



Memorandum

*To: Mr. Charles Gregory, NYSDEC Division of Environmental Remediation
Mr. Jeffrey Dyber, NYSDEC Division of Environmental Remediation*

*From: Mr. William Wert, CHMM, CDM Smith
Ms. Amy Picunas, P.E., PMP, CDM Smith*

Date: November 21, 2022

*Subject: NYSDEC Site No. 828109, Speedy's Cleaners
Remedial Investigation – Offsite Investigation Work Plan*

This purpose of this memorandum is to present the work plan for performing an offsite investigation to assess groundwater conditions for the New York State Department of Environmental Conservation (NYSDEC) Site No. 828109, Speedy's Cleaners (the Site). This offsite investigation is part of the ongoing remedial investigation being performed at the Site. This memorandum presents the objectives, methods to be employed, and laboratory analysis for the offsite investigation.

Site Location and Description

The Speedy's Cleaners site is located in a commercial area at 3130 Monroe Avenue in the Town of Pittsford, Monroe County, New York (**Figure 1**). Monroe Avenue borders the property to the south and west and the Oak Hill Country Club and Pittsford Trail System border the property to the north and east. The Site was found to be contaminated with chlorinated solvents, primarily tetrachloroethylene (PCE) and trichloroethylene (TCE). Speedy's Cleaners operations were determined to be the source of the contamination.

The Site consists of the 0.27-acre Speedy's Cleaners property and the 0.11-acre Rochester Gas and Electric Company (RG&E) right-of-way property (**Figure 2**). A paved lot and a 4,900-square foot building that is currently occupied by a nail salon are located on the Speedy's Cleaners property. The property is serviced by public water and sewer. The Oak Hill Country Club borders the northeastern edge of the Site, and retail businesses are adjacent to the northwest and southeast. Monroe Avenue borders the southwestern edge of the Site.

Speedy's Cleaners operated as a dry cleaner at the Site between 1966 and circa (ca.) 1993, when onsite dry cleaning ceased. Until 2005, the building operated as a dry cleaning pick-up and drop-off location only. The volatile organic compound (VOC) PCE was used in dry cleaning operations at the

Site for an undetermined amount of time. The Site sustained releases of PCE to the ground over time due to poor operating practices. Potential source areas of contamination include the area along the northeastern wall adjacent to the former vent pipes and the area by the north corner of the building, which may have been used for cleaning dry cleaning filters.

2021 Remedial Investigation (RI) Summary

In 2021, NYSDEC initiated the RI to characterize the nature and extent of contamination in the groundwater and soil at the Site. As part of the RI, groundwater and soil sampling were performed by CDM Smith, NYSDEC's contractor. Based on the results of the RI, PCE and its degradation products, TCE, *cis*-1,2-Dichloroethylene (*cis*-1,2-DCE), and vinyl chloride, remain in groundwater in the northern portion of the Site at levels above the NYSDEC Ambient Water Quality Standards (AWQS). These contaminants are traveling via advective transport with groundwater to the northeast. The current extent of VOC contamination in groundwater located offsite (i.e., to the northeast of the Site) is unknown. Groundwater impacted by Site contamination ranges from the surface of the water table to approximately 19 feet below ground surface (bgs), where glacial till becomes too dense for groundwater to permeate. Between 2002 and 2021, Site-related compound concentrations have decreased significantly, likely due to degradation via biotic or abiotic processes and advective transport; this trend will presumably continue as there is no evidence of a continuing source of contamination. Due to a lack of temporally spaced data, it is not possible to determine the rate at which degradation occurs at the Site. Groundwater at the Site does not pose a risk to human health or the environment because exposure pathways are either incomplete or addressed via mitigation measures (i.e., active sub-slab depressurization (ASD) system for indoor air).

Site-related contamination is not present at significant levels in saturated soils. Historically, the highest levels of soils contamination occurred within the unsaturated zone (i.e., vadose zone) between 2 to 4 feet bgs and in the areas adjacent to the former vent pipes and to the north of the north corner of the Speedy's Cleaners building. VOC concentrations appeared to decrease with depth. Because samples were not collected within the vadose zone nor within the potential source areas during the 2021 RI activities, the current lateral and vertical extent of contaminated soils is unknown. However, based on historic concentrations of Site-related contaminants in soil, it is possible that significant levels of contamination remain in soils within the vadose zone. The ASD system continues to operate to mitigate any off-gassing of VOCs in subsurface soils to indoor air of the Speedy's Cleaners building.

Proposed Offsite Investigation

NYSDEC has proposed additional groundwater sampling be conducted as part of an offsite investigation to address data gaps identified during the 2021 RI. The offsite investigation will be performed on the RG&E right-of-way and the Oak Hill Country Club property located north and northeast of the Speedy's Cleaners Site, respectively (**Figure 3**). The offsite investigation includes

the following activities: a geophysical utility clearance, Geoprobe® soil borings, groundwater screening, drilling and monitoring well installation, monitoring well development, groundwater sampling, professional well survey, fence repair or gate installation, and characterization/transportation/disposal of investigation derived waste (IDW). Oversight of the offsite investigation field activities will be provided by NYSDEC's contractor, CDM Smith. NYSDEC anticipates that the offsite investigation fieldwork would begin in Winter 2022/2023 during the off-peak golf season when the soil will be either frozen or less saturated thereby minimizing disturbance to the ground surface at the Oak Hill Country Club while conducting work activities.

Geophysical Utility Clearance

All subsurface work locations will be checked for subsurface utilities prior to the start of direct push technology (DPT) soil borings and well drilling. NYSDEC will request as-built drawings from the Oak Hill Country Club to determine the approximate location of underground utilities in the proposed work area. After reviewing these drawings and any other additional information provided by the Oak Hill Country Club, a professional geophysical utility clearance subcontractor will identify and mark all utilities within a 15-foot radius of the proposed DPT borings and three monitoring well drilling locations using ground penetrating radar and electromagnetic survey. CDM Smith will provide oversight of the geophysical utility clearance and anticipates this activity to take one day to complete.

Advancement of Soil Borings and Groundwater Screening

Eight soil borings will be advanced by a drilling subcontractor using DPT to 20 feet bgs via a tracked Geoprobe® unit at locations shown on **Figure 3**. One soil boring will be located on the RG&E right-of-way that is north of the Speedy's Cleaner's Site and 7 borings will be located on the adjacent Oak Hill Country Club property that is northeast of the Site. Continuous 2-inch macrocores will be collected at each location to a depth of 20 feet bgs to evaluate lithology. Additionally, one groundwater screening grab sample will be collected at each of the boring locations. All groundwater screening samples and associated quality assurance/quality control (QA/QC) samples will be collected and handled by the CDM Smith oversight personnel. All samples will be analyzed for target compound list (TCL) VOCs via USEPA Method 8260D and perfluorinated alkyl substances (PFAS) via USEPA Method 1633. The groundwater screening samples will be sent by CDM Smith to a subcontract laboratory for analysis. CDM Smith will record lithology and photograph all soil boring locations. Horizontal coordinates of all groundwater screening locations will be collected by CDM Smith using a Trimble GeoXH (or equivalent) global positioning system (GPS) unit.

The drilling subcontractor shall utilize track mats when mobilizing to and from any drilling locations on the Oak Hill Country Club property to minimize disturbances to the ground surface. The drilling subcontractor will construct a temporary decontamination pad and will steam clean the drill rig and tools between each borehole. All decontamination fluids and soil will be containerized by the drilling subcontractor and will be transported to the RG&E right-of-way at the

Site for waste characterization and offsite disposal. CDM Smith anticipates that the advancement of soil borings, groundwater screening, and monitoring well installation (see below) will take five days to complete.

Monitoring Well Installation

Following the advancement of soil borings and groundwater screening, the Geoprobe® unit shall be retooled for installation of three monitoring wells at three of the soil borings closest to the Speedy's Cleaner's Site. The proposed monitoring wells are shown on **Figure 3**. One monitoring well will be installed on RG&E right-of-way approximately 10 feet north of the northeastern corner of the Speedy's Cleaners property. This location will delineate the northern extent of VOCs in groundwater near a contaminant "hot spot" identified during the 2021 RI. Additionally, two monitoring wells will be installed on the Oak Hill Country Club property to determine whether VOCs are present in groundwater hydraulically downgradient of the Speedy's Cleaners Site.

The monitoring wells will be constructed as flush mounts with 2-in diameter Schedule 40 polyvinyl chloride (PVC) casings and 10-foot 0.010-slotted screens. The screened interval at each monitoring well will be approximately 10 to 20 feet bgs. The wells will be completed with a 2 ft x 2 ft flush mount concrete well pad. The monitoring wells will be developed by the drilling subcontractor by purging a minimum of five well volumes to remove silt introduced during drilling and improve water quality.

Groundwater Sampling and Synoptic Groundwater Level Measurements

Groundwater sampling will be conducted at five monitoring wells (i.e., three newly installed offsite monitoring wells and two existing onsite monitoring wells [MW-3 and MW-5]) at least two weeks following monitoring well development (**Figure 3**). Groundwater samples and associated QA/QC samples will be analyzed for TCL VOCs and PFAS. The sampling of MW-3 and MW-5 will aid in the development of a more accurate VOC degradation rate for the feasibility study (FS). In addition, two of the newly installed wells will also be sampled for monitored natural attenuation (MNA) parameters to further support the viability of the MNA alternative in the FS. The MNA parameters are alkalinity, chloride, sulfate, nitrate, nitrite, ferrous iron, sulfide, and total organic carbon. CDM Smith will collect quality assurance/quality control samples that will be analyzed for TCL VOCs and PFAS. The groundwater samples will be sent by CDM Smith to a subcontract laboratory for analysis.

During the groundwater sampling event, CDM Smith will collect one round of synoptic water levels from 13 monitoring wells (i.e., 10 onsite monitoring wells located at the Speedy's Cleaner's Site and three newly installed offsite monitoring wells). CDM Smith anticipates that groundwater sampling and collection of synoptic water levels to take two days to complete.

Monitoring Well Survey

A professional survey of the three new monitoring wells will occur concurrently with the groundwater sampling event. The surveyor will obtain spatial coordinates and vertical elevations

for the three new monitoring wells. These coordinates and elevations will match the spatial and vertical datums used during the monitoring well survey that was conducted during the 2021 RI. CDM Smith will provide oversight of the survey.

Investigation Derived Waste

An investigation derived waste (IDW) subcontractor will be contracted to manage and properly dispose of solid and aqueous waste generated during advancement of soil borings, well drilling, well installation and development, and groundwater sampling. Based on the data collected during the 2021 RI, all solid and aqueous waste are expected to be non-hazardous. All drill cuttings, purge water, decontamination water, and well development water will be drummed by the drilling subcontractor. Solid and liquid wastes will be containerized in 55-gallon drums. These drums will be transported to the RG&E right-of-way at the Site. Personal protective equipment (PPE) and any other dry solid waste (i.e., tubing, plastic sheeting, bags, used disposable sampling equipment, etc.) will be disposed as municipal trash.

Following the groundwater sampling event, CDM Smith will collect one composite sample from the soil cutting drums and one composite sample from the purge water drums following the completion of sampling activities. Each composite sample will be analyzed for Resource Conservation and Recovery Act (RCRA) 8 metals, RCRA characteristics, toxicity characteristic leaching procedure (TCLP) VOCs, TCLP semivolatile organic compounds (SVOCs), TCLP pesticides, TCLP pesticides/herbicides, TCLP metals, PFAS, and polychlorinated biphenyls (PCBs). The composite samples will be sent by CDM Smith to a subcontract laboratory for analysis. Results will be provided to the IDW subcontractor for creation of a waste profile.

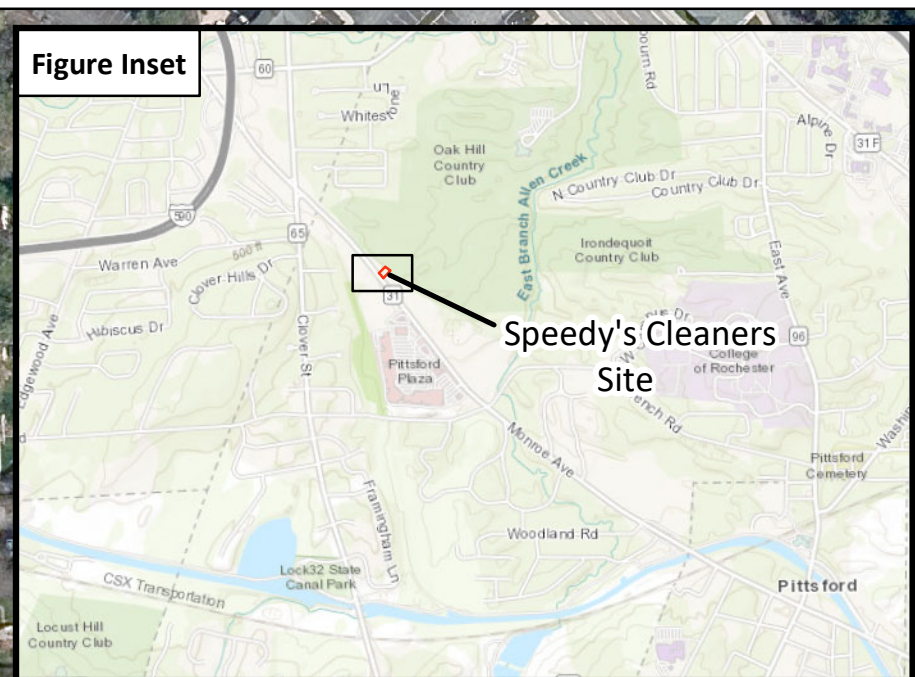
Once the waste results have been characterized and a waste profile has been generated, the waste will be transported to an approved waste disposal facility. CDM Smith will provide oversight of the IDW management. CDM Smith anticipates one day to oversee the pickup of the IDW.

Access Points and Staging Area

To better access the locations planned on the Oak Hill Country Club property, a break in the perimeter fence behind the Tompkins Bank of Castile (south of the Site on Monroe Avenue) has been identified as a potential access point (**Figure 3 and Figure 4**). This point of access would provide the shortest distance (approximately 150 feet) to the proposed investigation area and minimize disturbance of Oak Hill Country Club property. The drilling subcontractor will adjust the break in the fence to allow for the egress of the field personnel and the Geoprobe® rig. The break in the fence will then be either (1) reinstalled as-is, (2) replaced with new chain link fence, or (3) retrofitted with a chain link swing gate to allow access to the permanent monitoring wells planned on the Oak Hill Country Club property. CDM Smith will provide oversight of the drilling subcontractor reinstall, retrofit, or replace the fence if access through the fence is approved by the Oak Hill Country Club. CDM Smith anticipates that reinstalling, replacing, or retrofitting the fence will require two days to complete.

Mr. Charles Gregory
November 21, 2022
Page 6

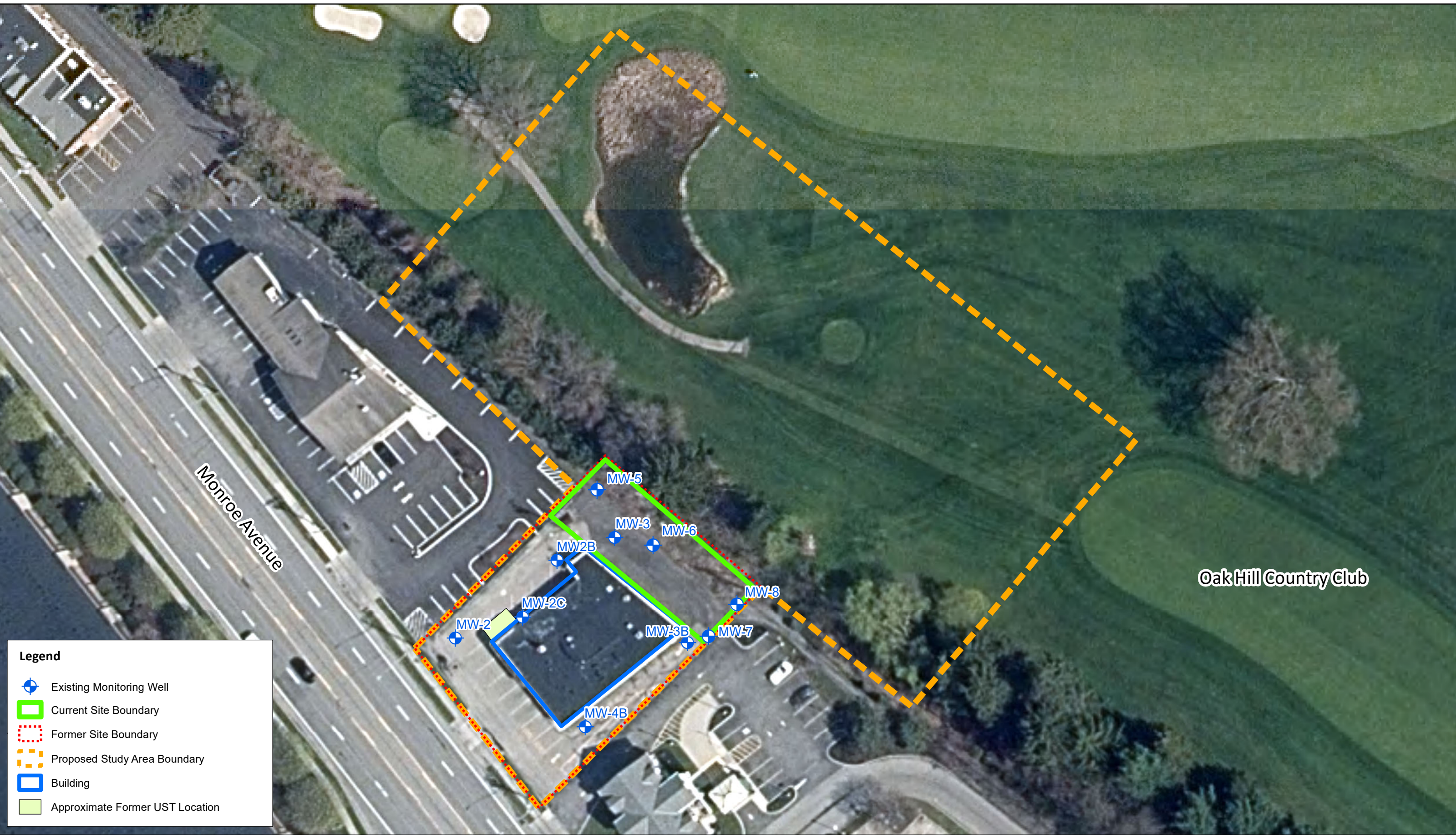
If Oak Hill Country Club does not agree to accessing the investigation area through the perimeter fence, alternative routes of entry will be required. For example, a potential access/staging area was identified by the groundskeeper at the Oak Hill Country Club during the 2021 RI. This potential access point is located west of the clubhouse, approximately 2,700 feet from the investigation area (**Figure 4**). However, the drilling subcontractor will require substantial time to mobilize from this potential staging area to the investigation area due to the longer distance and placement of track mats over this longer distance to minimize disturbance to the property.



Legend
Site Boundary

Note:
1. The Speedy's Cleaners site boundary is approximate.

Figure 1
Site Location Plan
Speedy's Cleaners Site
Pittsford, New York



Legend

- Existing Monitoring Well
- Current Site Boundary
- Former Site Boundary
- Proposed Study Area Boundary
- Building
- Approximate Former UST Location

Notes:
1. The site boundaries are approximate.
2. UST - underground storage tank
3. Current site boundary is a Rochester Gas and Electric right-of-way

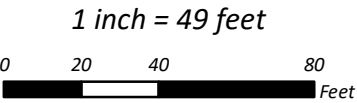


Figure 2
Site Plan
Speedy's Cleaners Site
Pittsford, New York

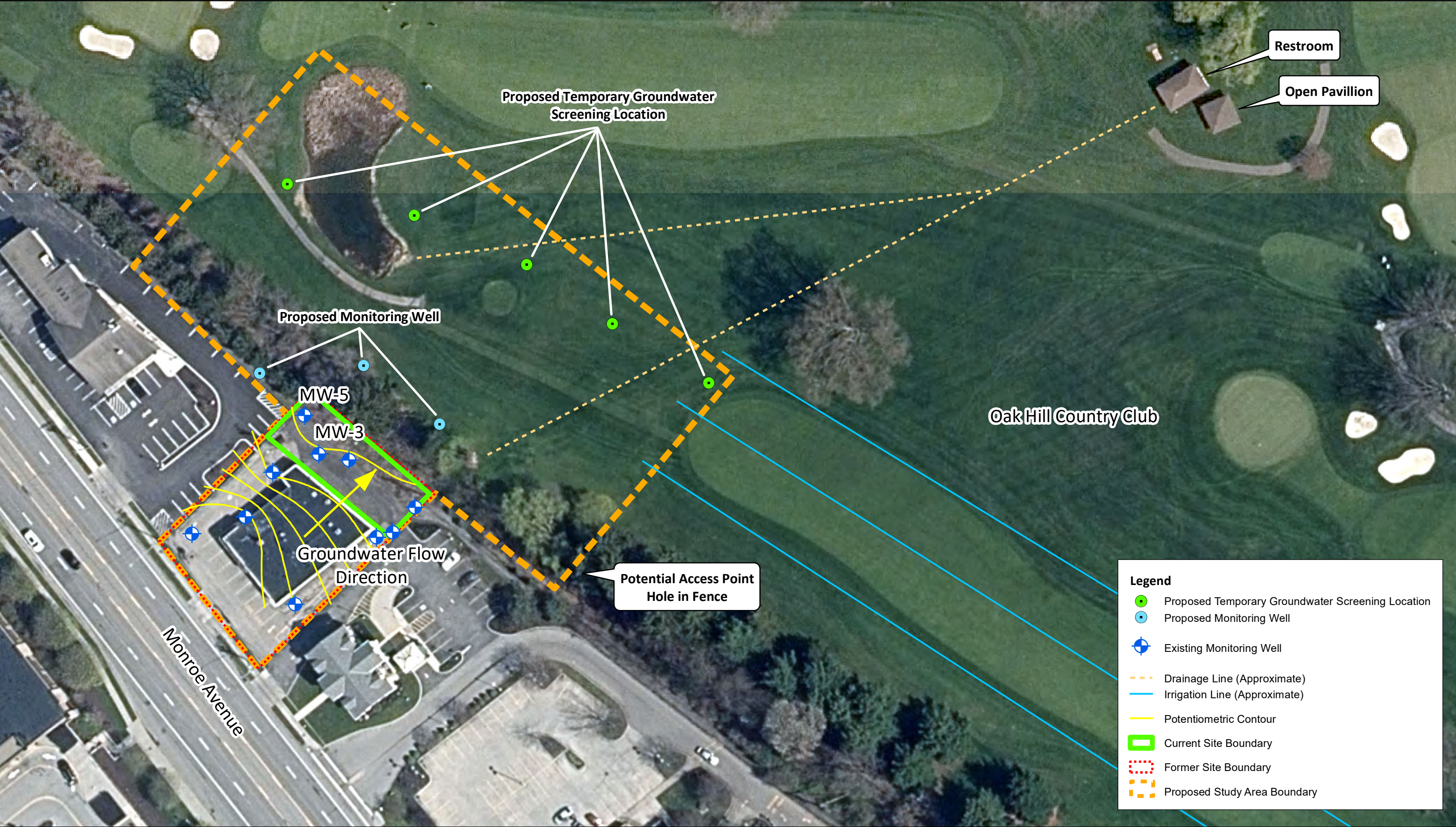


Figure 3
Proposed Temporary Groundwater Screening Locations and Proposed Monitoring Wells
Speedy's Cleaners Site
Pittsford, New York

