



Electronic Transmittal Form for DEEP Remediation, LUST, and PCB Secure File Transfer (SFT)

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
REMEDICATION DIVISION, PCB PROGRAM, AND
LEAKING UNDERGROUND STORAGE TANK COORDINATION PROGRAM

www.ct.gov/deep

This Electronic Transmittal Form must be completed and included as the cover sheet of your electronic document when uploading a document to the Connecticut SFT website. Requirements for Transmittals through the SFT website:

- Documents submitted through the SFT website must include all applicable figures, tables and laboratory data.
- Files must be formatted as PDF/A and use the appropriate naming convention:
 - For Remediation Filings: **REM_REMID #_SiteAddress_Town_DocumentType_DateofDocument**
 - For LUST Filings: **LUST_SiteAddress_Town_AbbreviationForDocumentType_DateofDocument**
 - For PCB Filings: **PCB_SiteAddress_Town_AbbreviationForDocumentType_DateofDocument****Example:** LUST_1MainStreet_Hartford_ESA_01-01-2001
Note: For "AbbreviationForDocumentType" use appropriate abbreviation at [Transmittal of Documents](#)
- **If no Rem ID assigned (new filing) or REM ID is unknown leave field blank**

Part I: Primary Recipient*: Remediation Program (* required)

For Remediation documents: Primary Program*: Other Remediation Program Rem ID*: 15092	For PCB/LUST documents: UST Facility ID: 105-1820 (if applicable) Spill Case Number: 202203368 (if known)
---	---

Part II: Site Information

Site Name*: 49 Lyme Street		
Site Address*:		
City/Town*: Old Lyme	State: CT	Zip Code: 06371
Secondary Programs (complete as many as applicable for this document):		
Program: Significant Environmental Hazard	Project ID: 1230	
Program: Other Remediation Program	Project ID: 23-001	
Program: Select Secondary Program	Project ID:	
Program: Select Secondary Program	Project ID:	
Provide Project ID for each secondary program if it is known. Each program has a unique ID (i.e. Rem ID, Spill Case #, UST Facility ID, etc.)		

Part III: Document Information (document type required for appropriate program[s] only)

Remediation*: Correspondence
LUST/PCB*: LUST/PCB Document
Type Date of Document*: 03/28/2024 Version: Final

Part IV: Submitter Information

Name*: Turner Environmental, LLC
E-mail*: turnerenviro@att.net
Name of company/business this document is being submitted on behalf of: *
Region 18 Schools

TURNER ENVIRONMENTAL, LLC

P.O. Box 581

East Lyme, CT 06333

(860) 705-8704

March 28, 2024

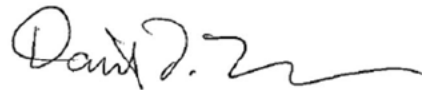
Moises Torrent
Department of Energy and Environmental Protection
Emergency Response and Spill Prevention Division
79 Elm Street
Hartford, Connecticut 06106-5127

Re: Regional School Board District 18
Consent Order Number COWSERU
23-001 Monthly Progress Report March

Dear Mr. Torrent:

Turner Environmental, LLC has been working on the oil spill response for Region 18 in Old Lyme. Pursuant to Section B.2. of Consent Order Number COWSERU 23-001 please find our Progress Report and the required certification page for this submittal. Please feel free to contact me at (860) 705-8704 if you have any questions.

Sincerely,
Turner Environmental, LLC



David T. Turner, L.E.P.

Attachments – Certification Page COWSERU 23-001
March 2024 Update

cc: Ian Neviasher
Ronald Turner
Ann Catino

CERTIFICATION REQUIRED BY CONSENT ORDER COWSERU 23-001

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

Turner Environmental LLC

David T. Turner

Signature Name

(Print)/Title: David Turner, LEP

Date: 3-28-2024

Regional School District No. 18

Jan Neviasek

Signature

Name (Print): Jan Neviasek

Date: March 28, 2024

March 28, 2024 Update

Summary of Tasks Completed Pursuant to Consent Order COWSERU 23-001

Region 18, Lyme-Old Lyme Middle School

Turner Environmental has continued to work on the investigation and clean-up of the oil spill at Lyme-Old Lyme Middle school. In March, the primary tasks involved: operation of the *Pump and Treat* groundwater remediation system including a carbon change of the primary carbon vessel, off-site drinking water sampling, a round of quarterly groundwater sampling and installation of two additional monitoring wells.

The access agreements with the adjacent private property owners at [REDACTED] to install proposed additional monitoring wells was finalized effective February 29, 2024. Two additional monitoring wells were installed on March 27, 2023, on these properties. These wells were developed upon installation but have not been surveyed or sampled. These two new monitoring wells adjacent to [REDACTED] will be surveyed and sampled in early April.

All existing monitoring wells, including the three existing off-site wells, were resampled on March 24, 2024. Samples have been submitted to the laboratory and results are pending. A summary table of all groundwater monitoring from May 2023 to the present (to the extent results have been received) is provided in Table 1.

The site location is shown in Figure 1 including the location of the existing and the recently installed monitoring wells. Groundwater elevations and flow directions from the March groundwater sampling event are shown in Figure 2.

Nearby shallow drinking water wells were resampled on February 21, March 21 and 22, 2024. Further details are subsequently provided.

Off-site Drinking Water Wells

Drinking water wells at [REDACTED] were resampled on February 21, 2024, and results of the February analyses are attached. One well at [REDACTED] had a detection of ETPH at 0.17 mg/L (below the ETPH clean-up criteria). No VOCs were detected in that sample. The [REDACTED] drinking water well was resampled on March 6 and analyzed for VOCs, ETPH and PAHs. No compounds were detected in the March 6 sample.

These drinking three water wells were again re-sampled on March 21 and 22, 2024 for VOCs and ETPH. No compounds were detected in any of the drinking water samples. Copies of the drinking water well analytical reports are attached to this update letter.

Figure 3 shows the nearby drinking water wells, the monitoring well network and location of the plume based on the information collected and sample results received to date.

Groundwater Pump and Treat System

As previously reported the pump and treat system was installed during the second week of September and started operation on September 18, 2023. The general location of treatment system components is shown on Figure 4. The compressor and pump skid are in the boiler room. The treatment system itself, including the oil/water separator, transfer pump, controls, bag filters and carbon vessels are located in a "conex box" located just outside the eastern wall of the boiler room.

Since start-up in mid-September over 415,000 gallons of water have been collected and treated. The current pumping rate is approximately 2,400 gallons per day. Sampling and analyses for General Permit limits was completed and results in March showed a slight exceedance with one VOC, acetone detected at 41 ug/L in DSN 001-1. No other VOCs were

detected in the sample. The general permit limit for VOCs is 10 ug/L. ETPH was detected at 0.204 mg/L in the discharge sample, that concentration is below the respective discharge permit limit of 5.0 mg/L for ETPH.

The acetone detection was reported to the CT DEEP both verbally and a 5-day written report was also submitted. The breakthrough detection of acetone signaled that the carbon filter is aging and requires replacement.

The carbon in the primary vessel was replaced with new carbon on March 15, 2024. The newly replaced carbon became the secondary polish vessel, and the former secondary vessel is now the primary carbon vessel. A compliance sample was collected on March 25, 2024. Results are still pending.

The treatment system is currently pumping from wells RW-11, RW-10 and RW-7 which includes the former holding tank area and boiler room where free product has been observed and where ETPH concentrations are the highest.

The treatment system is set up with three air operated pneumatic pumps. These pumps are currently set-up in RW-11 (former holding tanks area), RW-10 (southern portion of the boiler room) and RW-7 (northernmost portion of the boiler room). The intakes of these wells are currently set to extract water from 2 to 3 feet below the standing water table.

In February amounts of free product (FP) continue to be observed in some of these wells. Oil absorbent "pigs" continue to be used to recover FP from the recovery wells. Oil is collected by wringing out these pigs approximately twice per week and measuring the amounts of oil recovered. In October approximately 2.5 L of FP was recovered from the wells. In November approximately 3.7 L of additional FP were recovered. In December just over 1.0 L of FP was recovered from the oil absorbent pigs. In January approximately 1.2 L of FP was recovered. In February an additional 3.25 L was recovered. In March 4.9 L of FP has been recovered. In general, the majority of FP is being recovered from RW-7 which is in the northwestern portion of the boiler room.

We also estimate that over 2.0+ L of "dissolved" petroleum was removed from impacted groundwater pumped through the treatment system.

During the operational cycle recovery well drawdowns are approximately 1.5 feet. Water table rebound occurs relatively quickly in these wells in the range of several minutes. Overall, the water table in the general vicinity of the pumping wells is lowered approximately 0.5 to 1.0 feet below ambient levels. Turner is now adjusting its operation to have more constant pumping from the wells to increase drawdown and the radius of influence around these wells. Water tables continue to be highly influenced by precipitation events. In March significant rainfall has increased the water table elevations by approximately one to two feet above February lows.

Groundwater Monitoring

Groundwater monitoring was performed on all existing monitoring wells on March 24 using Low Flow Sampling Methods. Twenty-one monitoring wells were sampled. These samples were submitted to York Analytical for analyses of VOCs by EPA Methos 8260, ETPH and PAHs. Results are expected to be delivered in the beginning of April.

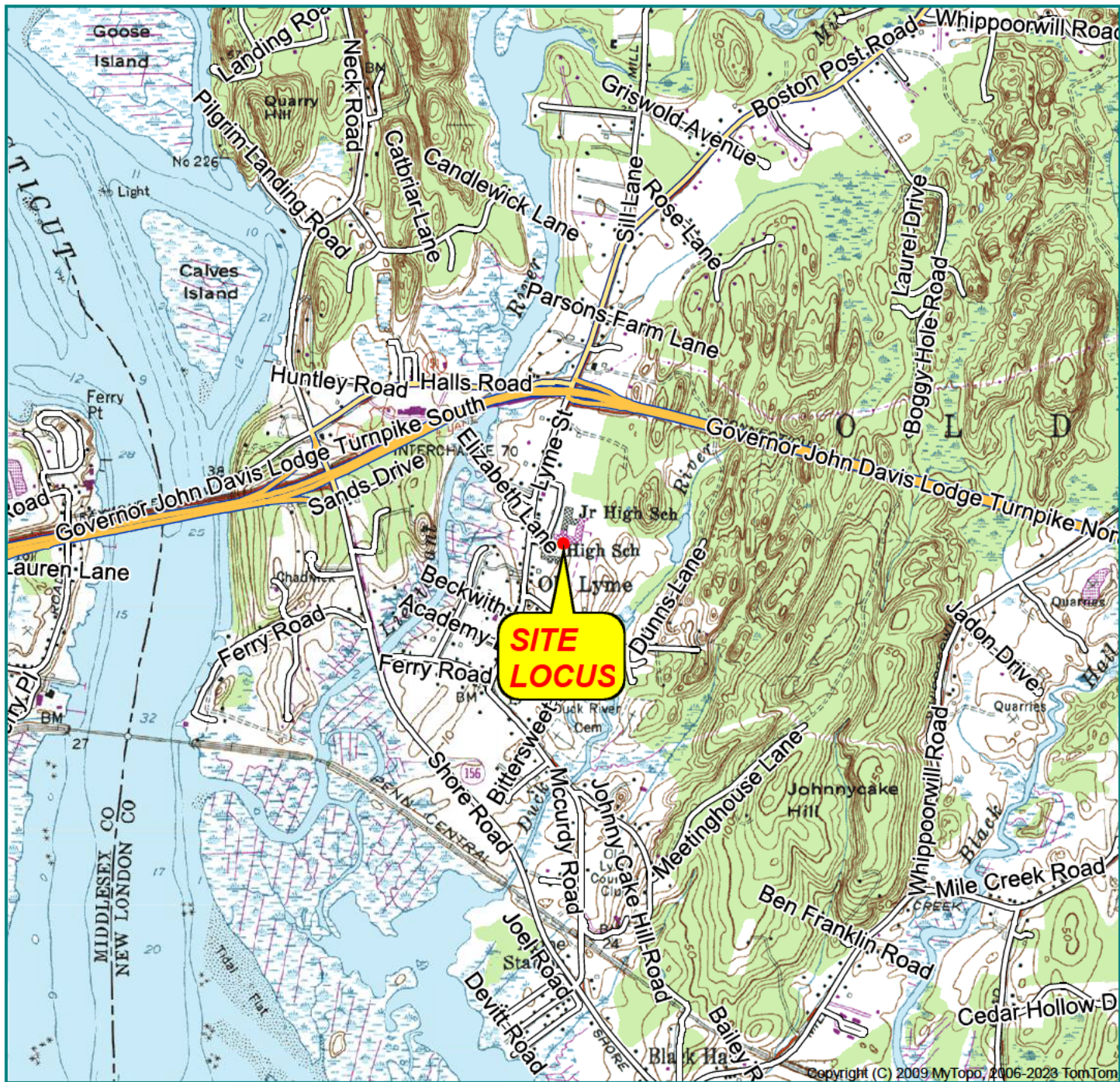
Respectfully submitted,

TURNER ENVIRONMENTAL, LLC



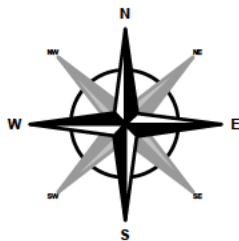
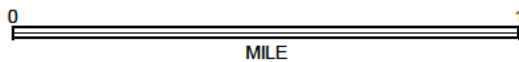
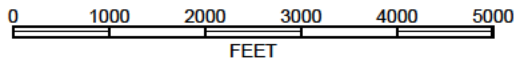
David T. Turner, LEP
Attachments

Figures



OLD LYME Topographic 1958 41072-C3-TF-024 National Geodetic Vertical Datum 1929

SCALE 1:24000



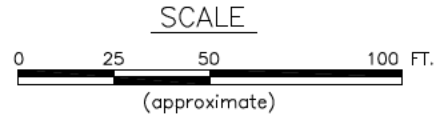
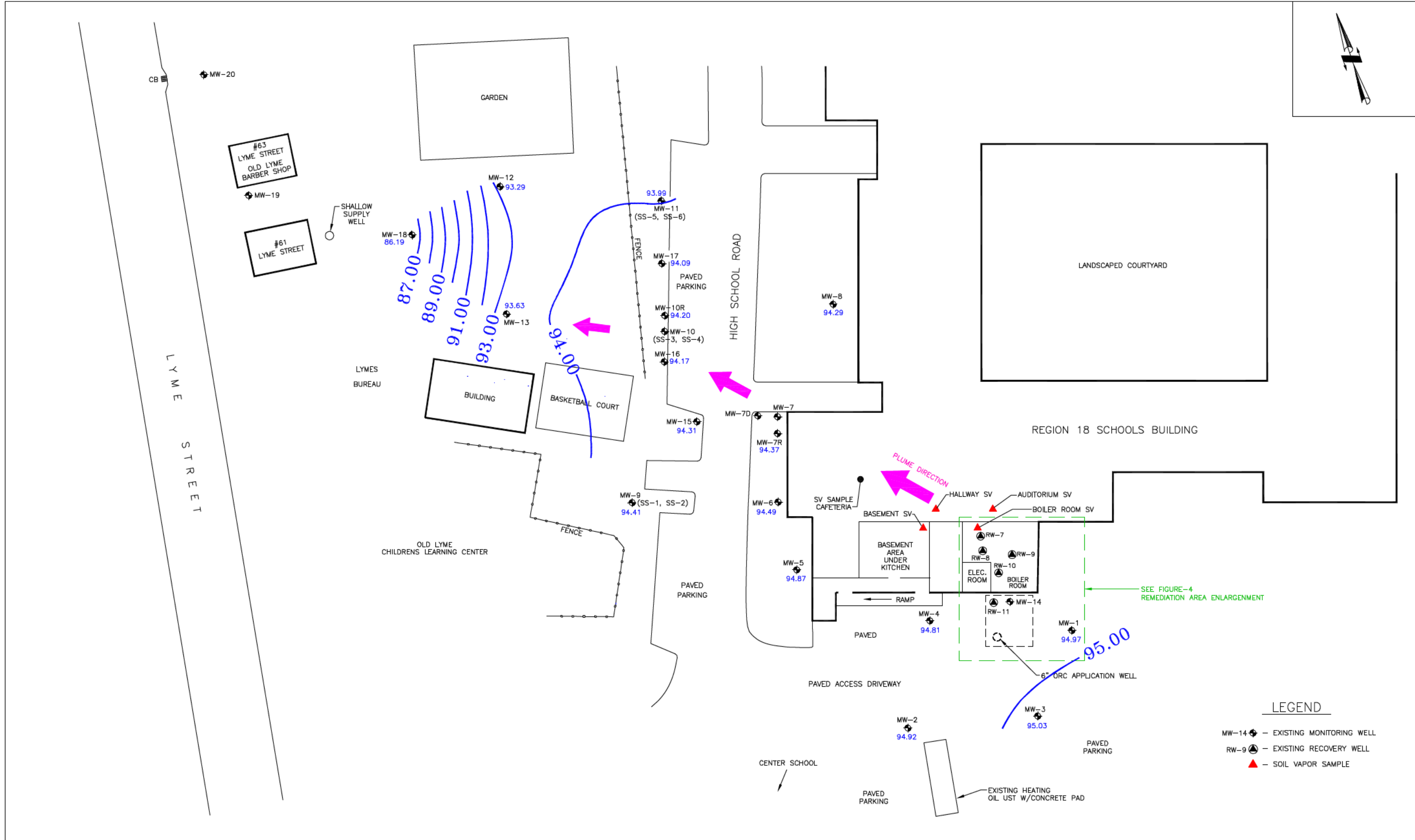
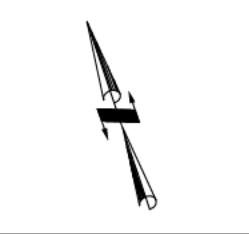
Site Coordinates:
041° 19' 04.35" N, 072° 19' 42.04" W

Turner Environmental LLC
P.O. Box 581, East Lyme, CT 06333
(860) 705-8704 turnerenviro@att.net

Site Location:
47 Lyme Street
New London County,
Old Lyme, CT

Figure-1
Site Locus Map

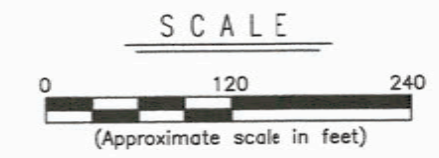
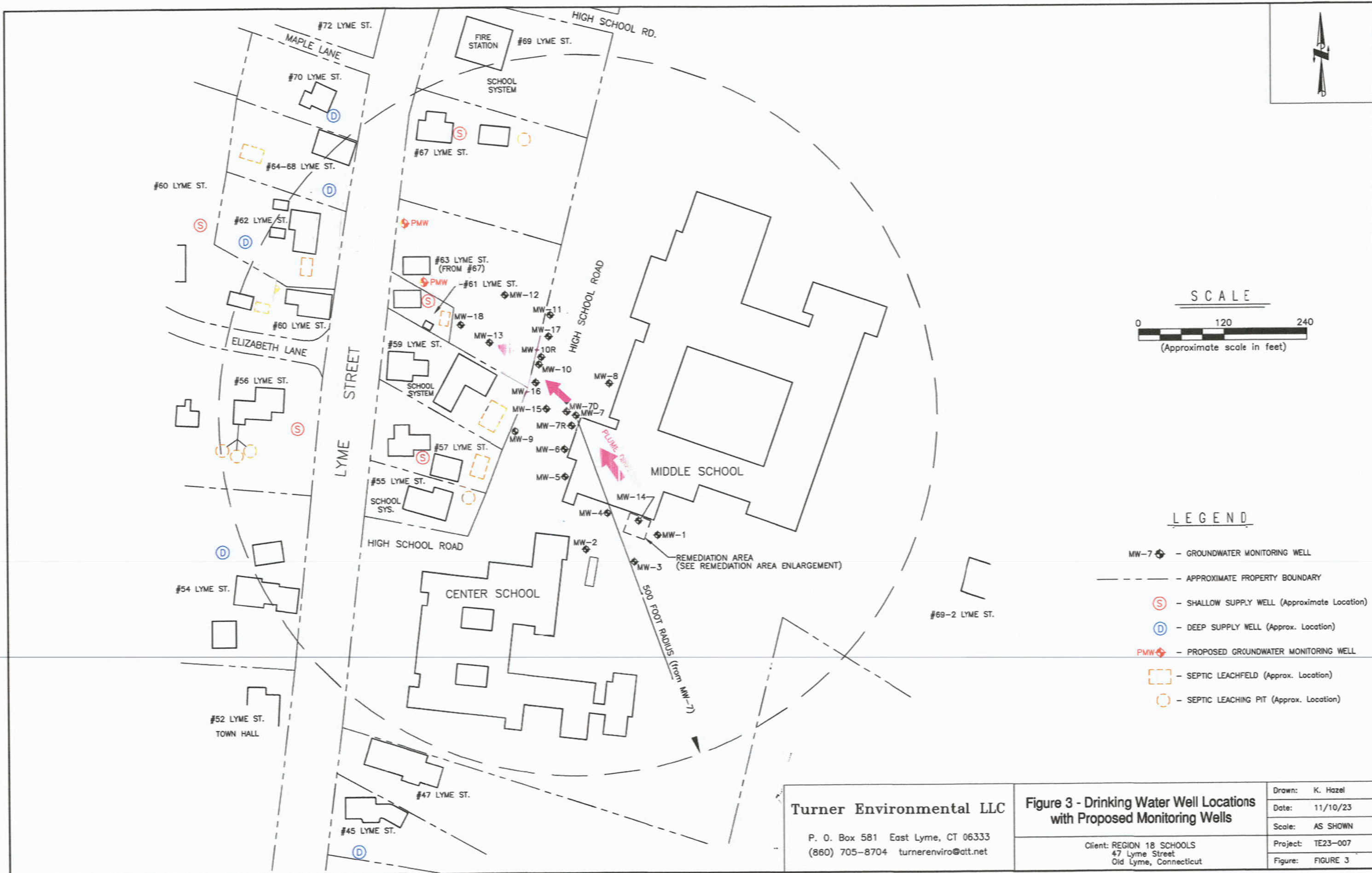
Project: TE 23-007 Date: 3/9/23



LEGEND

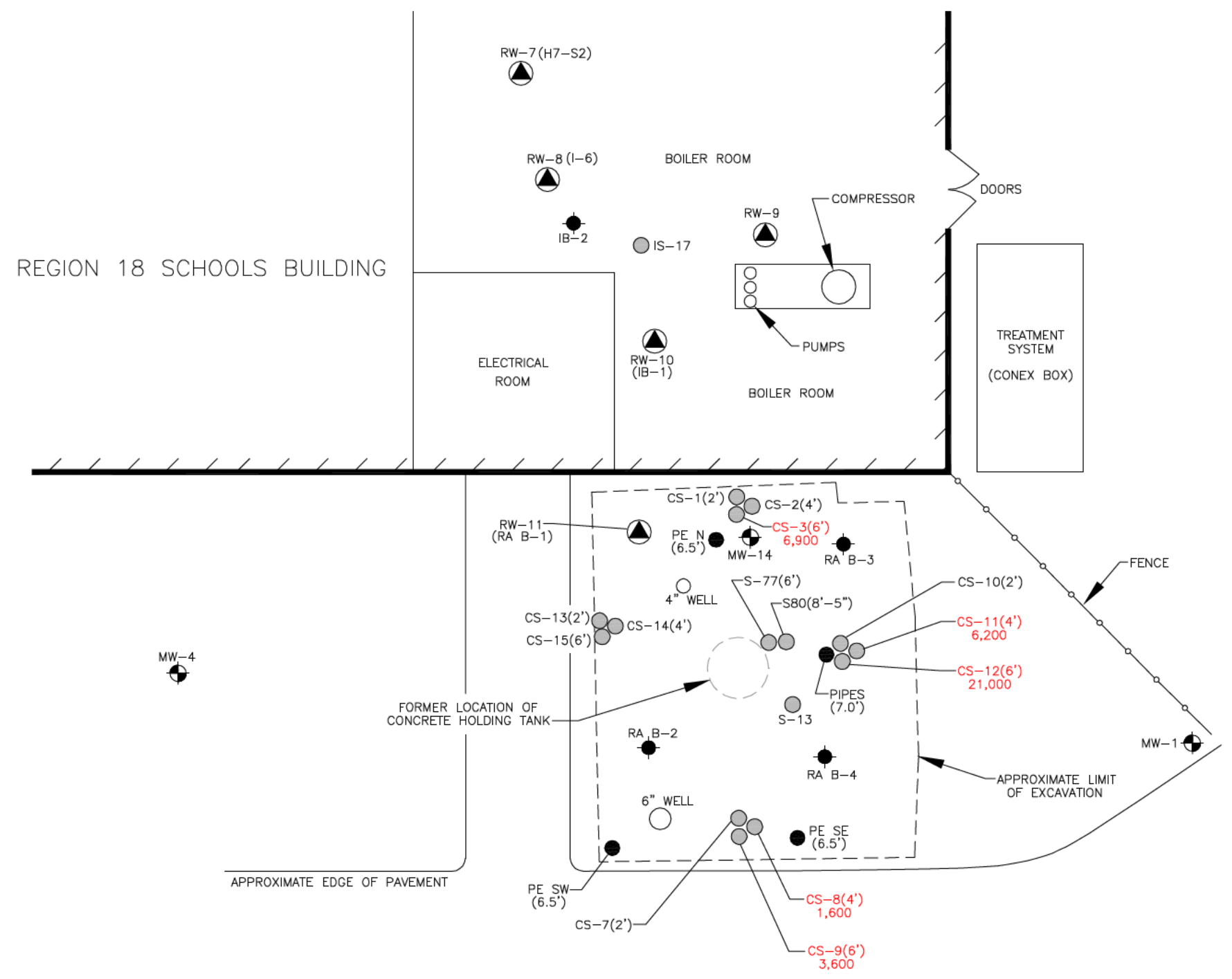
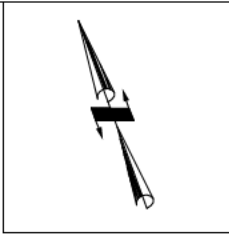
- MW-14 - EXISTING MONITORING WELL
- RW-9 - EXISTING RECOVERY WELL
- SOIL VAPOR SAMPLE

<p>Turner Environmental LLC</p> <p>P. O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net</p>	<p>Figure 2 - Groundwater Contours (3/24/24 gauging data)</p>	<p>Drawn: K. Hazel</p>
	<p>Client: REGION 18 SCHOOLS 47 Lyme Street Old Lyme, Connecticut</p>	<p>Date: 3/30/24</p> <p>Scale: AS SHOWN</p> <p>Project: TE23-007</p> <p>Figure: FIGURE 2</p>

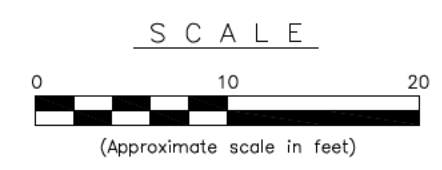


- LEGEND**
- MW-7 - GROUNDWATER MONITORING WELL
 - - - - - APPROXIMATE PROPERTY BOUNDARY
 - SHALLOW SUPPLY WELL (Approximate Location)
 - DEEP SUPPLY WELL (Approx. Location)
 - PMW - PROPOSED GROUNDWATER MONITORING WELL
 - SEPTIC LEACHFIELD (Approx. Location)
 - SEPTIC LEACHING PIT (Approx. Location)

Turner Environmental LLC P. O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviron@att.net	Figure 3 - Drinking Water Well Locations with Proposed Monitoring Wells	Drawn: K. Hazel Date: 11/10/23 Scale: AS SHOWN
	Client: REGION 18 SCHOOLS 47 Lyme Street Old Lyme, Connecticut	Project: TE23-007 Figure: FIGURE 3



- LEGEND
- CS-12 (6.0) 21,000 - SOIL SAMPLE LOCATION OBTAINED BY KROPP ENVIRONMENTAL CONTRACTORS, INC. (August 2022)
 - - DEPTH OF SAMPLE
 - - SOIL SAMPLE DATA ABOVE RSR CRITERIA (IN PPM)
 - PE PW (7.0') - SOIL SAMPLE LOCATION OBTAINED BY TURNER ENVIRONMENTAL LLC (March 17, 2023)
 - - DEPTH OF SAMPLE
 - ⊕ - GROUNDWATER MONITORING WELL
 - ⊕ - RECOVERY WELL
 - - SOIL BORING



<p>Turner Environmental LLC P.O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net</p>	<p>Figure 4 Remediation Area Enlargement</p>	<p>Drawn: K. HAZEL Date: 9/24/23 Scale: As Shown Project: TE 23-007 Figure: FIGURE-4</p>
	<p>Address: 49 Lyme Street Town of Old Lyme, New London County, Connecticut</p>	

Tables

80 Lupes Drive
Stratford, CT 06615

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cet1@cetlabs.com

Client: Mr. David Turner
Turner Environmental, LLC
PO Box 581
East Lyme, CT 06333

Analytical Report

CET# 24B0544

Report Date: March 04, 2024
Project: Region 18 Schools, Old Lyme
Project Number: TE-23-007
PO Number: Region 18

Connecticut Laboratory Certificate: PH 0116
Massachusetts Laboratory Certificate: M-CT903
Rhode Island Laboratory Certificate: 199

New York NELAP Accreditation: 11982
Pennsylvania Laboratory Certificate: 68-02927

