

## EXECUTIVE SUMMARY

Waite-Heindel Environmental Management (WHEM) is pleased to present this *Phase I Environmental Site Assessment report* for the Road Res-Q property, a former maintenance garage and gasoline station (“Site”) located at 1 Main Street in Essex Junction, Vermont. This work was conducted during February and March 2019 at the request of the Chittenden County Regional Planning Commission (CCRPC) with funding through their US Environmental Protection Agency (EPA) Brownfields Assessment Cooperative Agreement (#BF00A00214). It was done on behalf of the Village of Essex Junction, as part of the due diligence process for their potential purchase of a portion (“Conveyance”) of the subject property.

The objective of this ESA was to identify Activity and Use Limitations (AULs) and Recognized Environmental Conditions (RECs) associated with the property as defined and described in the American Society of Testing and Materials (ASTM) *Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13). WHEM’s work involved an inspection of the former maintenance garage and the surrounding property, a review of historical land ownership, a review of historic orthophotographs and maps, a review of previous environmental investigations, and various interviews.

The subject property has one building present, which was historically utilized as a maintenance garage and gasoline service station since at least the 1930’s. Gasoline pumping operations apparently ceased in the late 1990s, but vehicle maintenance ended only recently. As of the time of our inspection, the business had shut down. The garage was full of vehicle maintenance equipment and tools, including oil drums, oil ASTs, shelves full of vehicle maintenance fluids, and a parts washing station. There is currently one electric vehicle lift present; no hydraulic lifts are known to have been present prior to this. Within the building is a maintenance pit in the concrete floor where personnel would stand when working on the underside of vehicles prior to the electric lift being installed. This pit was filled with water during the inspection. We understand that the garage will be emptied shortly to make way for a future café.

In 1996, six (6) 1962-era underground storage tanks (gasoline, waste oil and heating oil) associated with this past use were removed, with evidence of contaminated soils encountered. Due to this, the State designated the Site an active hazardous waste site, SMS #96-1993. Four (4) groundwater monitoring wells were installed, and have been sampled for petroleum contaminants from 1996 to the present. Records indicate that the groundwater sampling has been strictly for petroleum VOCs, with the exception of one sampling event in May 2011, when the full list of VOCs was analyzed. The 2011 sampling event did not reveal chlorinated VOCs in groundwater. The VT DEC currently classifies the Site as a “Low Priority” site with bi-annual groundwater monitoring required. The most recent 2017 report indicates groundwater contamination in exceedance state standards. The 2017 report also recommends that additional monitoring points be installed to determine if contamination extends beneath Maple Street (Route 117) to the south and/or the west, and that the building may be at risk of vapor intrusion. Due to the building being vacant and planned redevelopment of a portion of the Site by the Village, the VT DEC requested this additional work be put on hold until plans are finalized.

This assessment has revealed the following recognized environmental condition (REC) in connection with the Conveyance, or portion of the subject property the Village of Essex Junction is potentially purchasing, as defined by ASTM Practice E1527-13:

1. The former use of the property as a gasoline station and vehicle garage is a REC. There is known groundwater contamination beneath the Site associated with its former use. Groundwater sampling has been generally limited to petroleum compounds, so the possibility that additional contaminants (SVOCs or metals) are impacting soil and groundwater beneath the Site is a data gap. Another data gap is that full extent of soil and groundwater contamination is unknown outside the immediate vicinity of the former tanks. This unknown area includes the northern portion of the property where gas pumps were located, which the Village intends to purchase.

This assessment has revealed the following recognized environmental conditions (RECs) in connection with the Site, or portion of the subject property which will be retained by the current owner:

1. The former use of the property as a gasoline station and vehicle garage is a REC. There is known groundwater contamination beneath the Site associated with its former use. There are several data gaps associated with this REC:
  - Groundwater sampling has been generally limited to petroleum compounds, it's unknown if additional contaminants (SVOCs or metals) are impacting groundwater beneath the Site.
  - The full extent of soil and groundwater contamination is unknown outside the immediate vicinity of the former tanks, specifically under Maple Street to the west and south.
  - Soil vapor sampling has not been conducted, so it is unknown if the on-site building is at risk for vapor intrusion from VOC contamination.
  - Upon review of historic Sanborn Fire Insurance Maps<sup>©</sup> from 1944, gas tanks are shown to the east of the building, which may have been located at the boundary with the property to the east, which is currently vacant.
  - Various hazardous materials present are associated with vehicle maintenance activities, and have potential to impact soil, soil gas and groundwater beneath the subject property if improperly handled.
2. Due to the age of the building likely pre-dating the ban on lead-based paints and asbestos containing materials (ACMs), both may be present. Note that a formal surveys for lead paint or ACMs were not requested or conducted as part of this Phase I ESA.
3. Simon's Five Corners (former Essex Agway) is an active State hazardous waste site (#96-1961), located at 2 Park Street and across the road (west) from the subject property. The full extent of off-site migration has not been defined by the current monitoring well network. Since the full extent of off-site migration is unknown, it's possible this site is minimally impacting the subject property.

Due to the RECs identified above, WHEM recommends further Phase II site characterization. For the Conveyance, the Phase II work should include the installation of 4-5 soil borings and at least 2 monitoring wells groundwater monitoring wells to define the full extent of potential contamination within the 2,200 sq. ft area.

For the Site, the Phase II work should also include the installation of additional soil borings and monitoring wells to define the full extent of contamination east and west of the former 1969-era USTs, including under Maple Street to the west and along the property boundary to the east in the vicinity of where USTs are shown in the 1944 Sanborn Maps. The Phase II should also include the following considerations:

- Sub-slab soil vapor intrusion testing should be conducted, as it is unknown if the on-site building is at risk for vapor intrusion from the documented VOC contamination. This should be done as part of the property renovation activities, and prior to occupancy of the building.
- Due to the age of the building likely pre-dating the ban on lead-based paints and asbestos containing materials, formal surveys for lead paint and asbestos should be considered.
- All hazardous materials should be properly disposed of by a certified waste hauler. This includes emptying the maintenance pit and properly disposing of its contents.
- As per the most recent (2017) groundwater monitoring report, consideration should be given to remediation of the source area through enhanced bioremediation, so appropriate geochemical parameter sampling should be conducted.

## Miles Waite

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**From:** Nahmias, Michael <Michael.Nahmias@vermont.gov>  
**Sent:** Tuesday, April 9, 2019 3:11 PM  
**To:** Miles Waite; Dan Albrecht  
**Cc:** 'Robin Pierce'; Wendy Shellito  
**Subject:** RE: Road Res-Q DRAFT Phase I ESA Report  
**Attachments:** API.Biovapor.Model.Output.pdf

Miles,

The current groundwater data does not support the need for vapor intrusion testing (see attached output from the API Biovapor model). So the VTDEC is not in agreement with the need for soil vapor testing at this time

Clearly additional testing is needed on the portion of the property the Village is potentially acquiring.

With regard to Gabriel Handy's property, the VTDEC will discuss needs there with the property owner and their consultant.

**Michael Nahmias**

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[email] [michael.nahmias@vermont.gov](mailto:michael.nahmias@vermont.gov)

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**From:** Miles Waite <mwaite@waiteenv.com>  
**Sent:** Tuesday, April 9, 2019 1:54 PM  
**To:** Nahmias, Michael <Michael.Nahmias@vermont.gov>; Dan Albrecht <dalbrecht@ccrpcvt.org>  
**Cc:** 'Robin Pierce' <robin@essexjunction.org>; Wendy Shellito <wshellito@waiteenv.com>  
**Subject:** RE: Road Res-Q DRAFT Phase I ESA Report

Thanks Mike,

We ended up sending a copy of the Phase I ESA to Gabe Handy, so are waiting for comments from him.

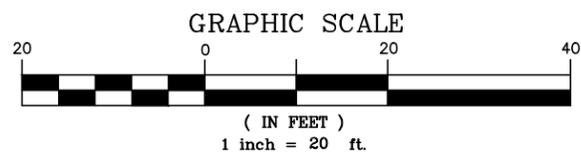
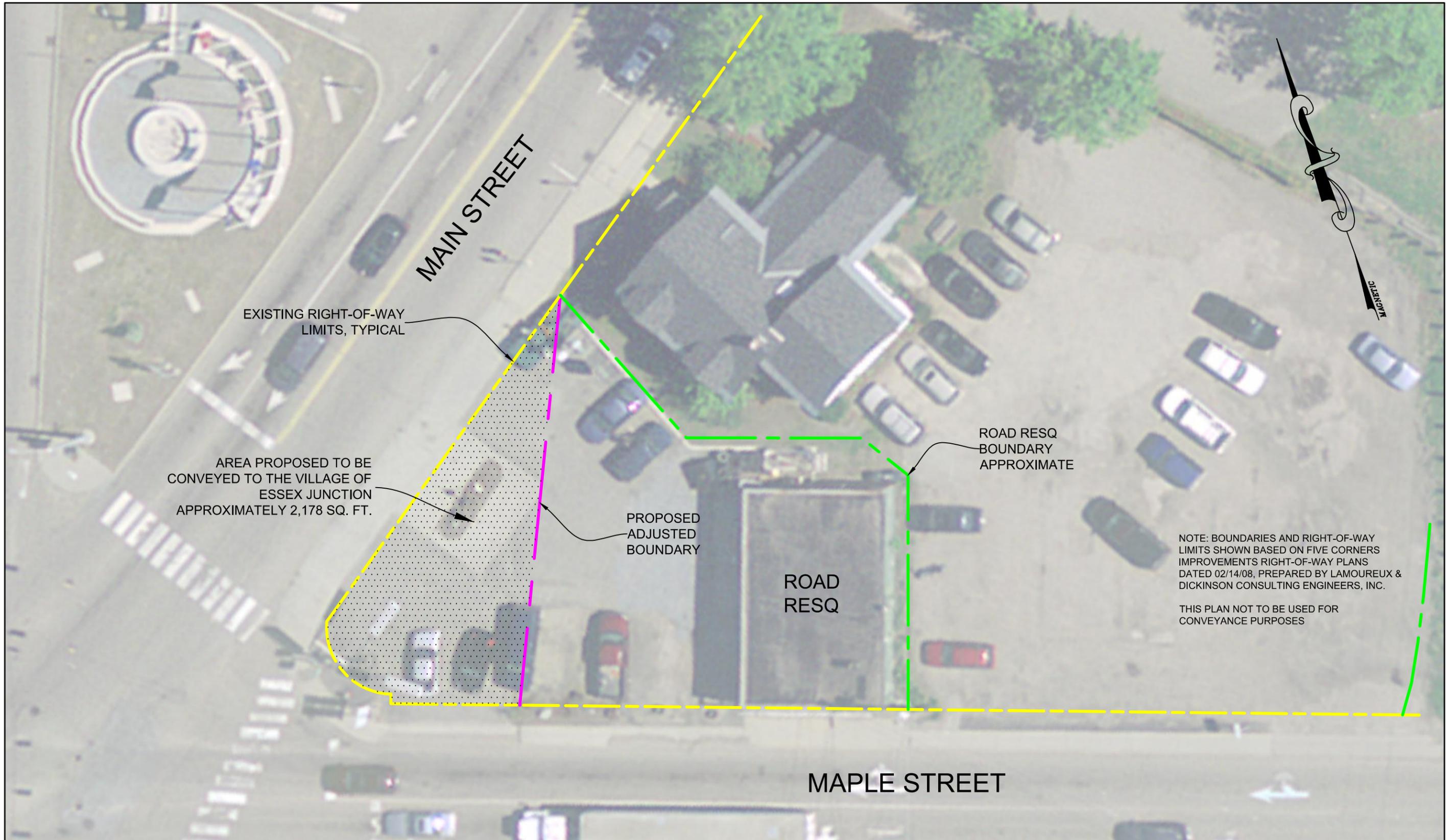
Are you in agreement that the sub-slab soil vapor testing should be conducted prior to occupancy of the new restaurant?

Also, I know that you have had prior discussions with KAS on the need for additional site investigation work, but that there was the decision to hold off until a redevelopment plan was in place. Now that we know the building will remain and be converted into a restaurant, does this mean that the VT DEC is in agreement that new soil borings/wells are merited?

Thanks, Miles

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**From:** Nahmias, Michael <[Michael.Nahmias@vermont.gov](mailto:Michael.Nahmias@vermont.gov)>  
**Sent:** Tuesday, April 9, 2019 1:36 PM  
**To:** Miles Waite <[mwaite@waiteenv.com](mailto:mwaite@waiteenv.com)>; Dan Albrecht <[dalbrecht@ccrpcvt.org](mailto:dalbrecht@ccrpcvt.org)>

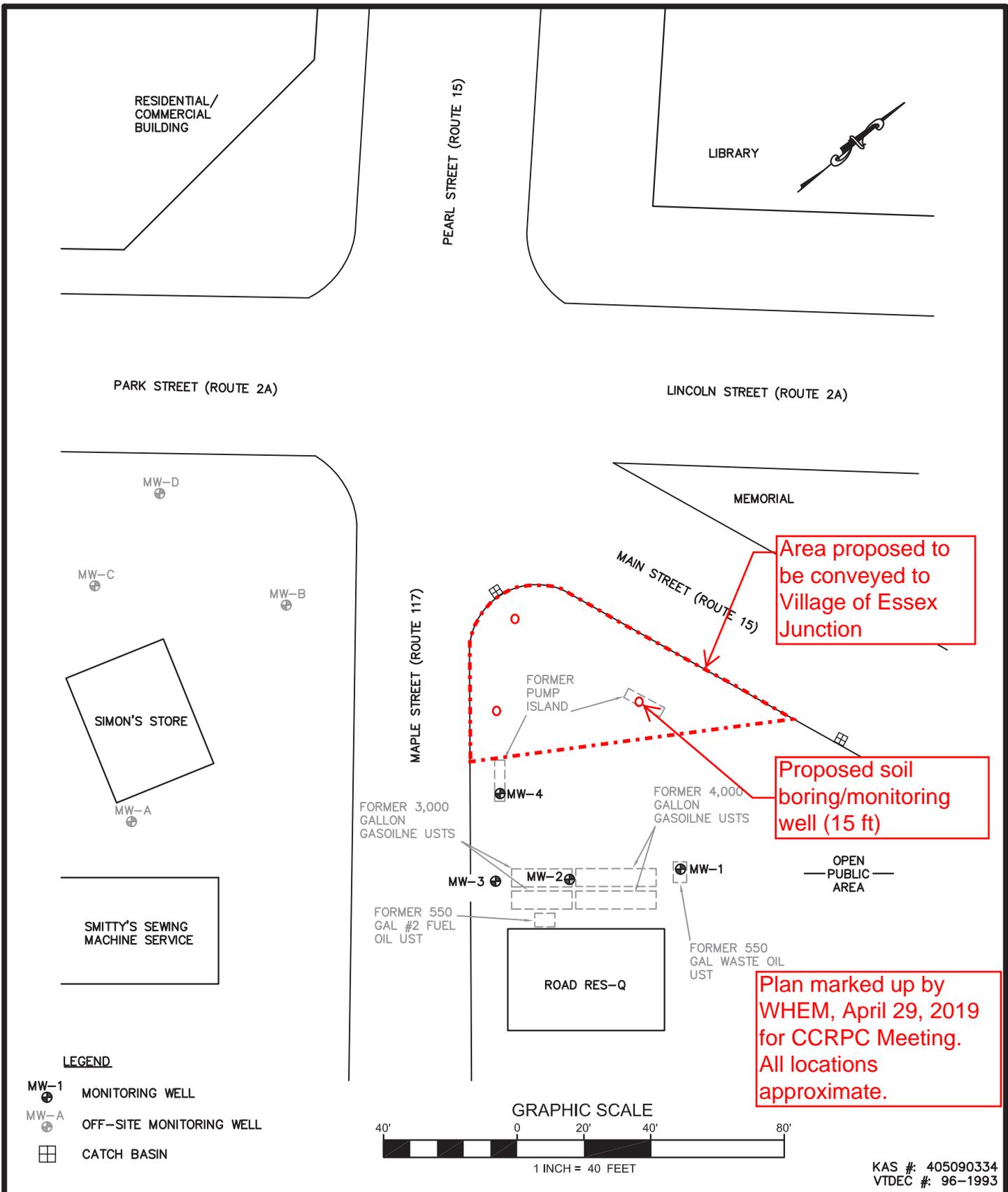


DATE	REVISION	BY


**Donald L. Hamlin**  
 Consulting  
 Engineers, Inc.  
 Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION  
 PROPOSED BOUNDARY LINE ADJUSTMENT  
 ROAD RESQ PARCEL

Survey	---	Scale	1" = 20'
Design	SOL/RPH	Job	19-801
Drawn	SOL	File	
Checked	RPH	Drawing	1
Date	01/24/19		



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VTDEC #: 96-1993

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<b>ROAD RES-Q</b>				
1 MAIN STREET ESSEX JUNCTION, VERMONT				
<b>SITE MAP</b>				
DATE: 6/21/17	DWG #: 1	SCALE: 1"=40'	DRN.: TB	APP.: SD