis provided by the customer indicating 305 kVA of demand.

   Staff 3-4 Attachment 7 is electrical load analysis provided by the customer indicating 175 kW of connected load.

   Staff 3-4 Attachment 8 is electrical load analysis provided by the customer indicating 384 kVA of demand.

Capital Budget 2019 UES Capital

Project Description

Year: 2019
Company: UES Capital
Status: [A] Accepted
Priority: 1
Budget Category: SPBC02 Substation Project
Project Name: Gulf Street - 13kV Additions and Upgrades
Submitted By: J. Goudreault / P. Krell

Project Categorizations

Load

Project Estimates

Labor Time to Install (Man Hours):	40
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	20
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	150000
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	270000
Other Specific Charges ($):	211000
Overhead on Specific Charges (%):	30
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	No
Retirement:	
Salvage:	

Description/Scope

Increase the overall capacity at Gulf Street substation by eliminating the existing 4.16kV upper yard supplied by the 3T1 transformer, and building two new 13.8 kV circuit positions supplied from a new 13.8kV power transformer, including:

- new 10/14 MVA, 34.4 kV-13.8 kV power transformer,
- 38 kV high-side transformer breaker,
- two 13.8 kV circuit positions, each with breaker/recloser and regulators,
- and the removal of all 4.16 kV equipment and dismantling of existing structures associated with the 3T1 transformer.

This is the first year of a two year project. This first year includes costs for any design services and permitting, purchase of all major equipment (some planned to be invoiced in 2020), and preliminary contractor installation costs.

Total cost of this substation project over the full two years is estimated at approximately $1.5M without direct or indirect overheads.

Justification

Capacity additions needed for anticipated load additions in the Concord downtown area.

Printed: 7/12/2021 8:49:37 AM

Capital Budget 2020 UES Capital

Project Description

Year: 2020
Company: UES Capital
Status: [A] Accepted
Priority: 1
Budget Category: SPCC01 Substation Project, Carryover
Project Name: Gulf Street - 13kV Additions and Upgrades
Submitted By: J. Goudreault / P. Krell

Project Categorizations

Load

Project Estimates

Labor Time to Install (Man Hours):	120
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	60
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	12000
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	228000
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	730000
Other Specific Charges ($):	180000
Overhead on Specific Charges (%):	30
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	No
Retirement:	
Salvage:	

Description/Scope

Increase the overall capacity at Gulf Street substation by eliminating the existing 4.16kV upper yard supplied by the 3T1 transformer, and building two new 13.8 kV circuit positions supplied from a new 13.8kV power transformer, including:

- new 10/14 MVA, 34.4 kV-13.8 kV power transformer,
- 38 kV high-side transformer breaker,
- two 13.8 kV circuit positions, each with breaker/recloser and regulators,
- and the removal of all 4.16 kV equipment and dismantling of existing structures associated with the 3T1 transformer.

This is the second year of a two year project. This second all remaining equipment and material costs, and remaining installation, removal, testing and commissioning costs.

Total cost of this substation project over the full two years is estimated at approximately $1.5M without direct or indirect overheads.

Justification

Capacity additions needed for anticipated load additions in the Concord downtown area.

UES Capital
Construction Authorization

AUTH: **190118**
Date: **1/31/2019**
Budgeted Amount: **$924,588.59**

Budget Item No:	**SPBC02**	Type:	**Original**
Budget Year:	**2019**	Sequence:	**1**
Description:	**Gulf Street - 13kV Additions and Upgrades**	Status:	**Completed**
Project Supervisor:	**Sherwood, Nathan**	Initiated Date:	**1/31/2019 11:32:22 AM**
Crew Days:	**11**	Initiated By:	**Krell, Paul**
Start Date:		Finalized Date:	**4/30/2019 8:17:35 AM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
4/22/2019	YES	**Lydon, Lisa** *Plant Accountant*
4/29/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
4/25/2019	YES	**Goudreault, James** *Manager, Electric Dispatch & Substations*
4/23/2019	YES	**Sherwood, Nathan** *Sr. Design Engineer*
4/25/2019	YES	**Krell, Paul** *Manager Energy Sys. Engineer.*
4/23/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
4/25/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
4/26/2019	YES	**Sprague, Kevin** *VP, Engineering*
4/29/2019	YES	**Main, Dan** *Assistant Controller*
4/29/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
4/29/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$2,925,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$2,925,000.00
Retirement:	$400,000.00
Cost Of Removal:	$162,000.00
Salvage:	$0.00
CWO Total:	$2,763,000.00

DESCRIPTION/SCOPE

Increase the overall capacity at Gulf Street substation by building two new 13.8 kV circuit positions, installing a new 34.4-13.8 kV power transformer, eliminating the existing 4.16 kV upper yard and removing the 3T1 transformer, rebuilding the 4.16 kV lower yard and replacing the 3T2 transformer. This work includes:

- new 13.8 kV structures and buswork
- two (2) new 13.8 kV circuit positions w/ breakers/reclosers and voltage regulators
- new 10/14 MVA, 34.4 kV-13.8 kV power transformer
- new 38 kV high-side transformer breaker
- rebuild of existing 4.16 kV lower yard
- install of 4.2/5.25 MVA, 34.4-4.36 kV power transformer removed from Hampton Beach S/S
- replace existing recloser at remaining 4.16 kV 3H3 circuit position, and install of voltage regulators removed from Hampton Beach S/S
- removal of existing 4.16 kV upper yard
- removal of existing 3T1 and 3T2 transformers (3T1 to be kept as spare, 3T2 to be disposed)

This will be a two-year project. The first year includes surveying & permitting, design, most major equipment purchases, and preliminary construction. The second year includes any remaining equipment and material, the completion of construction, testing, and placing into service.

JUSTIFICATION

Capacity additions needed for anticipated load additions in the Concord downtown area.

NOTES

Straight 30% overhead on the following:
CWO #20191608 (Outside Services)
CWO #20191609 (Power Transformer)

AUTHORIZATION COMMENTS

Estimated Spending By Year:
2019: $1,397,000
2020: $1,528,000
Total: $2,925,000

The total project cost of $2,925k compares to the sum of the following amounts in the 2019 capital budget:
$ 924,589 Gulf Street - 13kV Additions and Upgrades (2019 SPBC02)
+ $1,869,068 Gulf Street - 13kV Additions and Upgrades (carryover) (2020 SPCC21)

+ $ 132,172 Gulf Street - Replace 3H3 Recloser (2020 SPBC25)
= $2,925,829 Total

CWO Summary

CWO	Description	Amount
20191607	Gulf Street - 13kV Additions and Upgrades	$0.00
20191608	Gulf Street - Outside Services	$132,000.00
20191609	Gulf Street - Power Transformer	$510,000.00
20191610	Gulf Street - Equipment & Material (excl. Power Transformer)	$724,000.00
20191611	Gulf Street - Construction	$1,390,000.00
20191612	Gulf Street - other	$7,000.00
	Total	$2,763,000.00

Capital Budget 2019 UES Capital

Project Description

Year: 2019
Company: UES Capital
Status: [A] Accepted
Priority: 1
Budget Category: DPBC04 Distribution Projects
Project Name: Conversion in Downtown Concord
Submitted By: T. Glueck

Project Categorizations

Load

Project Estimates

Labor Time to Install (Man Hours):	2669
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	1334
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	28853
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	67900
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	164080
Other Specific Charges ($):	
Overhead on Specific Charges (%):	
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	??
Retirement:	
Salvage:	

Description/Scope

Re-conductor and re-insulate 1H6 to 336AAC and 15kV BIL to simultaneously eliminate overloading, low voltage, and prepare for a conversion to a higher voltage class. This will take place from P.13 S. Main St. to P.1 S. State St. (roughly 1400ft).

It also includes a new circuit from Gulf St S/S to the crossover into the city at Theatre St.

1H1 will have a new open point and the southern end of 1H1 will be placed on the new 13.8kV circuit, as well as all load on 1H6.

Justification

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades.

Two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu to be overloaded in the summer of 2019.

The 2/0 ACSR and the #2 Cu is expected to be loaded to 102% and 114%, respectively, of their summer normal amp rating. Voltage may also be as low as 116V in 2019. Converting the circuit will eliminate these issues and prepare for the conversion to a higher voltage class.

Phase swaps have been completed where possible to defer the conversion to 2019.

UES Capital
Construction Authorization

AUTH: **190149**
Date: **3/28/2019**
Budgeted Amount: **$803,450.03**

Budget Item No: **DPBC04**
Budget Year: **2019**
Description: **Conversion in Downtown Concord**
Project Supervisor: **Balch, Stanley**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **3/28/2019 10:35:18 AM**
Initiated By: **Balch, Stanley**
Finalized Date: **4/11/2019 12:34:22 PM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
4/4/2019	YES	**Lydon, Lisa** *Plant Accountant*
4/4/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
4/4/2019	YES	**Lloyd, Charles** *Manager Electric Operations*
4/5/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
4/9/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
4/9/2019	YES	**Sprague, Kevin** *VP, Engineering*
4/9/2019	YES	**Main, Dan** *Assistant Controller*
4/9/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
4/11/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$250,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$250,000.00
Retirement:	$0.00
Cost Of Removal:	$45,000.00
Salvage:	$0.00
CWO Total:	$205,000.00

DESCRIPTION/SCOPE

Re-conductor and re-insulate 1H6 to 336AAC and 15kV BIL to simultaneously eliminate overloading, low voltage, and prepare for a conversion to a higher voltage class. This will take place from P.13 S. Main St. to P.4 N. State St. (roughly 1900ft).

This work being completed is a portion of the work included in the original budget amount. Separate authorizations will be written as the additional work is identified and work requests are written.

JUSTIFICATION

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades.

Two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu to be overloaded in the summer of 2019.

The 2/0 ACSR and the #2 Cu is expected to be loaded to 102% and 114%, respectively, of their summer normal amp rating. Voltage may also be as low as 116V in 2019. Converting the circuit will eliminate these issues and prepare for the conversion to a higher voltage class.

Phase swaps have been completed where possible to defer the conversion to 2019.

NOTES

AUTHORIZATION COMMENTS

Intake# 37660

Costs from CWO# 20193088 to be transferred to this CWO when authorization is approved

CWO Summary

CWO	Description	Amount
20191623	Re-conductor and re-insulate circuit 1H6	$205,000.00
	Total	$205,000.00

UES Capital

Construction Authorization

AUTH: **190174**
Date: **7/25/2019**
Budgeted Amount: **$0.00**

Budget Item No: **DPNC05**
Budget Year: **2019**
Description: **Reconductor 1H6 - Pleasant and Green Street, Concord**
Project Supervisor: **Balch, Stanley**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **7/25/2019 11:46:25 AM**
Initiated By: **Balch, Stanley**
Finalized Date: **8/5/2019 8:43:56 AM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
7/25/2019	YES	**Lydon, Lisa** *Plant Accountant*
7/25/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
7/25/2019	YES	**Lloyd, Charles** *Manager Electric Operations*
7/29/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
7/30/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
7/29/2019	YES	**Sprague, Kevin** *VP, Engineering*
7/29/2019	YES	**Main, Dan** *Assistant Controller*
7/31/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
8/2/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$197,798.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$197,798.00
Retirement:	$0.00
Cost Of Removal:	$64,277.00
Salvage:	$0.00
CWO Total:	$133,521.00

DESCRIPTION/SCOPE

This authorization is to cover the cost of converting a portion of circuit 1H6 along Pleasant St., Green St., and Blake St. in Concord. The three phase primary line along Pleasant St. will be reconductored to 1/0 ACSR with 1/0 ACSR neutral and reinsulated to15 kV. Approximate distance to be reconductored is 700' and includes 7 pole sections. Six poles along Pleasant St. are scheduled to be replaced in the Consolidated Telephone maintenance area.
The single phase primary line along Green St. and Blake St. will be reconductored to 1/0 ACSR with 1/0 ACSR neutral and reinsulated to 15kV. Approximate distance for these two streets to be reconductored is 685' and includes 7 pole sections. These poles are Unitil maintenance and will be replaced with 40' CL3 poles.
Construction will be Standard Overhead 15kV Pole Top. Along this circuit there are (6) single phase transformers and (2) three phase banks that will be installed or replaced with Dual ratio transformers.

JUSTIFICATION

This reconductoring is a portion of the Downtown Concord Conversion under DPBC04.

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades. The projection analysis and modeling shows that multiple elements will be in violation of projection guidelines, including conductor, solid blade disconnects, and substation regulators.

For the summer of 2019, two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu along S.State St to be overloaded in the summer of 2019. This portion of the circuit was re-conductored with 336 AAC Primary and 4/0 neutral in May 2019

NOTES

AUTHORIZATION COMMENTS

Although this is a non-budget authorization, the costs will off set the remaining balance of budgeted funds for Budget item DPBC04. This project is a portion of the original scope for that budget item.

CWO Summary

CWO	Description	Amount
20191651	Reconductor 1H6 - Pleasant and Green Street, Concord	$133,521.00
	Total	$133,521.00

UES Capital

Construction Authorization

AUTH: **190181**
Date: **8/13/2019**
Budgeted Amount: **$0.00**

Budget Item No: **DPNC07**
Budget Year: **2019**
Description: **Reconductor/Convert Circuit 1H6 - Thompson Street, Concord**
Project Supervisor: **Balch, Stanley**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **8/13/2019 9:05:57 AM**
Initiated By: **Balch, Stanley**
Finalized Date: **8/20/2019 7:25:51 AM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
8/13/2019	YES	**Lydon, Lisa** *Plant Accountant*
8/19/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
8/13/2019	YES	**Lloyd, Charles** *Manager Electric Operations*
8/14/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
8/19/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
8/19/2019	YES	**Sprague, Kevin** *VP, Engineering*
8/19/2019	YES	**Main, Dan** *Assistant Controller*
8/19/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
8/19/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$128,720.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$128,720.00
Retirement:	$0.00
Cost Of Removal:	$23,584.00
Salvage:	$0.00
CWO Total:	$105,136.00

DESCRIPTION/SCOPE

This authorization is to cover the cost of converting a portion of circuit 1H6 along Thompson St., South St., Wall St., and Fayette St. in Concord. The three phase primary line along Thompson St. and South St. will be reinsulated to15 kV. The single phase primary line along Wall St. and Fayette St. will be reconductored to 1/0 ACSR with 1/0 ACSR neutral and reinsulated to 15kV. Approximate distance to be reconductored is 900' and includes 7 pole sections. Twelve poles within the scope of this project are scheduled to be replaced in the Consolidated Telephone maintenance area. Construction will be Standard Overhead 15kV Pole Top. Along this circuit there are (14) single phase transformers and (1) three phase bank that will be installed or replaced with Dual ratio transformers.
Two step-down transformers banks will be installed, one on South St. and another on Thompson St, to keep the remaining portion of circuit 1H6 4.16/2.4kV.

JUSTIFICATION

This reconductoring and reinsulating is a portion of the Downtown Concord Conversion under DPBC04.

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades. The projection analysis and modeling shows that multiple elements will be in violation of projection guidelines, including conductor, solid blade disconnects, and substation regulators.

For the summer of 2019, two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu along S.State St to be overloaded in the summer of 2019. This portion of the circuit was re-conductored with 336 AAC Primary and 4/0 neutral in May 2019

NOTES

AUTHORIZATION COMMENTS

Although this is a non-budget authorization, the costs will off set the remaining balance of budgeted funds for Budget item DPBC04. This project is a portion of the original scope for that budget item.

CWO Summary

CWO	Description	Amount
20191656	Reconductor/Convert Circuit 1H6 - Thompson Street, Concord	$105,136.00
	Total	$105,136.00

UES Capital

Construction Authorization

AUTH: **190192**
Date: **11/4/2019**
Budgeted Amount: **$0.00**

Budget Item No: **DPNC12**
Budget Year: **2019**
Description: **Reconductor/Convert Circuit 1H6 - S Spring St., Concord**
Project Supervisor: **Balch, Stanley**
Crew Days: **0**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **11/4/2019 12:41:52 PM**
Initiated By: **Raymond, Gary**
Finalized Date: **11/5/2019 3:40:38 PM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
11/4/2019	YES	**Lydon, Lisa** *Plant Accountant*
11/4/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
11/4/2019	YES	**Lloyd, Charles** *Manager Electric Operations*
11/4/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
11/5/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
11/5/2019	YES	**Sprague, Kevin** *VP, Engineering*
11/5/2019	YES	**Main, Dan** *Assistant Controller*
11/5/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
11/5/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$138,870.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$138,870.00
Retirement:	$0.00
Cost Of Removal:	$29,587.00
Salvage:	$0.00
CWO Total:	$109,283.00

DESCRIPTION/SCOPE

This authorization is to cover the cost of converting a portion of circuit 1H6 along South Spring Street in Concord. The three phase primary line along South Spring Street will be reinsulated to 15kV. At South Spring Street and Pleasant Street, circuit 1H6 will be extended two sections and a pipe operated gang switch will be installed to create a circuit tie with 21W1P.
Construction will be Stand Overhead 15kV Pole Top.
There will be six pole replacements in the Consolidated Telephone maintenance area that Consolidated Telephone has notified UES that they are not authorized to set. The cost of these pole sets are calculated into this authorization.

JUSTIFICATION

This reconductoring is a portion of the Downtown Concord Conversion under DPBC04.

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades. The projection analysis and modeling shows that multiple elements will be in violation of projection guidelines, including conductor, solid blade disconnects, and substation regulators.

For the summer of 2019, two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu along S. State St to be overloaded in the summer of 2019. This portion of the circuit was reconductored with 336 AAC Primary and 4/0 neutral in May 2019

NOTES

AUTHORIZATION COMMENTS

Although this is a non-budget authorization, the costs will off set the remaining balance of budgeted funds for Budget item DPBC04. This project is an addition to the original scope for that budget item.

CWO Summary

CWO	Description	Amount
20191670	Reconductor/Convert Circuit 1H6 - S Spring St., Concord	$109,283.00
	Total	$109,283.00

UES Capital
Construction Authorization

AUTH: **190198**
Date: **11/22/2019**
Budgeted Amount: **$0.00**

Budget Item No: **DPNC13**
Budget Year: **2019**
Description: **374 Line Rebuild with 15kV Underbuild**
Project Supervisor: **Sherwood, Nathan**
Crew Days: **3**
Start Date:
Completion Date:

Type: **Original**
Sequence: **1**
Status: **Completed**
Initiated Date: **11/22/2019 3:08:30 PM**
Initiated By: **Sherwood, Nathan**
Finalized Date: **12/13/2019 2:36:32 PM**
Finalized By: **Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
12/6/2019	YES	**Lydon, Lisa** *Plant Accountant*
12/6/2019	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
12/9/2019	YES	**Lloyd, Charles** *Manager Electric Operations*
12/6/2019	YES	**Letourneau, Raymond** *VP, Electric Operations*
12/9/2019	YES	**Krell, Paul** *Manager Energy Sys. Engineer.*
12/12/2019	YES	**Bonazoli, John** *Manager Distribution Engineer*
12/9/2019	YES	**Sprague, Kevin** *VP, Engineering*
12/9/2019	YES	**Main, Dan** *Assistant Controller*
12/12/2019	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
12/12/2019	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$1,066,000.00
Less Customer Contribution:	$0.00
Net Authorized Cost:	$1,066,000.00
Retirement:	$0.00
Cost Of Removal:	$48,000.00
Salvage:	$0.00
CWO Total:	$1,018,000.00

DESCRIPTION/SCOPE

Construct (2) new 13.8kV circuits underbuilt along the 374 line from Gulf Street substation to Theatre St., and rebuild the 374 pole line to accommodate the new circuits.

This project is a portion of the work being completed for the downtown Concord upgrades and conversions included in the original (2019) DPBC04 - Conversion in Downtown Concord capital budget item.

JUSTIFICATION

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades.

NOTES

Straight 30% overhead on the following:
CWO #20191675 (Outside Services, Fees, etc.)

Total project cost includes transfer of costs from the 2019 Preliminary Survey (374 Line Survey).

AUTHORIZATION COMMENTS

Estimated Spending By Year:
2019: $ 60,000
2020: $1,006,000
Total: $1,066,000

CWO Summary

CWO	Description	Amount
20191674	374 Line Rebuild with 15kV Underbuild	$927,000.00
20191675	374 Line Rebuild with 15kV Underbuild - Outside Services, Fees, Etc.	$91,000.00
	Total	$1,018,000.00

Capital Budget 2020 UES Capital

Project Description

Year:	2020
Company:	UES Capital
Status:	[A] Accepted
Priority:	1
Budget Category:	DPBC07 Distribution Projects
Project Name:	Conversion in Downtown Concord - Part 2
Submitted By:	T. Glueck/C. Lloyd

Project Categorizations

Load, Voltage

Project Estimates

Labor Time to Install (Man Hours):	514
Labor Time for Removal (Man Hours):	
Transportation Expenses (Heavy Truck Hours):	257
Transportation Expenses (Light Truck Miles):	
Material OH Electric Construction (from Stockroom):	57548
Material UG Electric Construction (from Stockroom):	
Material Gas Construction (from Stockroom):	
Material Direct Charge (Ordered directly to job.):	91311
Material Hot Water Heaters:	
Contract Labor Hours (Man Hours):	
Contract Services:	194564
Other Specific Charges ($):	
Overhead on Specific Charges (%):	
Customer Contribution (%) (before OH's applied):	
EDP? (Yes or No):	No
Retirement:	
Salvage:	

Description/Scope

This is part 2 of the downtown conversion project. The scope is to finish the conversion work, particularly switching the transformer dual ratio switch, connecting circuits to their new circuit positions, and tapping other already installed devices.

The scope of this project has expanded. Additional conversion work is necessary for 1H1 and there are two new 13.8kV circuits instead of one.

Additional work includes: padmount transformer replacements, new switch installations, and building new circuit getaways from the converted Gulf St substation.

In addition to the distribution work to be done, some of the funds in this budget item are referenced in Auth #190198, which is the sub-transmission/374 line right-of-way rebuild portion of the overall Gulf St Conversion Project.

Justification

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades.

Two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu to be overloaded in the summer of 2019.

The 2/0 ACSR and the #2 Cu is expected to be loaded to 102% and 114%, respectively, of their summer normal amp rating. Voltage may also be as low as 116V in 2019. Converting the circuit will eliminate these issues and prepare for the conversion to a higher voltage class.

Phase swaps have been completed where possible to defer the conversion to 2020.

UES Capital

Construction Authorization

AUTH: **200124**
Date: **2/4/2020**
Budgeted Amount: **$721,846.64**

Budget Item No:	**DPBC07**	Type:	**Original**
Budget Year:	**2020**	Sequence:	**1**
Description:	**Conversion in Downtown Concord - Part 2**	Status:	**Completed**
Project Supervisor:	**Balch, Stanley**	Initiated Date:	**2/4/2020 1:32:45 PM**
Crew Days:	**0**	Initiated By:	**Balch, Stanley**
Start Date:		Finalized Date:	**2/24/2020 7:34:23 AM**
Completion Date:		Finalized By:	**Lydon, Lisa**

APPROVALS

Action Date	Approved	Approver/Title
2/18/2020	YES	**Lydon, Lisa** *Plant Accountant*
2/20/2020	YES	**Bickford, Tressa** *Utility Acctng And Budgeting Mgr*
2/19/2020	YES	**Lloyd, Charles** *Manager Electric Operations*
2/19/2020	YES	**Letourneau, Raymond** *VP, Electric Operations*
2/21/2020	YES	**Bonazoli, John** *Manager Distribution Engineer*
2/21/2020	YES	**Sprague, Kevin** *VP, Engineering*
2/21/2020	YES	**Diggins, Todd** *Director, Finance*
2/21/2020	YES	**Brock, Laurence** *Chief Accounting Officer & Controller*
2/23/2020	YES	**Vaughan, Christine** *SVP, CFO and Treasurer*

ESTIMATED COST SUMMARY

Description	Amount
Total Project Cost:	$721,846.64
Less Customer Contribution:	$0.00
Net Authorized Cost:	$721,846.64
Retirement:	$0.00
Cost Of Removal:	$144,369.00
Salvage:	$0.00
CWO Total:	$577,477.64

DESCRIPTION/SCOPE

This is part 2 of the Downtown Conversion Project. Circuit 1H1 out of Bridge Street substation will be converted to 13.7/7.97kV. The current spacer out of Bridge Street substation will be fed from one the new Gulf Street 13.8/7.97kV circuits. Storrs Street will be re-insulated and Depot Street and Kennedy Lane will need to be reinsulated and re-conductored. This will provide a back-up to the radial underground that feeds from Storrs Street to South Main Street. The additional scope is to finish the conversion work, connecting circuits to their new circuit positions, and tapping other already installed devices.

The scope of this project has expanded. Additional conversion work is necessary for 1H1 and there are two new 13.8kV circuits instead of one.

Additional work includes: padmount transformer replacements, new switch installations, and building new circuit getaways from the converted Gulf St substation.

In addition to the distribution work to be done, some of the funds in this budget item are referenced in Auth #190198, which is the sub-transmission/374 line right-of-way rebuild portion of the overall Gulf St Conversion Project.

JUSTIFICATION

Development in the city of Concord expected to be in service by summer of 2020 requires infrastructure upgrades.

Two buildings at the corner of S. State St. and Pleasant St. in Concord are in the process of being renovated into apartments and retail space. Modeling shows that the additional load will cause the 2/0 ACSR and #2 Cu to be overloaded in the summer of 2019.

The 2/0 ACSR and the #2 Cu is expected to be loaded to 102% and 114%, respectively, of their summer normal amp rating. Voltage may also be as low as 116V in 2019. Converting the circuit will eliminate these issues and prepare for the conversion to a higher voltage class.

Phase swaps have been completed where possible to defer the conversion to 2020.

NOTES

AUTHORIZATION COMMENTS

CWO Summary

CWO	Description	Amount
20201606	Conversion in Downtown Concord - Part 2	$577,477.64
	Total	$577,477.64

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-71 Witness: Kevin E. Sprague

REQUEST:

Reference Sprague Testimony, discussing Concord Downtown Conversion.

a. Please provide a comparison of the peak loading by expected customer at the time of the decision to expand the system as compared to the most recent seasonal by loading by those customers. See, also, Company response to Staff 1-2 and 2-4 in DE 20-002.

b. Please describe any planned customer additions, including kVA by customer or development, expected for the area served by the Concord Downtown conversion, providing any supporting materials which lead the company to believe those additions will occur.

RESPONSE:

Part a:

The table below identifies the load additions expected at the time of the decision compared to the most recent load of those customers. The table also provides some indication of the status of the customer.

	Proposed (kVA)	In-service?	Previous Year's Recorded Peak Load (kVA)	Notes
18 S Main St	250	Yes	60	Concord theatre (business impacted by pandemic and expects to increase load)
20 S Main St	500	No	-	multi-use restaurants, retail, and apartments in the design phase
5-7 Pleasant St	800	Yes	-	Apartments do not have demand meters. Approximately ½ of units rented at this point
32-34 S Main St	1000	No	-	Discussions in progress with City for funding opportunities
1-5 Depot St	200	No	-	Project schedule delayed due to pandemic
97 Storrs St	500	No	-	Project schedule delayed due to pandemic
80 Storrs St	200	No	-	Development seeking city approval for construction
34-42 N Main St	300	No	-	Mixed use, project schedule delayed due to pandemic
56 N Main St	400	No	-	CVS and mixed use in design phase

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-71 Witness: Kevin E. Sprague

58-68 N Main St	75	Yes	40	Apartment renovations and new penthouse
76-82 N Main St	280	Yes	27	Bank, restaurant, and apartments; only bank in service, rest is active construction
Eagle Square	300	No	-	Office space was to be renovated, but project schedule delayed due to pandemic
Dubois Ave	unknown	No	-	5-7 story mixed use building; conceptual planning phase
18-22 Low Ave	75	Yes	48	Concord brewery upgrade
8-14 Dixon Ave	200	No	-	Status tied to the 97 Storrs St work, project schedule delayed due to pandemic
120-146 N Main St	300	Yes	-	Mixed-use renovations ongoing;

The pandemic had an impact on the timing of the planned load additions. However, the total load increase from 2018 to 2020 is approximately 1,400kVA for 3W3, which supports the need for the conversion.

The Gulf Street conversion project converted the load originally served from 1H1 to 3W1 and the load from 1H6 to 3W3.

Loads at the time of planning:

	2018 Peak Load (MVA)	Expected Additional Load (MVA)	Total Load After Addition (MVA)
1T2	4,698	4,750	9,448
1H1	2,453	2,950	5,403
1H6	1,110	1,800	2,910

2020 peak load and expected additional load:

	2020 Peak Load (MVA)	Expected Additional Load (MVA)	Total Load After Addition (MVA)
3T1	6,054	225	6,279
3W1	3,821	225	4,046
3W3	2,233	-	2,233

Unitil Energy Systems, Inc.
Docket No. DE 21-030
DOE Data Requests – Set 4

Date Request Received: 08/05/2021 Date of Response: 08/19/2021
Request No. DOE 4-71 Witness: Kevin E. Sprague

Part b:

As stated above, the pandemic had an impact on project schedules. The Company had no way of knowing this at the time of the decision. The Company expects the load to continue to increase in the Concord Downtown area as indicated in the table.