

TURNER ENVIRONMENTAL, LLC

P.O. Box 581

East Lyme, CT 06333

(860) 705-8704

February 29, 2024

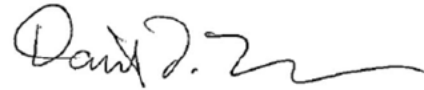
Moises Torrent
Department of Energy and Environmental Protection
Emergency Response and Spill Prevention Division
79 Elm Street
Hartford, Connecticut 06106-5127

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

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
February 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: Feb. 29, 2024

Regional School District No. 18

Jan Neviasek

Signature

Name (Print): Jan Neviasek

Date: Feb. 29, 2024

February 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 the Lyme-Old Lyme Middle school. In February, the primary tasks involved: operation of the *Pump and Treat* groundwater remediation system and off-site drinking water sampling. A revised Additional Scope of Study for the installation of additional off-site monitoring wells to further evaluate the extent of the groundwater plume was submitted to the Connecticut Department of Energy and Environmental Protection (CT DEEP) on January 25, 2024.

The access agreement with the adjacent private property owners to install proposed additional monitoring wells was revised and re-sent to the neighboring property owners on February 20, 2024. We are awaiting response from the neighbors. Existing and additional proposed wells will be sampled as soon as the access agreement is finalized and notifications have been made. Drilling tasks can be scheduled as soon as the agreement is finalized.

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

Three nearby shallow drinking water wells were resampled on February 21, 2024. Results will be provided when received.

A summary table of the groundwater monitoring from on-site monitoring wells for December 2023 and previous sampling events is provided in Table 1. Results of analyses for monitoring wells and Recovery Wells obtained in December are lower than results for the corresponding wells obtained in September.

Off-site Drinking Water Wells

Drinking water wells at [REDACTED] were resampled on January 24, 2024. The samples were submitted for analyses for VOCs and ETPH. No contaminants were detected in any of the drinking water samples. A copy of the laboratory report is provided in Attachment A. These wells were resampled on February 21, 2024, results are pending.

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 330,000 gallons of water have been collected and treated. The current pumping rate is approximately 2,000 gallons per day. Previous sampling and analyses for General Permit limits was completed and results show the discharge to be in compliance with General Permit limits.

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 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.

We also estimate 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 February water tables have dropped by approximately one to 1.5 feet from December/January highs.

Exiting wells will be resampled as soon as possible after the access agreement is finalized and proposed additional monitoring wells will be scheduled for installation as soon as practical.

Respectfully submitted,

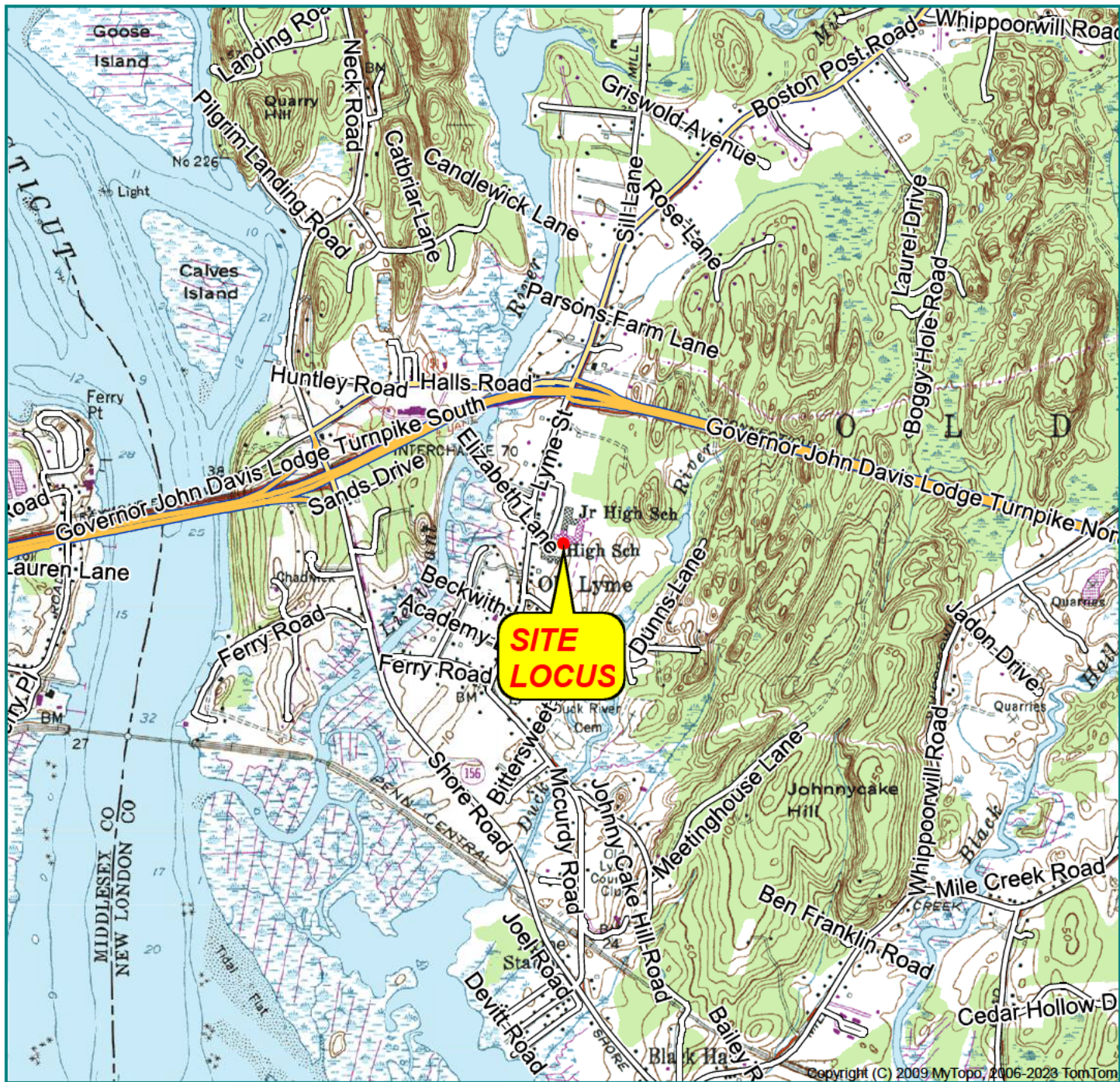
TURNER ENVIRONMENTAL, LLC

A handwritten signature in blue ink that reads "David T. Turner".

David T. Turner, LEP

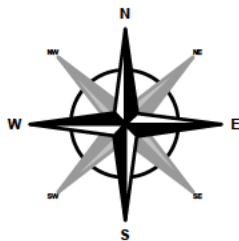
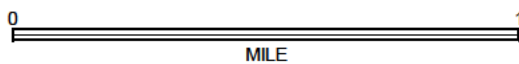
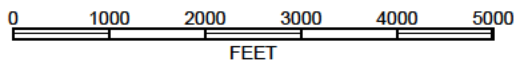
Attachments

Figures



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

SCALE 1:24000



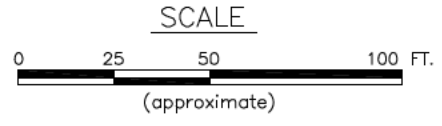
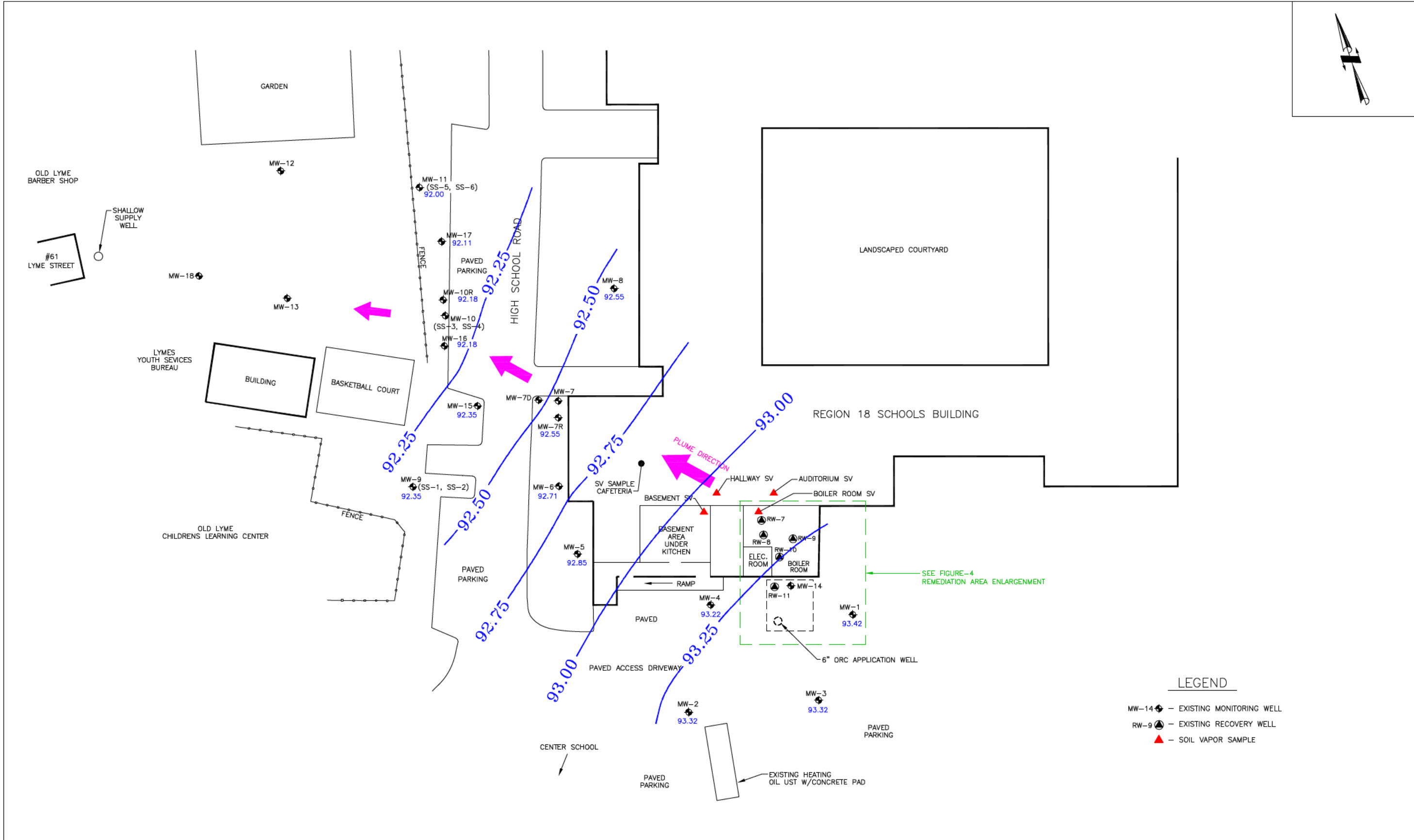
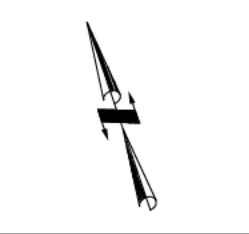
Site Coordinates:
041° 19' 04.35" N, 072° 19' 42.04" W

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

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

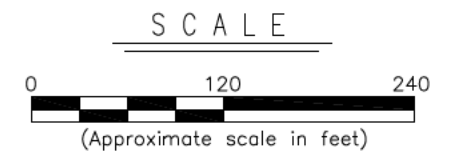
Figure-1
Site Locus Map



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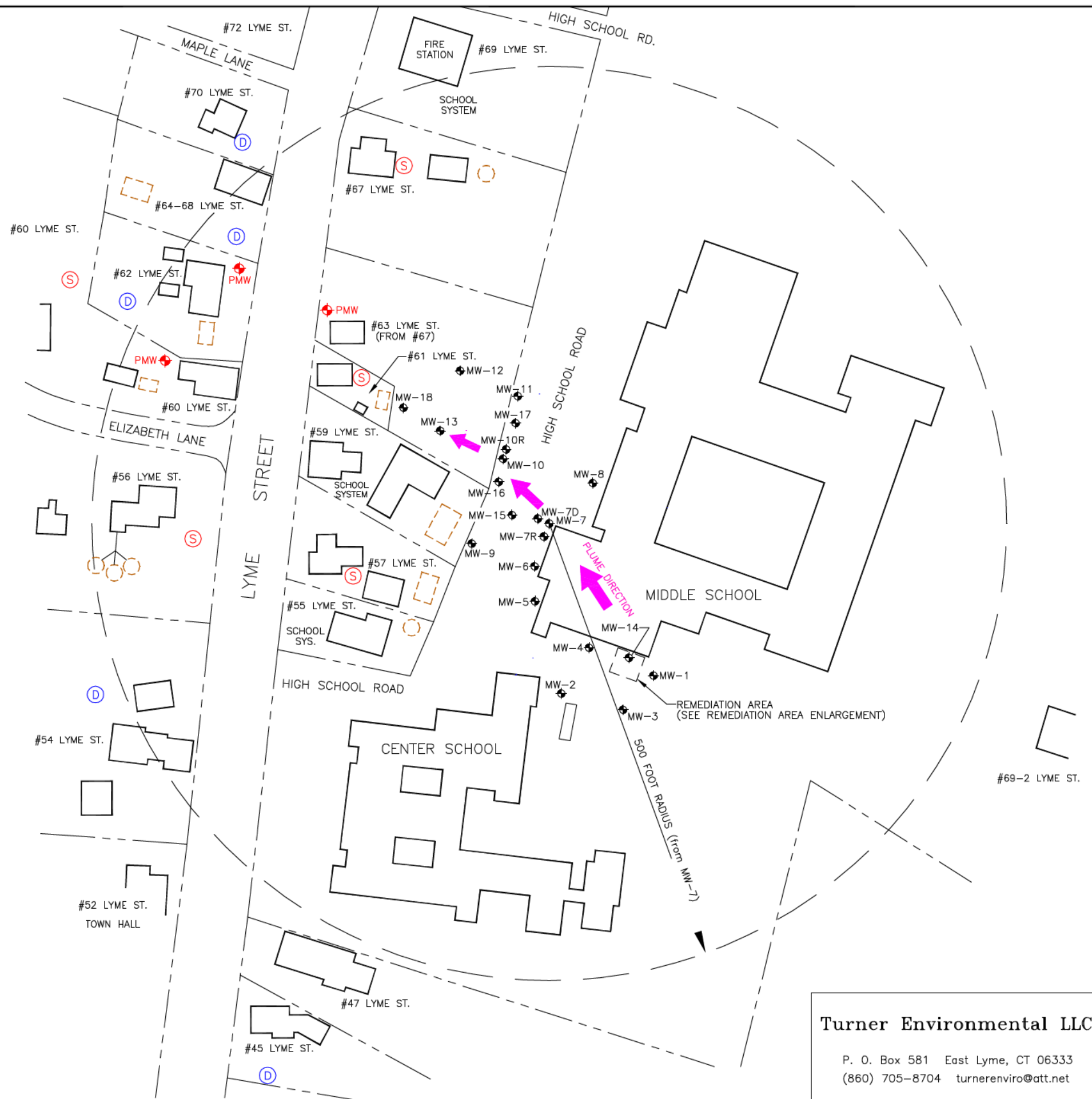
- MW-14 - EXISTING MONITORING WELL
- RW-9 - EXISTING RECOVERY WELL
- SOIL VAPOR SAMPLE

Turner Environmental LLC P. O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net	Figure 2 - Groundwater Contours (12/17/23 gauging data)	Drawn: K. Hazel Date: 12/28/23 Scale: AS SHOWN
	Client: REGION 18 SCHOOLS 47 Lyme Street Old Lyme, Connecticut	Project: TE23-007 Figure: FIGURE 2



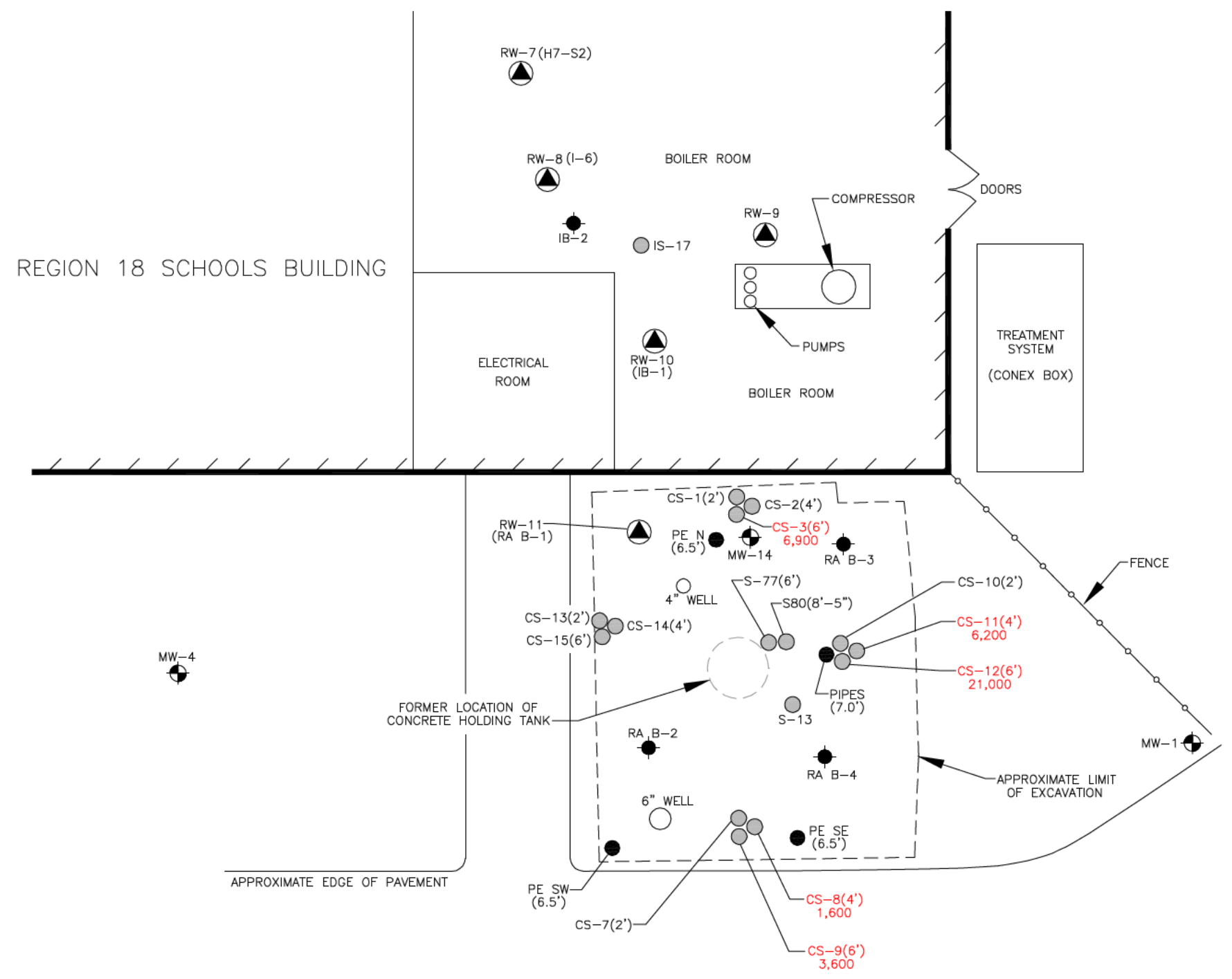
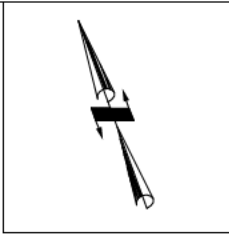
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- MW-7 - GROUNDWATER MONITORING WELL
- - - - - APPROXIMATE PROPERTY BOUNDARY
- SHALLOW SUPPLY WELL (Approximate Location)
- DEEP SUPPLY WELL (Approx. Location)
- PMW - PROPOSED GROUNDWATER MONITORING WELL
- SEPTIC LEACHFIELD (Approx. Location)
- SEPTIC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



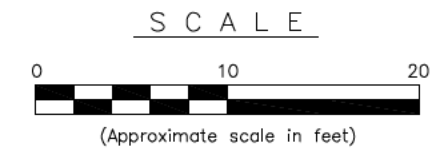
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Figure 3 - Drinking Water Well Locations with Proposed Monitoring Wells	Drawn: K. Hazel
	Date: 11/10/23
Client: REGION 18 SCHOOLS 47 Lyme Street Old Lyme, Connecticut	Scale: AS SHOWN
	Project: TE23-007
	Figure: FIGURE 3



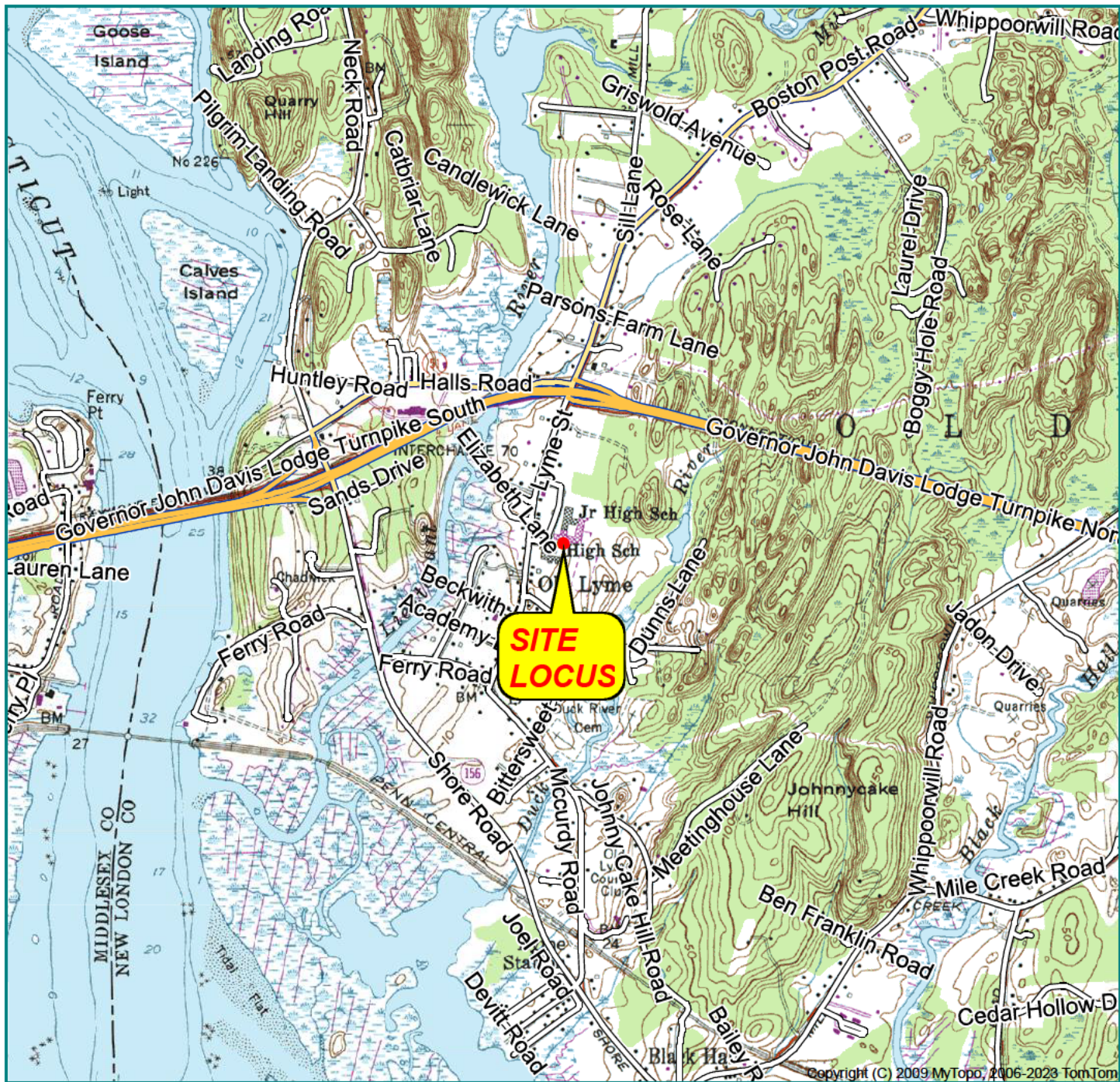
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- (6.0) - DEPTH OF SAMPLE
- 21,000 - SOIL SAMPLE DATA ABOVE RSR CRITERIA (IN PPM)
- PE PW (7.0') - SOIL SAMPLE LOCATION OBTAINED BY TURNER ENVIRONMENTAL LLC (March 17, 2023)
- (7.0') - DEPTH OF SAMPLE
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- ⊕ - RECOVERY WELL
- - SOIL BORING



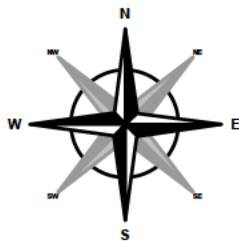
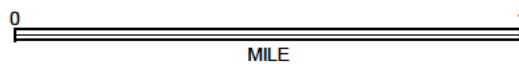
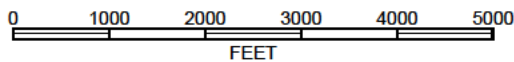
Turner Environmental LLC P.O. Box 581 East Lyme, CT 06333 (860) 705-8704 turnerenviro@att.net	Figure 4 Remediation Area Enlargement	Drawn: K. HAZEL Date: 9/24/23 Scale: As Shown
	Address: 49 Lyme Street Town of Old Lyme, New London County, Connecticut	Project: TE 23-007 Figure: FIGURE-4

Tables



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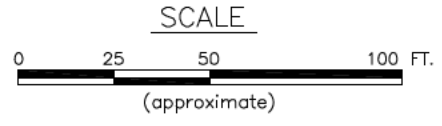
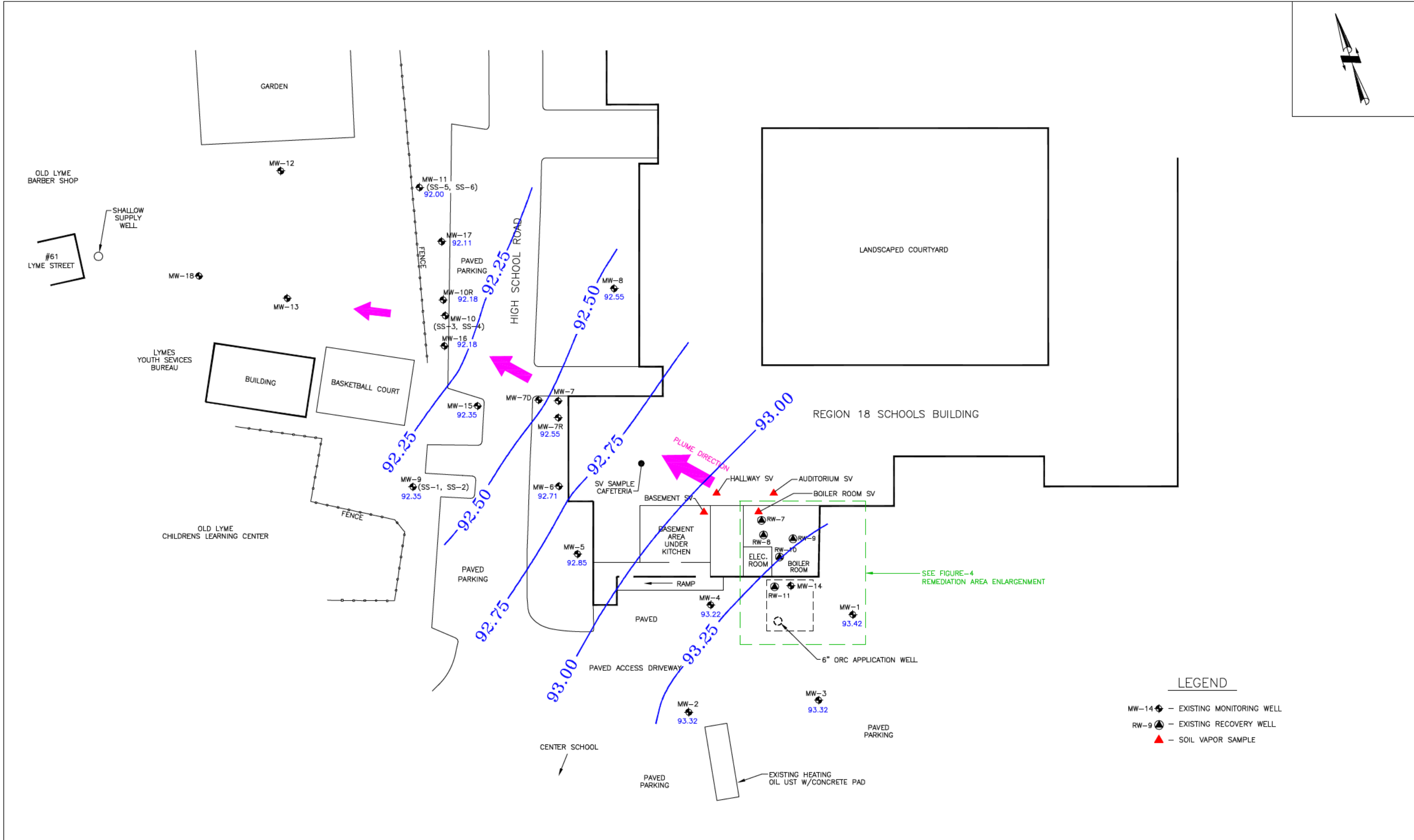
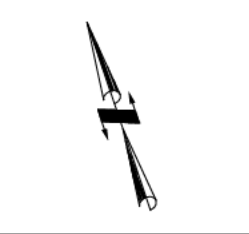
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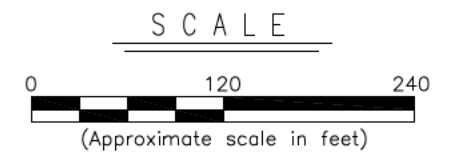
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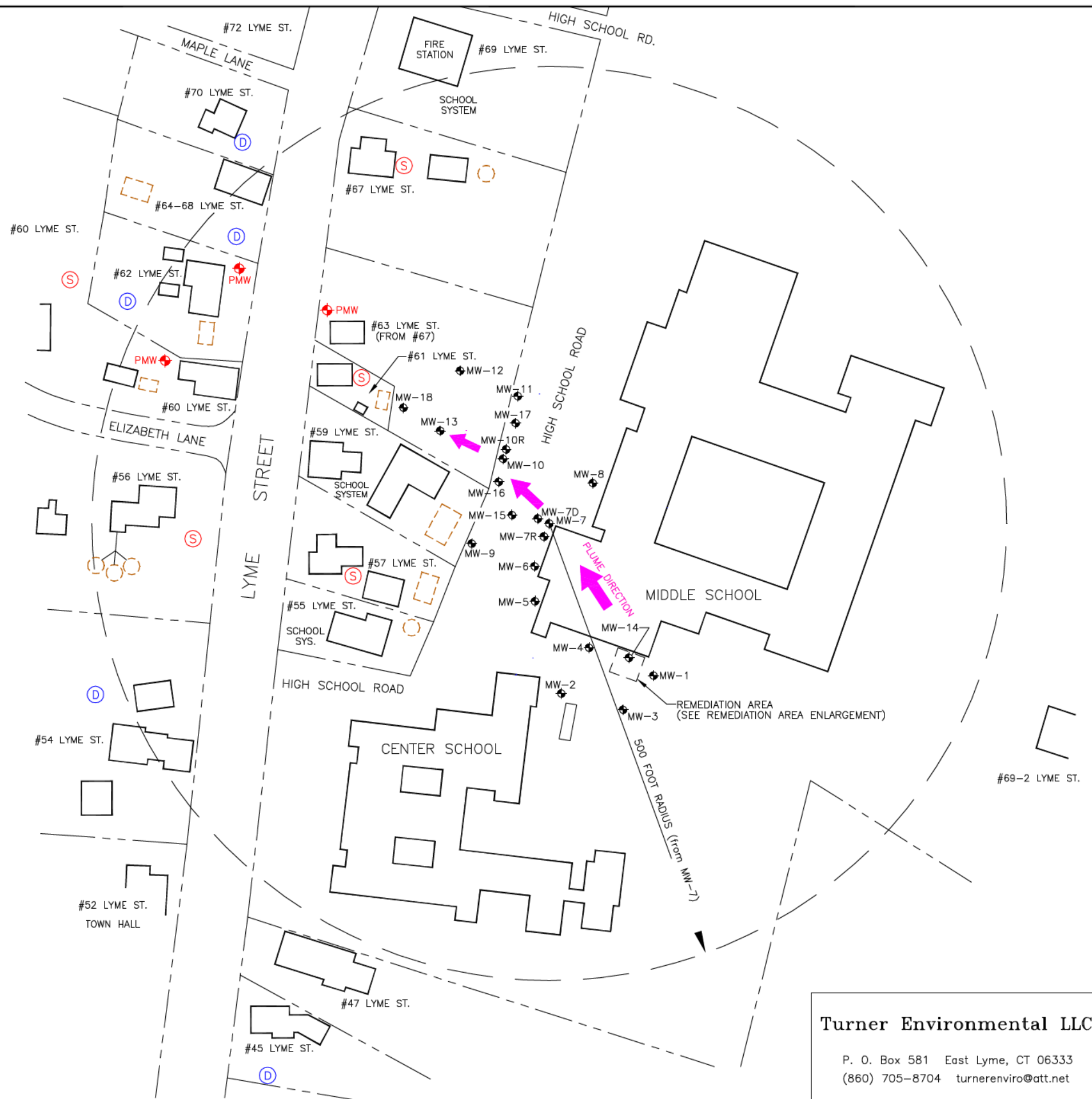
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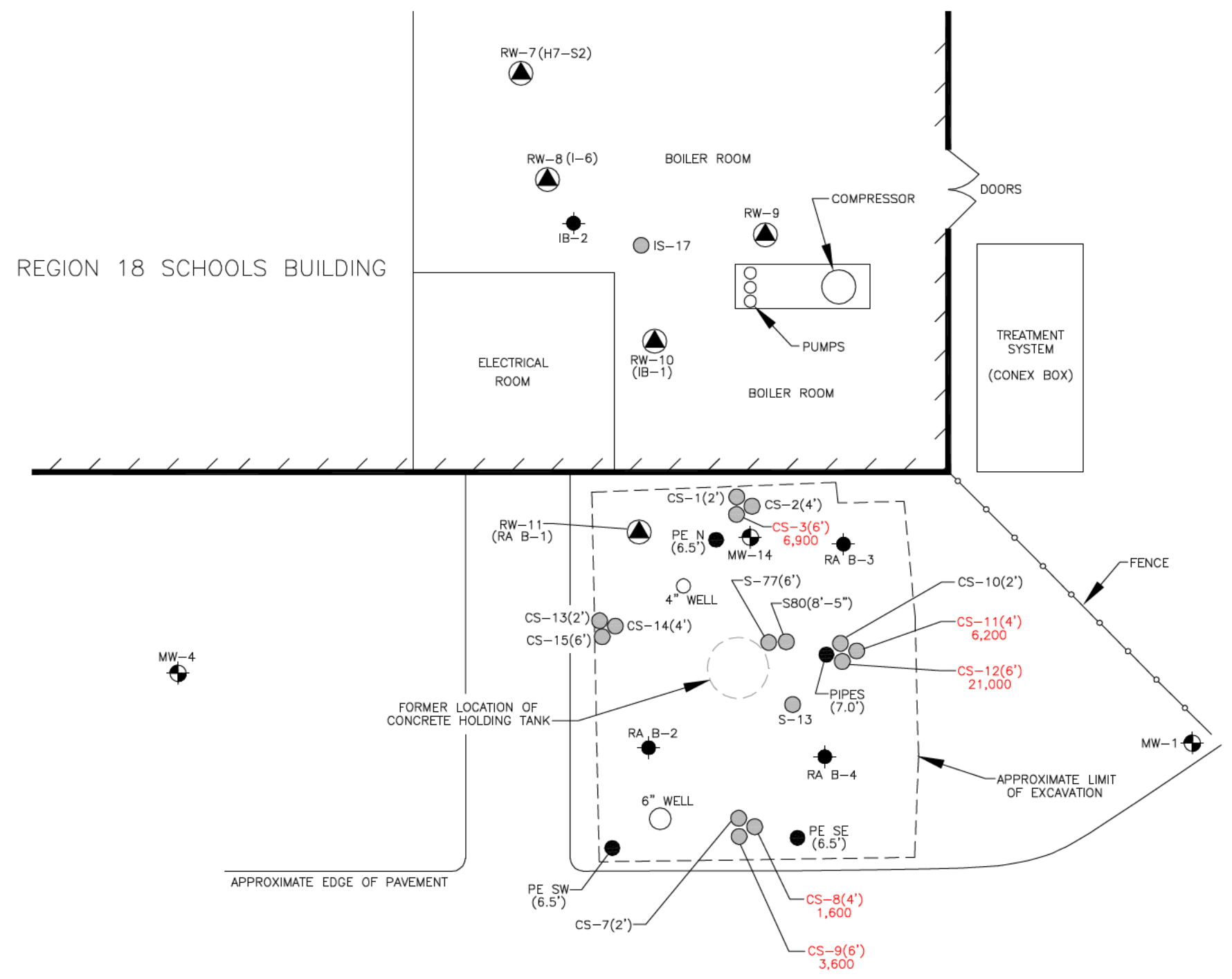
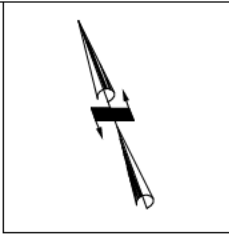
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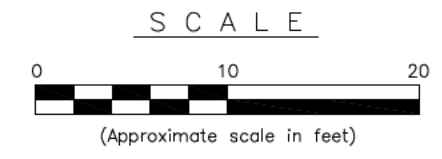
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