MCLANE MIDDLETON BARRY NEEDLEMAN
Direct Dial: 603.230.4407
Email: barry.needleman@mclane.com
Admitted in NH, MA and ME
11 South Main Street, Suite 500
Concord, NH 03301
T 603.226.0400
F 603.230.4448

VIA E-MAIL & HAND DELIVERY

April 9, 2019

New Hampshire Site Evaluation Committee Pamela G. Monroe, Administrator 21 South Fruit Street, Suite 10 Concord, NH 03301

Re: SEC Docket No. 2015-04: Public Service Company of New Hampshire d/b/a
Eversource Energy for a New 115k Transmission Line from Madbury Substation to
Portsmouth Substation
Applicant's Request for a Minor Modification to a Portion of the Underground
Alignment Across the University of New Hampshire Campus

Dear Ms. Monroe:

On April 12, 2016 Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource") filed an Application for a Certificate of Site and Facility ("Application") to the New Hampshire Site Evaluation Committee ("SEC") to construct and operate the Seacoast Reliability Project ("SRP" or the "Project"). On January 31, 2019, the SEC issued an Order and Certificate of Site and Facility with Conditions to construct the Project. As part of the Project, Eversource will install a 115 kV underground transmission line across parts of the University of New Hampshire ("UNH") campus in Durham, NH.

For the reasons discussed herein, Eversource and UNH jointly request that the SEC Administrator approve a minor, non-material modification to the underground alignment across a part of the UNH Campus to accommodate UNH's preferred location of the underground line. As part of its request, Eversource and UNH will also submit the revised design to the New Hampshire Department of Environmental Services ("NHDES") for review and approval.

A. Background on Minor Modification

As part of its Application filed in April 2016, Eversource sought permission from the SEC to construct an underground transmission line across UNH from existing Parking Lot A to a location beyond the newly constructed football stadium. This design was shown on Drawing F10540705 in Appendix 5 of the Application. Prior to filing the Application, Eversource worked with representatives from UNH to design, layout, and secure the necessary property rights to construct the Project underground.

In February 2017, UNH representatives informed Eversource that UNH was planning to construct a new soccer and lacrosse field located in an area that Eversource and UNH had originally proposed to construct the underground alignment. The construction of the new soccer field, which was planned to be covered in artificial turf, was scheduled to begin prior to the conclusion of the SEC proceedings. Due to UNH's updated plans in this area, UNH and Eversource representatives worked collaboratively to revise the proposed underground design to avoid impacts to the newly proposed soccer field using the soccer field design plans that existed at that time. The revised design was submitted to the SEC and NHDES on September 19, 2017 as part of the "Applicants Response to NHDES Status Letter of August 1, 2017". Eversource Drawing F10743002 Sheet 3 of 5 showed the proposed shift to avoid impacts to the proposed soccer field. This design was also provided to the NHSEC on July 27th, 2018 as part of Supplemental testimony, reports and associated materials. Appendix 5b of that submittal contained engineering drawings which showed the revised alignment near the proposed soccer field.

In the fall of 2018 UNH, the University finalized the engineering design of the new field and began construction. However, during the final design phase, UNH made slight modifications and included additional engineering details to the design plans. Such modifications and additions to the field design plans included a finalized drainage design, a slight modification to the field and retaining wall location, and other miscellaneous details.

Based on the new fall of 2018 design, UNH and Eversource representatives met on November 1, 2018 to review the proposed underground transmission line alignment with the asbuilt field location and features. At that time, it was determined that the proposed alignment in the Application would be too close to the new field and facilities to construct in a safe and efficient manner. Since that time, Eversource and UNH representatives have met on a number of occasions to discuss a proposed revised alignment. Eversource and UNH now jointly propose this revised design, which is the University's preferred route. *See* Attachment 1. This revised design avoids the new soccer field and other UNH facilities and provides the University with flexibility for future work on their campus.

B. Description of Minor Modification

The proposed underground design on the UNH campus generally remains unchanged. As described in the Application, from proposed riser structure 22, the underground alignment will follow the edge of the UNH parking Lot A south towards Main Street. The line will pass under Main Street using a jack and bore trenching method as described in the Application. Once the Project crosses Main Street, the Project continues south along the original alignment until approximately station 85+50 (just south of the UNH Field House) as marked on the Revised UNH Engineering Drawings. *See* Attachment 2.

From that location, the new alignment will shift between three and ten feet east to avoid the new soccer field. The distance of the shift varies based on location of the line to the field and an existing methane gas line known as the Ecoline. This three to ten foot shift occurs between station 85+50 and College Brook (approximately station 89+50). The crossing of College Brook

SRP – Applicant's Request for a Minor Modification Page 3

is approximately eight feet closer to the existing Colovos Road Bridge then the previous location. See Attachment 2.

After crossing College Brook, the new alignment will generally be between 5 to 65 feet east of the approved design. This alignment change was also made at the request of UNH, brings the alignment closer to Colovos and Waterworks Road, and provides UNH with more buildable area for any future expansions without impacting the transmission line.

The new alignment will terminate at the originally proposed riser structure location; there is no change to the location of the riser structure. The total length of the revised trench alignment is approximately 835 feet (the total length of underground in this area is approximately 2,100 feet). The construction techniques for this section of the Project will not change and remain as proposed in the Application. The revised alignment is completely within an area that has been previously disturbed and/or is occupied by other utility lines.

C. Potential Impacts Relative to Criteria Under RSA 162-H:16

As described by Eversource in the original Project Application and all supplemental filings, and as determined by the Subcommittee, the Project will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety. The Subcommittee also determined that the Project will not have an undue interference on the orderly development of the region. Eversource and its experts have reviewed the proposed design modifications and has concluded that this minor modification will not have any further adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety, nor will these modifications have an undue interference on orderly development.

1. Aesthetics

The minor modification will not affect the Subcommittee's conclusions on aesthetics. The revised design only slightly modifies the location of approximately 835 feet of the underground portion of the Project across property owned by UNH. No additional tree clearing is needed. Eversource will comply with all requirements of the Certificate of Site and Facility, including, the terms of the Memorandum of Understanding executed with UNH, which requires the development of vegetation screening plans.

2. Historic Sites

As described above, the minor modification will not alter the aesthetics of the UNH campus, and therefore, will not have any indirect effect on above-ground historic resources. In addition, the construction of the Project will not have any direct effect on above-ground historic sites.

Eversource and its experts have conducted extensive field work on the UNH campus to assess whether there may be archeological resources that may be impacted by construction of the

 $\ensuremath{\mathsf{SRP}}-\ensuremath{\mathsf{Applicant}}\xspace$'s Request for a Minor Modification Page 4

Project. Based on this work, Eversource and its consultants concluded that there are no below-ground historic resources that may be affected by this minor modification. No additional test pits or surveys are necessary.

3. Water Quality and the Natural Environment

Due to the revised design, there will be a net reduction in temporary impacts to wetlands by approximately six feet. The minor modification does not include additional tree clearing. Also, as discussed above, Eversource will also notify NHDES about the minor modification and ask the agency for its concurrence.

Public Health and Safety

Since UNH identified the need for a change in the Project route alignment, UNH and Eversource have worked extensively to revise the design. This minor modification was specifically requested by UNH to limit impacts to the new field and other proposed facilities. It will also further avoid or limit impacts to other utilities in the near vicinity. This includes the Ecoline, water lines, sewer and other facilities.

Clearance between the Project and the Ecoline was a primary focus. National Electrical Safety Code ("NESC") Rule 320.B.5 establishes the required separation of electric ducts and gas and other lines that transport flammable material. The Rule states, "[r]adial separation of conduit systems from gas and other lines that transport flammable material shall not be less than 300 mm (12in) and should have sufficient separation from gas and other lines that transport flammable material to permit the use of pipe maintenance equipment." In addition, Eversource standards require a minimum separation of 24 inches which provides a buffer to the code requirement and allows additional room for maintenance of either facility.

As part of the realignment, the underground transmission line was redesigned to maintain a minimum separation of four feet to the Ecoline where the two lines are parallel. In most cases the line is further than four feet. Where the two lines cross, the gas company, Unitil, requires a minimum of one-foot separation with 18 inches of sand around the pipe. As discussed above, the

The new alignment modifies the location and extent of proposed temporary wetland and stream channel impacts in two locations: College Brook and its associated wetland (DS74 and DW74, respectively) and wetland DW69 located south of College Brook. The proposed temporary impacts included in the most recent NHDES Wetlands Permit Application totaled 1,365 square feet (SF) to DS74 (146 SF), DW74 (1,166 SF) and DW69 (53 SF). Following the modifications to the location of the underground cable and associated temporary work areas within the modified easements, the new proposed temporary impacts total 1,359 SF, or a net reduction of 6 SF of temporary stream and wetland impacts. Proposed temporary impacts were reduced at College Brook (DS74) and DW74 by 9 SF and 426 SF, respectively. The shift in the underground cable alignment does result in increased temporary impacts at wetland DW69 (an increase of 429 SF). Overall, the reduction of proposed temporary impacts at College Brook is beneficial to wetland habitat because it reduces the amount of stream channel that will need to be temporarily dewatered during cable installation and it reduces the amount of riparian wetland area to be impacted. The stream and wetlands in the College Brook area are of higher functional significance than the lower quality DW69.

SRP – Applicant's Request for a Minor Modification Page 5

new design will maintain a minimum of 24 inches of separation where the two lines cross per the Eversource standard, which is more restrictive.

These requirements were discussed and approved by both UNH (who owns the Ecoline) and Unitil (who is responsible for the operation and maintenance of the gas line). The revised design location and the existing location of the Ecoline were also laid out by survey and field verified by Eversource, Unitil and UNH representatives to ensure the design complied with the requirements of all parties. Moreover, during construction, Unitil and UNH will have personnel on site to ensure there are no impacts to existing facilities.

These design changes will not materially alter the calculated electric and magnetic fields in the area. The revised design will not alter construction methods or increase traffic impacts. Eversource will comply with all terms and conditions of the Certificate.

5. Orderly Development of the Region

The revisions to the Project alignment across UNH were specifically made at the request of the University. These new design changes will enhance the orderly development of the University to ensure that UNH can effective construct new facilities. Also, as part of this submittal, Eversource requests that you substitute Appendix B from the UNH MOU with Attachment 3 (Revised Appendix B to UNH MOU – Construction Work Zones). These revisions update the Civil Construction Work Zones to accommodate the revised alignment. Lastly, the revised alignment will have no greater effect to any of the subcategories found under pertaining to orderly development.

D. Conclusion

Eversource received a request to revise the alignment by UNH—the underlying property owner. After careful analysis, the alignment revision will not result in any additional impacts. In addition, Eversource will seek review and approval from NHDES, per the conditions of the Certificate.

Eversource respectfully requests that the SEC Administrator approve this minor modification, subject to authorization from NHDES.

Sincerely,

Barry Needleman

BN:amd Enclosure

Cc: SEC Distribution List



Facilities
Office of the Associate Vice President

Ritzman Lab 22 Colovos Road Durham, NH 03824-3515

V: 603.862.2650 F: 603.862.3927 TTY: 7.1.1 (Relay NH)

www.unh.edu/facilities

April 8, 2019

Ms. Pamela G. Monroe Administrator New Hampshire Site Evaluation Committee 21 South Fruit Street Suite 10 Concord NH 03301 Pamela.monroe@sec.nh.gov

Dear Ms. Monroe:

I am writing in support of Public Service Company of New Hampshire d/b/a Eversource Energy's ("Eversource") filing, which seeks approval from the Administrator of the Site Evaluation Committee for a minor, non-material modification to a portion of the Seacoast Reliability Project's ("Project") underground alignment that crosses the University of New Hampshire campus.

UNH and Eversource have worked collaboratively to identify and agree upon a preferred route across the UNH campus. Since the application for the Project was filed with the SEC, the University planned, designed and constructed a new soccer and lacrosse field in the vicinity of the Project's underground route across campus. To avoid impacting the new field and the newly proposed campus facilities, UNH recently requested Eversource review and alter the proposed alignment of the Project.

Eversource has agreed to modify the Project route alignment to accommodate UNH's recent projects. UNH hereby joins in and supports Eversource's request for the SEC Administrator to approve this minor route adjustment, subject to concurrence from the New Hampshire Department of Environmental Services. UNH agrees with Eversource's position that the minor route adjustment will have no new or additional adverse effects from the construction and operation of the Project. UNH respectfully requests that the SEC Administrator approve our joint request to facilitate the construction of the Project on the UNH campus during the 2019 summer break, namely, May 20 to August 23.

Sincerely,

William Janelle

Associate Vice President

Me

UNDERGROUND RISER

STRUCTURE

F107-22 (23)

/115kV F107

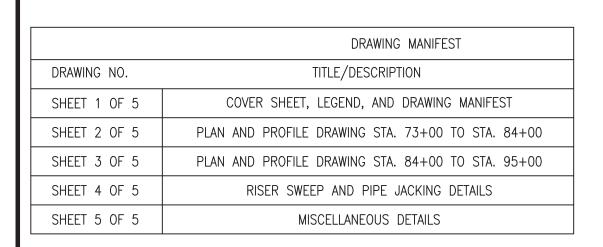
UNDERGROUND

TRANSMISSION LINE

UNDERGROUND RISER

STRUCTURE

F107-23 (24)



LEGEND

ELECTRICAL STRUCTURE LAMP POST WOODEN POST IRRIGATION CONTROL VALVE ELECTRIC BOX TELECOMMUNICATION BOX UTILITY BOX CATCH BASIN CONIFEROUS TREE DECIDUOUS TREE CONCRETE RIP RAP LANDSCAPED AREA CRUSHED STONE SURFACE LEDGE TYPICAL TYP. RET. RETAINING EDGE OF PAVEMENT CONC. CONCRETE TREE LINE SHRUB LINE \mathcal{M} PROPERTY LINES STORM DRAIN OVERHEAD ELECTRIC UNDERGROUND ELECTRIC EXISTING WATER LINE TELEPHONE LINE

PSNH (PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE)

EXISTING SEWER

PROPOSED STORM DRAIN

PROPOSED UNDER DRAIN

PER NHSEC APPLICATION

PERMITTING STRUCTURE NUMBER

STEAM LINE

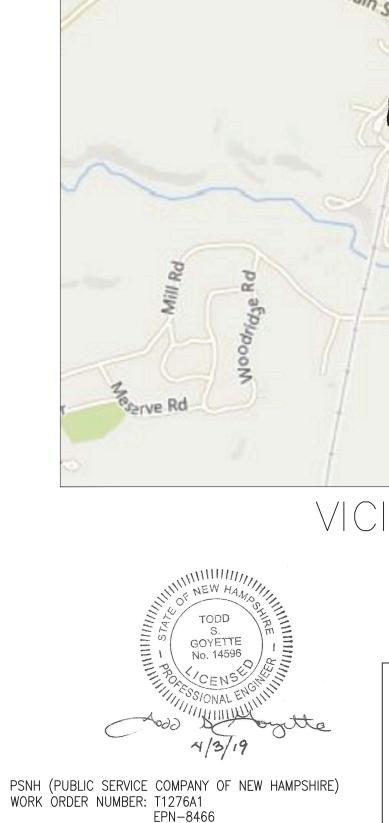
EASMENT

GAS

POWER ENGINEERS
PROJECT ENGINEER: TODD GOYETTE

DESIGN ENGINEER: JOSEPH SPERRY

——— PUD —



POWER ENGINEERS

PROJECT NUMBER: 133007

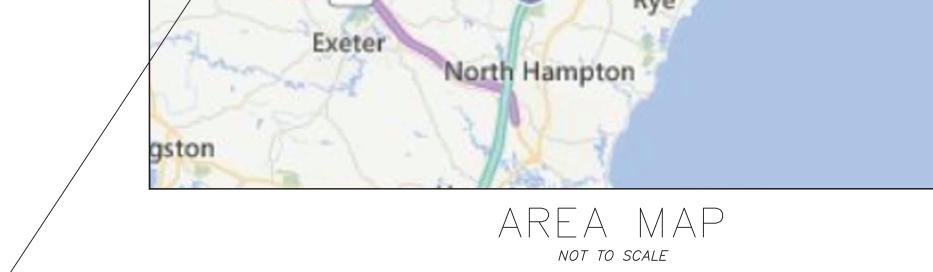
155A

THREE BUSINESS DAYS BEFORE YOU DIG CALL
NEW HAMPSHIRE DIG SAFE SYSTEM, INC
TOLL FREE
1-888-344-7233
Call before you dig.

NOT TO SCALE

108

PRINT DRAWING TO SCALE ON 22"X34" SHEET



Somersworth

Dover

Pease

Greenland

Base Portsmouth

Madbury

Durham

Newmarket

South Berwick

General Notes

- 1. THE PLANIMETRICS, UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. EXISTING AND PROPOSED CONDITIONS OF UNH CAMPUS PROVIDED BY THIGHE & BOND, WITH SUPPLEMENTAL SURVEY BY DOUCET. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK AND OTHER UTILITY LOCATING ACTIVITIES. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-800-344-7233.
- 2. VERTICAL DATUM IS BASED ON NAVD88, HORIZONTAL DATUM IS BASED ON NEW HAMPSHIRE STATE PLANE IN 13. PROPOSED DUCT BANK SHALL MAINTAIN MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 24" PER UTRM US FEET, NAD83
- 3. VERTICAL LOCATION OF SUBSURFACE UTILITY LINES ARE BASED ON ASSUMED DEPTHS USING BEST AVAILABLE INFORMATION AND MAY VARY FROM THE ACTUAL VERTICAL LOCATIONS. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES

 ARE PRESENT TO ALL BUILDINGS.
- 4. DETAIL DESIGN MAY BE OPTIMIZED TO REFLECT ACTUAL CONDITIONS WITH OWNER REVIEW AND ACCEPTANCE.
- 5. ALL WORK SHALL BE PERFORMED WITHIN THE DESIGNATED PROPERTIES AS NOTED ON THE DRAWINGS.
- 6. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER AS DETERMINED BY OWNER AND IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND THE APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS.
- 7. CIVIL CONTRACTOR SHALL HAUL AWAY ALL UNUSED EXCAVATED MATERIAL TO PERMITTED SOIL DISPOSAL SITE PROJECT SPECIFICATIONS, AND THE APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS.
- 8. CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY & ALL UTILITIES AND FACILITIES (INCLUDING THOSE NOT SHOWN ON THE DRAWINGS) DAMAGED DURING CONSTRUCTION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, APPLICABLE UTILITY SPECIFICATION, FEDERAL, STATE AND LOCAL REQUIREMENTS.
- 9. ABANDONED UTILITIES SHALL BE CUT AND CAPPED AS NECESSARY WITH UTILITY OWNER REVIEW AND ACCEPTANCE. ABANDONED GAS LINES SHALL NOT BE CUT.
- 10. CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING BEST MANAGEMENT PRACTICES FOR CONTROLLING EROSION AND SEDIMENTATION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS. CIVIL CONTRACTOR SHALL RESTORE GRADE TO PRE—CONSTRUCTION ELEVATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS.PROPOSED DUCT BANK SHALL MAINTAIN A MINIMUM CLEARANCE OF 2'-6" BETWEEN THE CONCRETE ENCASEMENT AND GRADE, OR AS SHOWN ON THE DRAWINGS.

11. PROPOSED DUCT BANK SHALL MAINTAIN A MINIMUM CLEARANCE OF 2'-6" BETWEEN THE CONCRETE ENCASEMENT AND GRADE OR SHOWN ON THE DRAWINGS.

Mount Agamenticus

Cape Neddick

York Beach

13. PROPOSED DUCT BANK SHALL MAINTAIN MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 24" PER UTR

12. ALL VERTICAL RADII ARE 500' AND ALL HORIZONTAL RADII ARE 500' UNLESS OTHERWISE NOTED ON THE

- 077 TO EXISTING UTILITIES, UNLESS OTHERWISE NOTED ON THE DRAWINGS. CONTRACTOR SHALL NOTIFY OWNER OF ALL UNDOCUMENTED UTILITIES DISCOVERED DURING CONSTRUCTION THAT IMPEDE ON THE REQUIRED CLEARANCES TO THE PROPOSED DUCT BANK.
- 14. PRINTED COPIES ARE NOT DOCUMENT CONTROLLED. CONTRACTOR IS RESPONSIBLE FOR ENSURING PRINTED COPIES ARE THE LATEST REVISION.
- 15. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND APPLICABLE EVERSOURCE UTRM REQUIREMENTS.
- 16. CONSTRUCTION SHALL BE IN ACCORDANCE WITH MEMORANDUM OF UNDERSTANDING BETWEEN EVERSOURCE AND THE UNIVERSITY OF NEW HAMPSHIRE AND TOWN OF DURHAM.
- 17. SEE DRAWINGS F10743001 AND F10705026 FOR CONNECTION CONNECTION DETAILS BETWEEN THE OVERHEAD AND UNDERGROUND LINES. SEE DRAWING F10713401 FOR PHASING OF F107 LINE.
- 18. SEE ENVIRONMENTAL CONSTRUCTION MAPS AND DETAILS FOR ENVIRONMENTAL CONTROLS AND ACCESS LOCATIONS.
- 19. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH SITE EVALUATION COMMITTEE REQUIREMENTS AND CONDITIONS.
- 20. DIMENSIONS OF JACKING AND RECEIVING PITS ARE BASE ON PREVIOUS PROJECTS. FINAL SIZE SHALL BE DETERMINED BY INSTALLATION CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION AND SHORING.
- 21. ALL WORK SHALL BE COMPLETED WITHIN THE EVERSOURCE PERMANENT AND CONSTRUCTION EASEMENT AREAS SHOWN ON THE PLANS.



1 ISSUE FOR CONSTRUCTION T1276A1 EPN-8466 3-1-19 REO TSG TSG NO. REVISION DATE DRWN CHKD APPRV.

/ERSOURCE ENERGY

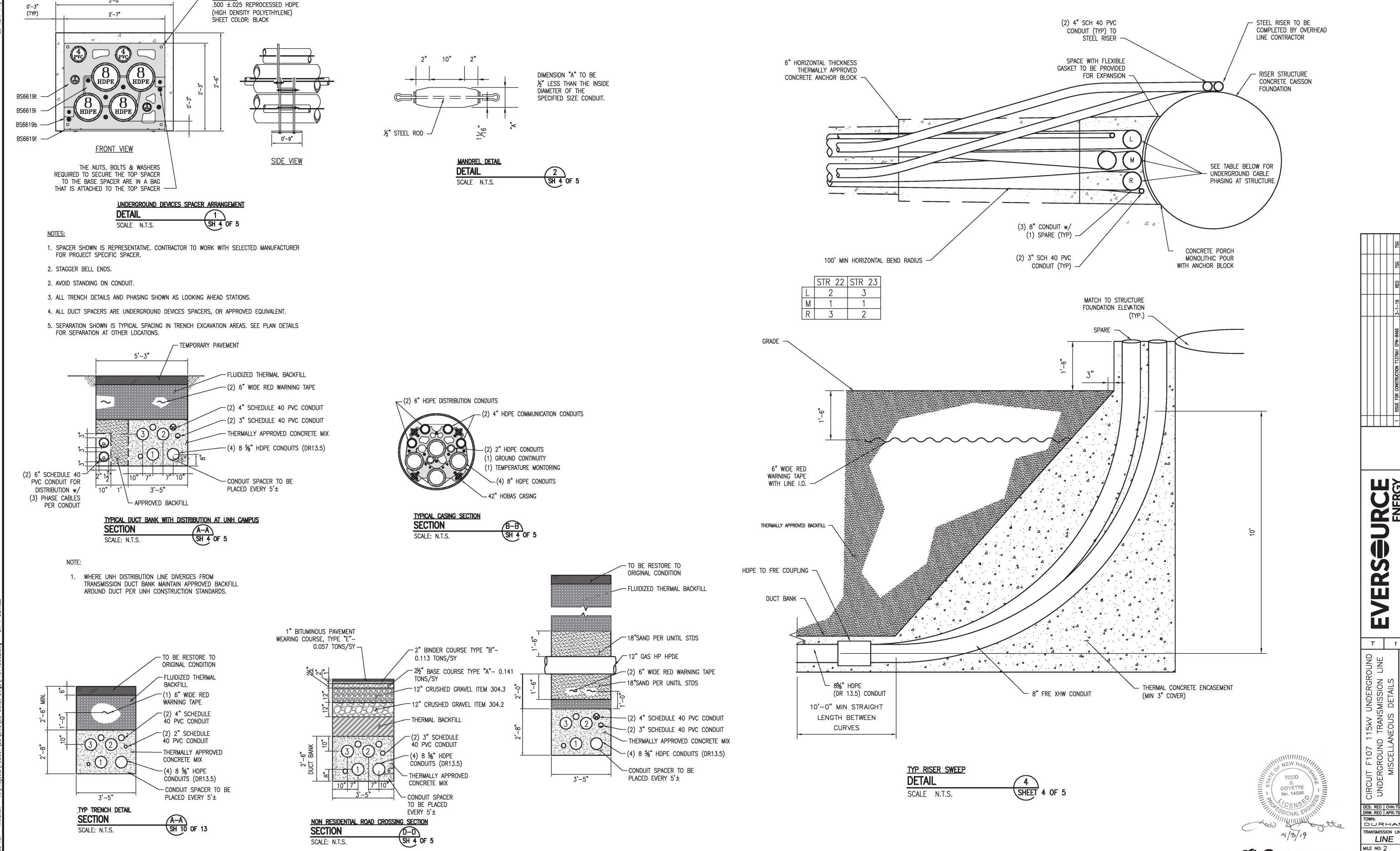
ON LINE

CIRCUIT F107 115kV GROUND TRANSMISSION AN AND PROFILE COVI

DES: REO | CHK:TSC DRW: REO | APR:TSC TOWN: DURHAN

MILE NO: 2
DISCIPLINE/SHT NO.

SHEET 1 OF 5



PRINT DRAWING TO SCALE ON 22"X34" SHEET

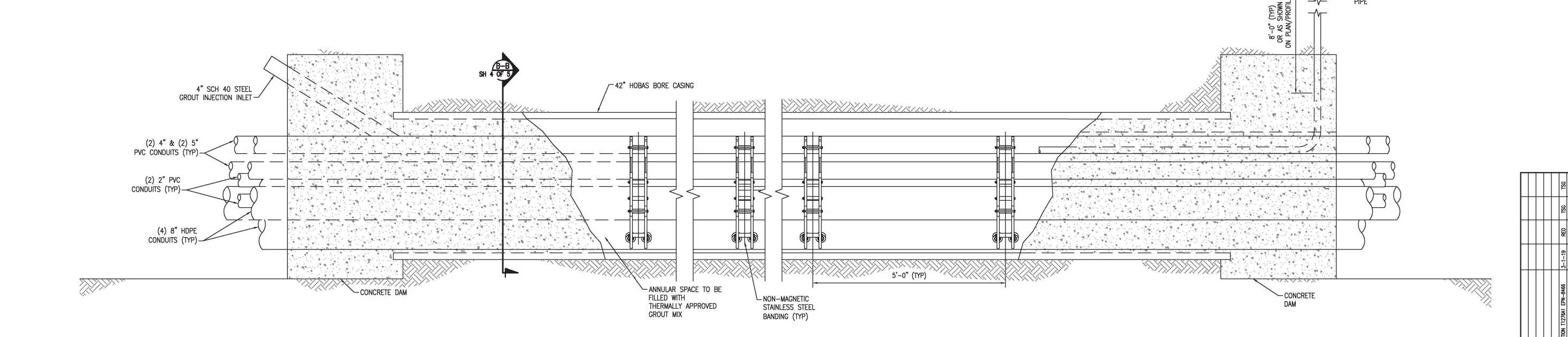
DISCIPLINE/SHT NO SHEET 4 OF 5 F10743002

DURHAN

TRANSMISSION LINE

LINE

Ш



TYP PIPE JACKING DETAIL

DETAIL

SCALE N.T.S.

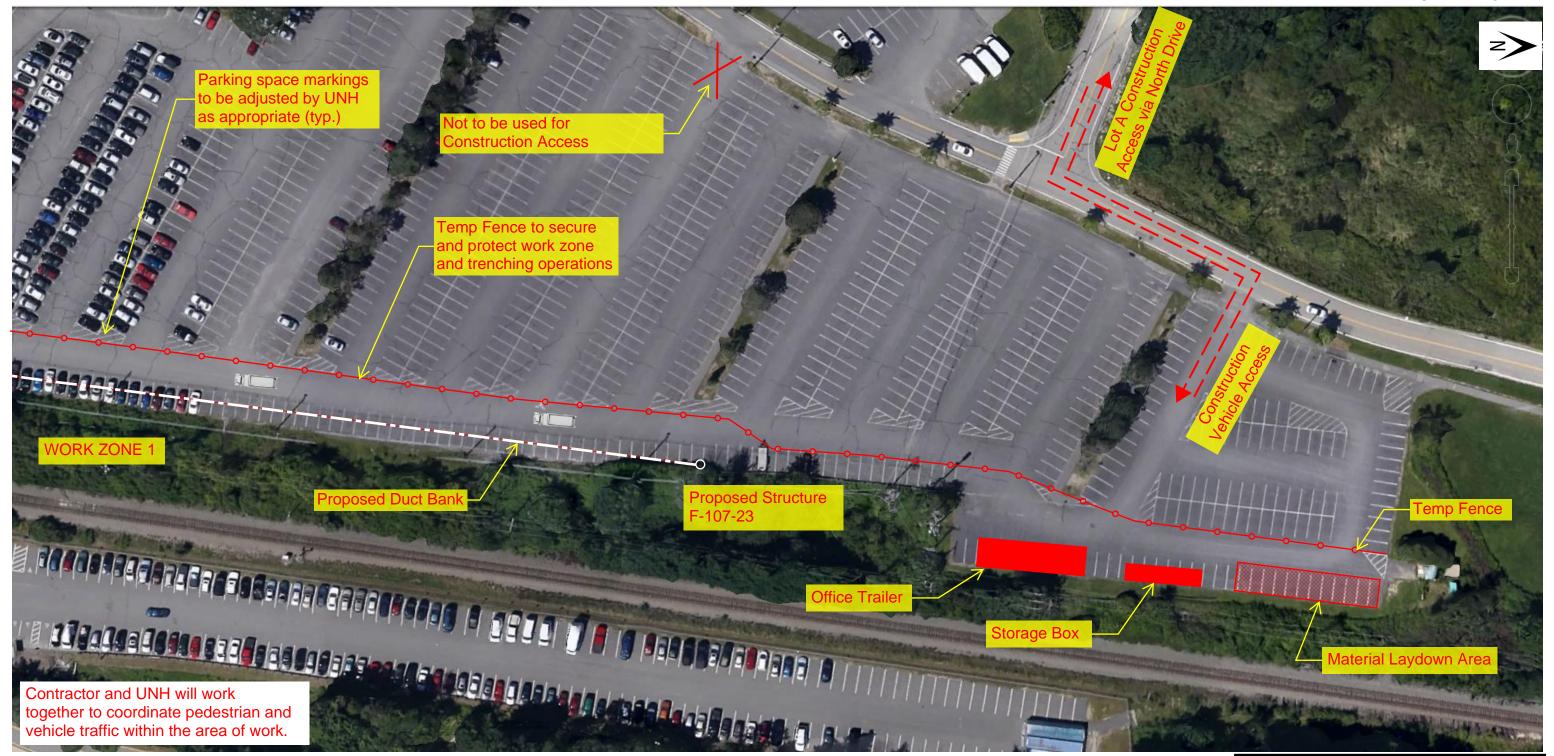
EVERSOUR

T F107 115kV UNDERGROUND A RGROUND TRANSMISSION LINE AND PIPE JACKING DETAILS LACKING DETAILS

DES: REO CHK:TSG
DRW: REO APR: TSG
TOWN:
DURHAM
TRANSMISSION LINE:
LINE
MILE NO: 2
DISCIPLINE/SHT NO.

SHEET 5 OF 5 F10743002

POWER ENGINEERS

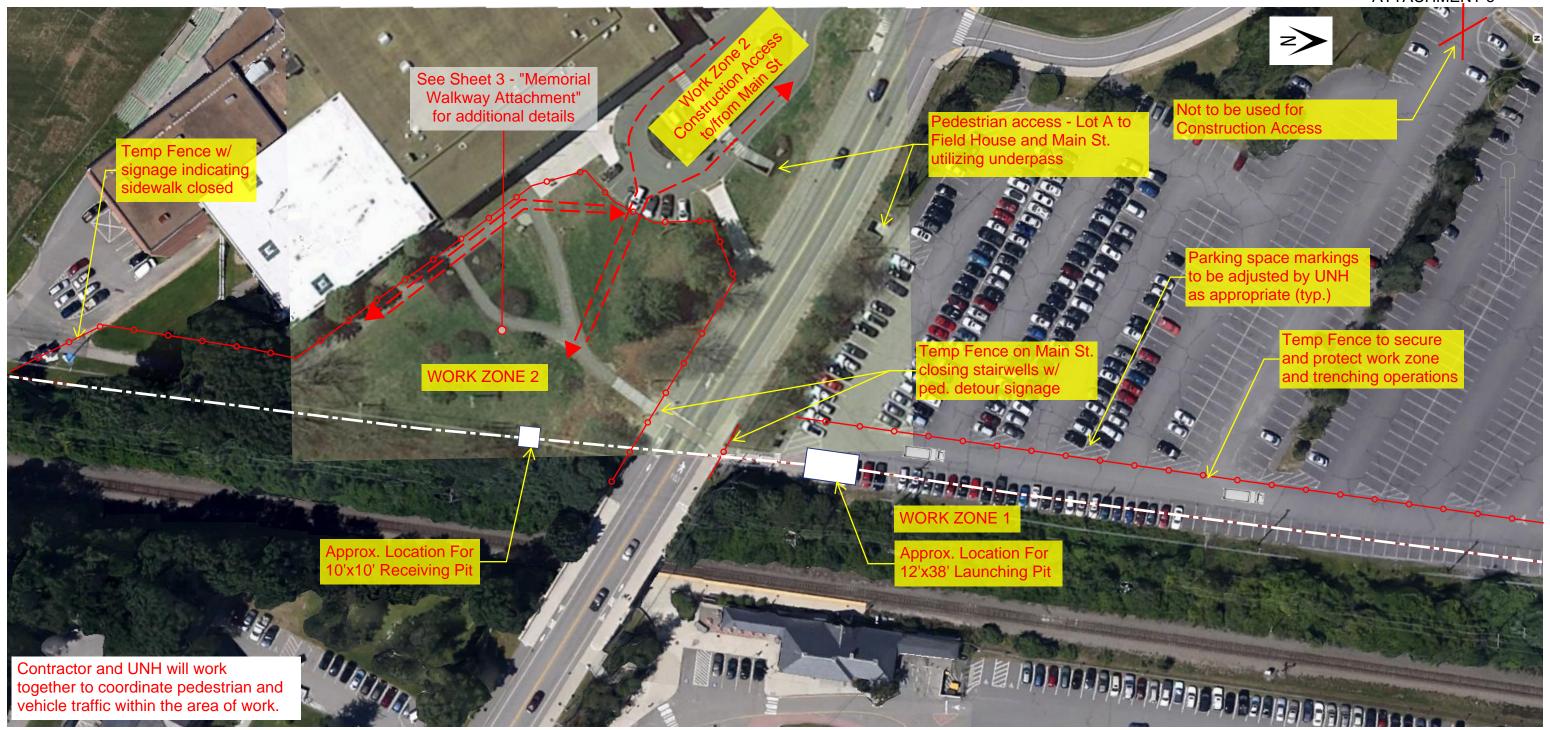


ENERGY

SEACOAST RELIABILITY PROJECT CIRCUIT F-107 115kV UNDERGROUND TRANSMISSION LINE

UNH CAMPUS - DURHAM, NH

APPENDIX B: CIVIL CONSTRUCTION WORK ZONE SHEET 1 OF 5

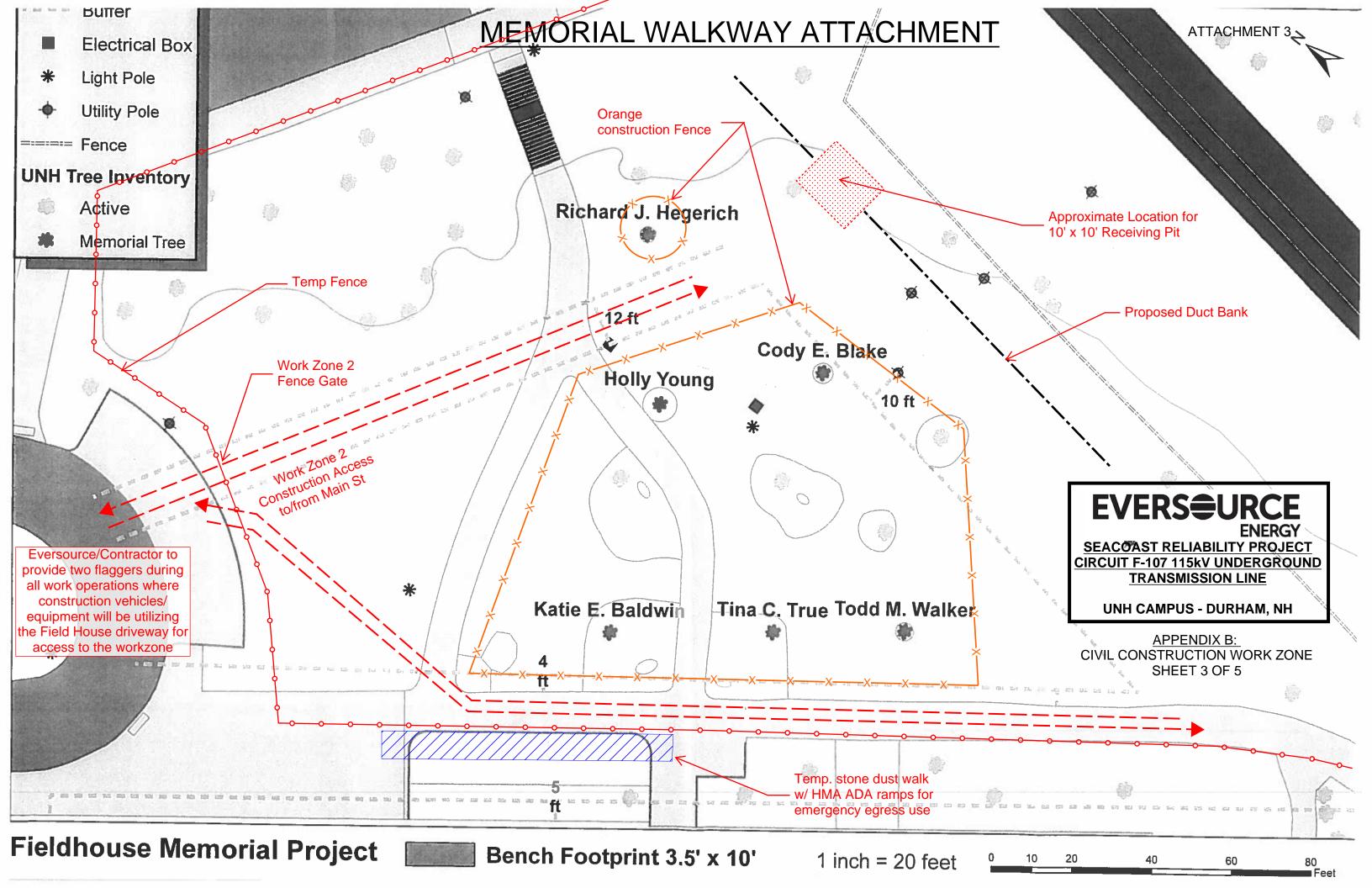


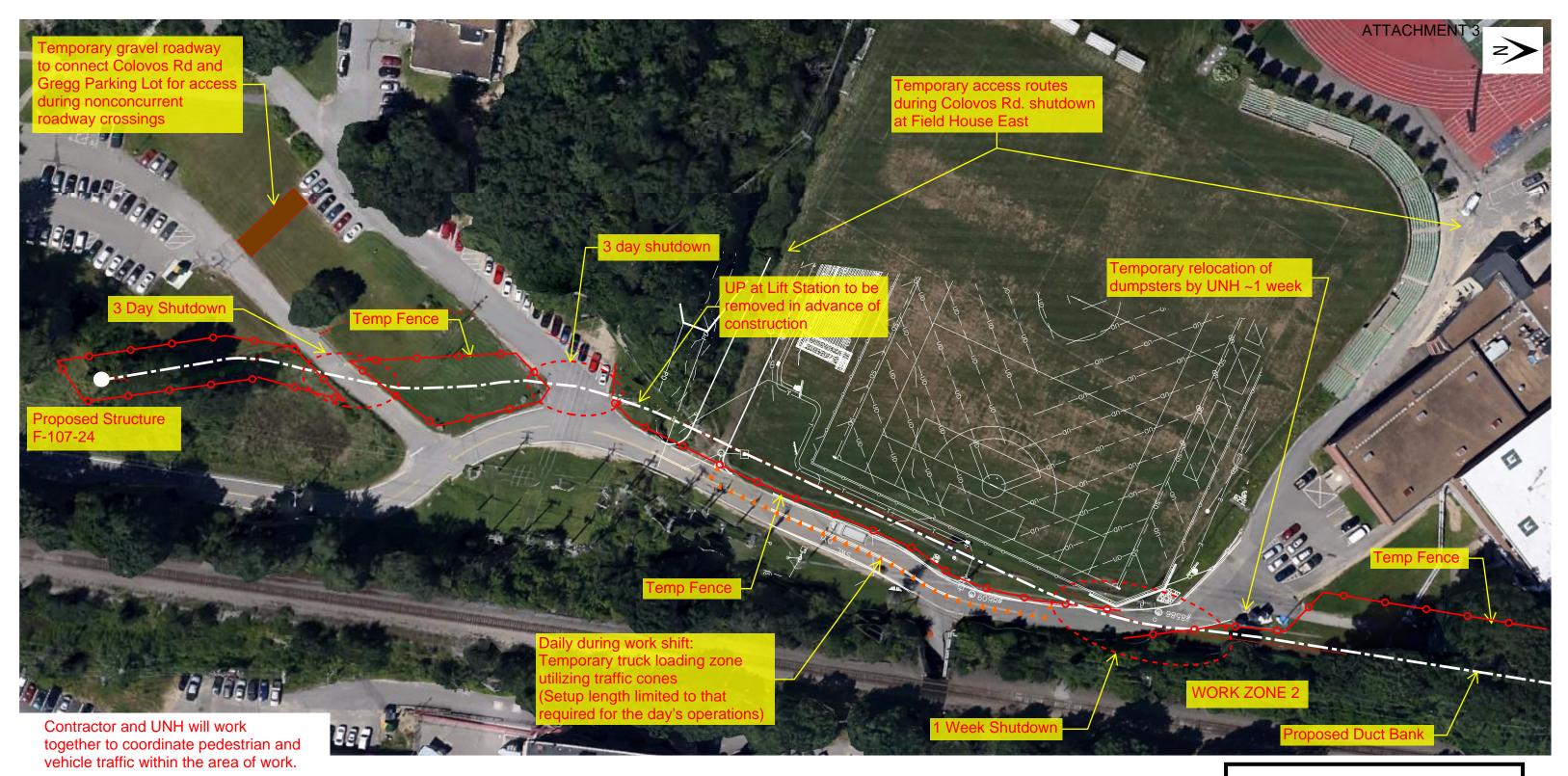
ENERGY SEACOAST RELIABILITY PROJECT

CIRCUIT F-107 115kV UNDERGROUND
TRANSMISSION LINE

UNH CAMPUS - DURHAM, NH

APPENDIX B: CIVIL CONSTRUCTION WORK ZONE SHEET 2 OF 5





ENERGY

SEACOAST RELIABILITY PROJECT
CIRCUIT F-107 115kV UNDERGROUND
TRANSMISSION LINE

UNH CAMPUS - DURHAM, NH

APPENDIX B: CIVIL CONSTRUCTION WORK ZONE SHEET 4 OF 5



ENERGY

SEACOAST RELIABILITY PROJECT CIRCUIT F-107 115kV UNDERGROUND TRANSMISSION LINE

UNH CAMPUS - DURHAM, NH

APPENDIX B:
CIVIL CONSTRUCTION WORK ZONE
SHEET 5 OF 5