July 22, 2026

Draft Pre-Construction Investigation Work Plan - Proposed Aircraft and Automobile Electric Charging Station Project

Hudson Valley Regional Airport Site
18 Griffith Way
Town of Wappinger
Dutchess County, New York
NYSDEC Site #C314129

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CERTIFICATION

I, Steven Gustems, certify that I am currently a Licensed Professional Geologist in New York and that this work plan was prepared in accordance with applicable statutes and regulations and in substantial conformance with DER Technical Guidance for Site Investigation and Remediation (DER-10).



NYS Professional Geologist #000429	September 2, 2026	
	Date	Signature

DRAFT PRE-CONSTRUCTION INVESTIGATION WORK PLAN - PROPOSED AIRCRAFT AND AUTOMOBILE ELECTRIC CHARGING STATION PROJECT

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1.0 INTRODUCTION & PURPOSE

1.1 Introduction

The Hudson Valley Regional Airport (HVRA) is located at 18 Griffith Way, in the Town of Wappinger, Dutchess County, New York (the "Site"). Refer to **Figure 1 –** *Site Location Map*. The Site is operated by the Dutchess County Department of Public Works (the "County"). This Site was listed as a Potential Inactive Hazardous Waste Disposal Site (IHWDS) ("P-Site") under Environmental Conservation Law (ECL) 27-1305, due to the discovery of the per- and polyfluoroalkyl substances (PFAS) perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) detected in May 2016 at concentrations exceeding regulatory criteria in an on-Site potable drinking water supply well. The New York State Department of Environmental Conservation (NYSDEC) accepted the Site into the Brownfield Cleanup Program (BCP) on October 15, 2024, to address the PFAS impacts (BCP No. C314129).

Apex Energy Tek LLC. of Queensbury, NY (AET) has partnered with BETA Technologies Inc. of Burlington, VT to design a pad mounted, dual aircraft, electric charging station, a pad mounted, dual automobile, electric charging station, and associated electrical appurtenances at the Site adjacent to the existing airport terminal building. The County wishes to initiate this construction project before the NYSDEC-approved Remedial Investigation (RI) has begun and/or will be completed. This project is herein referred to as the Aircraft and Automobile Electric Charging Station Project (AAECS Project). Refer to **Figure 2**: *Site Overview Map* for the location of the proposed AAECS Site work. Since the RI has not begun or been completed for the Site, a Pre-Construction Investigation (PCI) will be conducted at the proposed construction location to characterize Site conditions and determine the potential presence of contaminants in soil within the proposed construction area. If contaminants are identified at levels exceeding the applicable regulatory guidance values, an Interim Remedial Measure Work Plan (IRM WP) will be provided to the NYSDEC that outlines the steps that will be taken during construction to address contaminated soil identified within the proposed construction footprint and associated offsets, and to address potential human health exposure pathways and potential environmental impacts, as applicable.

This Pre-Construction Investigation Work Plan (PCI WP) describes the investigation activities proposed for this future construction area within the Site. The PCI WP is

intended to collect sufficient data to determine the remedial actions necessary during construction if contamination is identified in the proposed work area above applicable guidance values.

1.2 Purpose and Scope

The purpose of this PCI WP is to describe in detail the proposed means and methods for investigation of the AAECS Project area. Data from this PCI will be reported in a PCI Report. If soil contamination is identified during this PCI and an IRM WP is required by the NYSDEC, an IRM WP can be prepared that will recommend remedial activities to employ during construction to properly manage contaminated materials effected by the proposed construction. These remedial activities may include, but are not limited to, on-Site reuse of soil (if approved by the NYSDEC via soil re-use application), including placement beneath a suitable cover system in accordance with DER-10, and/or off-Site disposal at a permitted disposal facility.

The data obtained during this PCI will be collected in conformance with the general requirements identified in the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (DER-10), DER-31, Green and Sustainable Remediation Initiative and the NYSDEC's Guidance for the Sampling, Analysis and Assessment of Per and Polyfluoroalkyl Substance (PFAS) Under Part 375 Remedial Programs (April 2023).

The majority of the Site disturbed by proposed construction is asphalt paved, though two small areas are undeveloped turf grass. Proposed construction disturbance generally consists of excavation to an approximate depth of two (2) ft-bgs for underground conduit installation trenching, installation of bollard posts, and construction of concrete pads for installation of electrical equipment including charging stations, transformers and a main electrical switchboard. The dimensions of the proposed approximately 300 linear feet trenching will vary by area, but in general it will be two (2) to six (6) feet wide by two (2) ft-bgs.

A portion of chain link fencing adjacent/south of the existing tarmac located north of the terminal building will also be relocated slightly south to enclose the proposed aircraft charging station onto the tarmac side of the adjacent parking area. Design Development Contract Drawings detailing this work, prepared by AET/BETA, are included as **Exhibit 1**.

It is understood that contract specifications will direct the contractor to control dust and vapors resulting from construction operations in accordance with the Community Air Monitoring Program (CAMP).

Soil borings located within the proposed construction areas designated "PCI-BX" are proposed to characterize soil within the proposed trench and equipment pad excavation areas. Soil borings located approximately ten feet from the centerline of the proposed construction areas designated "PCI-OBXA and PCI-OBXB" are proposed to characterize soil in off-set areas immediately adjacent and typically a ten-foot margin on either side of proposed conduit locations. Soil samples collected from proposed off-set borings (PCI-OBXA and PCI-OBXB) will be submitted to the laboratory as HOLD samples only. The laboratory will not be instructed to analyze these HOLD samples unless the parent samples (PCI-BX) exhibit impact exceeding the applicable Soil Cleanup Objectives (SCOs).

It is the intention of this investigation to determine, to the extent possible, the extent of soil impact within the proposed construction footprint and associated off-set areas on either side of the trenching. Remedial actions, if necessary, will be proposed in an IRM WP.

Groundwater is not anticipated to be encountered by proposed construction. Groundwater depth in the work area is expected to be greater than eight (8) ft-bgs based on data from test pits excavated in 2024 for the proposed Sky Harbour Group, LLC (Sky Harbour) South Hanger Project in the area west of the DCC @ HVR Airport building located approximately 700-feet west of the proposed project area.

Sampling of soil gas is not proposed during this PCI since this project does not propose construction of enclosed occupied structures, and soil excavation is limited to the upper two (2) ft-bgs.

The results of this PCI will be incorporated into the future Site-wide Remedial Investigation. The PCI Report for this project will be submitted to the NYSDEC for approval and ultimately appended to the RI report.

The proposed PCI will generally include advancement of soil borings to aid in the collection of soil samples for subjective field evidence of contamination (FEC) screening (i.e., a visual inspection for staining and screening for organic vapors with a photoionization detector [PID) and for laboratory analysis.

2.0 SITE DESCRIPTION & HISTORY

2.1 Site Location and Description

The Hudson Valley Regional Airport Site is addressed as 18 Griffith Way in the Town of Wappinger, Dutchess County, New York. The Site is approximately 510.8 acres in size and is identified with tax number 135689-6259-03-225301-0000. Route 376 transects the northeastern portion of the Site. Jackson Road transects the southwestern portion of the Site.

The majority of the Site consists of an active airport that is owned and operated by Dutchess County. Two (2) closed landfills occupy northern portions of the Site. The landfills were reportedly used for the disposal of municipal wastes and have been designated as inactive hazardous waste sites by the NYS Department of Environmental Conservation (DEC). Two (2) hangars located on the southeastern portion of the Site, and currently occupied by Associated Aircraft Group, have been designated as inactive hazardous waste sites in relation to the discharge of spent solvents and petroleum to the Site's media.

The Site's topography is relatively flat within portions of the Site containing the aircraft runways and Site buildings. The topography slopes downwards towards Wappinger Creek on northern and western portions of the Site. The topography slopes upward on the northeastern portion of the Site located across New Hackensack Road (State Route 376).

Wappinger Creek is located adjacent to the Site's northern and western property boundaries. The Creek flows in a general southwesterly direction towards the Hudson River. An unnamed water body referred to as the Fire Pond is located on the southeastern portion of the Site adjacent north of the hangars occupied by the Associated Aircraft Group. The water body appears to discharge into an unnamed creek that flows in a general northeasterly direction to low lying areas to the northeast of the Site.

2.2 Geology

The HVRA Site is relatively large and expresses variations in both overburden soil and bedrock. Soil generally consists of sandy loams, alluvial river deposits and/or glacio-fluvial deposits and glacial tills, which have been reworked in some sections of the Site.

Bedrock is reportedly predominantly shale or limestone but is likely to vary significantly in elevation below and surrounding the Site.

The recovered soil in borings advanced at the Site during the Site Characterization Investigation (SCI) were observed to be loose sand and gravel overlying dense tills or silts. The SCI soil borings were limited to overburden soil depths. Bedrock was not encountered during on-Site drilling for the SCI.

2.2.1 Geologic History

The oldest bedrock found in Dutchess County is a mixture of gneiss and granite that were formed from pre-existing sedimentary rocks during a continental collision known as the Grenville Orogeny, approximately 1 billion years ago (bya). Roughly 0.5 bya, the supercontinent formed by the Grenville Orogeny broke apart, leaving the area now known to be Dutchess County on the edge of the North American continent, subject to sedimentary deposition that varied as sea level transgressed and regressed. The limestones and shales that now underly much of the County were largely deposited in their present location during periods of deeper sea level. About 450 million years ago (mya), North America was affected by another continental collision that is now known as the Taconic Orogeny, resulting in significant mountain building along the eastern edge of present-day New York, and the ultimate formation of a foreland basin that spanned much of the state, including Dutchess County. An extensive series of thrust faulting occurred during the Taconic Orogeny, which pushed large masses of sandstones and shales over much of the previously formed sedimentary rocks of Dutchess County. The foreland basin formed during the Taconic Orogeny which ultimately led to the deposition and lithification of other sedimentary rocks including sandstones and shales as the Taconic Mountain Range that formed during the Orogeny eroded. A combination of sedimentary rocks formed through these events now underly Dutchess County, though the oldest metamorphic and igneous rocks have been encountered as bedrock in some areas as well.

The Laurentide Ice Sheet fully covered Dutchess County roughly 20,000 years ago and is the most recent geologic force to drastically influence the regional geology and topography. Glaciers associated with the ice sheet's retreat scoured the bedrock, forming undulating valleys and leaving behind surficial deposits (glacial till) of varying source

and grain size that are still present today. Fluvial processes of erosion have since dominated the area and continue to modify the landscape.

2.2.2 Soils

Overburden soil at the Site consist primarily of silts and sands. Gravelly sections of overburden also exist but are less extensive, based on review of soil borings from previous site investigations. Deeper sections of soil consist of glacial till with a silty-clay matrix and highly variable grain size. Glacial till was observed or reported to be somewhat weathered, saturated, and only moderately dense in most instances. Additionally, like most overburden units encountered at the Site, the glacial till was not found extensively, likely having been eroded away entirely in some locations. Other overburden soils generally reflect fluvial deposits expected given the Site's proximity to Wappinger Creek.

Soils on the Site are mapped by the United States Department of Agriculture (USDA) Web Soil Survey primarily as udorthents, or gravelly loam, likely derived from glacial outwash and kame deposits. Udorthents are described by the USDA as well drained soils that have often been disturbed or reworked by cutting or filling in areas that are covered by buildings or pavement. The Wappinger loam and Pawling Silt loam are both mapped by the USDA in the western portions of the Site, and are siltier, fine-grained loams that are likely derived from lake and stream sediments.

2.2.3 Bedrock

Boring logs for pre-existing monitoring wells installed by others which extended into the surface of bedrock at the Site indicate that the bedrock beneath the Site is encountered at depths ranging from approximately 50 to 75 feet below grade elevation and is predominantly shale accompanied by intermittent to abundant veins of quartz. Some of the boring logs indicate limestone as bedrock. It is suspected that the bedrock beneath the Site is primarily the Austin Glen Member of the Normanskill Formation. This is a Middle Ordovician unit of interbedded greywackes and shales whose depositional setting would most likely correlate to the foreland basin of the Taconic Orogeny, described in the sections above. It is possible that greywacke was misclassified as limestone in limited instances at the Site where limestone was reportedly encountered. It is also possible that limestone encountered at the Site is an autochthonous unit, older than the Taconic Orogeny, or a section of Taconic Mélange, thrusted into the foreland during the collision

event. The predominantly shale bedrock at the Site was noted to be moderately to heavily eroded at most locations, and can be seen in outcrops surrounding the Site, as well as in the bed of Wappinger Creek immediately adjacent to the Site.

2.2.4 Hydrology

A surface water body referred to as the Fire Pond located adjacent north of the Dutchess County Airport Hangar, another unnamed pond located in northernmost portions of the Site, and an unnamed stream running through the northeastern portion of the property, east of Route 376 are the only surface water bodies located on-Site. Wappinger Creek is located topographically downgradient from, and borders, the northern and western Site boundary. The creek flows southwest toward Wappingers Falls and Wappinger Lake, ultimately discharging to the Hudson River. The off-Site Greens Pond is located topographically downgradient from, and approximately 500 feet to the south of the Site across New Hackensack Road. This pond drains via a seasonal, unnamed stream to Wappinger Creek. Lastly, a series of unnamed, perennial tributaries are noted to the east and south of the Site, which ultimately drain to either Wappinger Lake or Wappinger Creek.

2.2.5 Site Hydrogeology

The Site hydrogeology is relatively complex, largely due to the heterogeneity of soil across the roughly 500-acre area. Site soil was presumably reworked in several areas to develop the land surface in a manner necessary to construct the airport, adding to the complexity. Monitoring well and soil boring logs were obtained from previous site investigations and information compiled in the SCI Records Search Report and were carefully considered during the development of the conceptual site model. However, logs for several boring/monitoring well locations could not be obtained.

Monitoring wells were gauged monthly in March, April, and May of 2021 during the SCI for the purpose of groundwater flow mapping and to observe single-season variations in groundwater behavior.

2.2.6 Hydrogeologic Units

Based on review of available boring and monitoring well installation logs, it appears that three distinct aquifers exist at the Site, pending further evaluation and aquifer testing: 1)

a bedrock aquifer from approximately 50 to 75 feet below grade (Bedrock Aquifer), 2) a deep unconsolidated aquifer from approximately 40 to 60 feet below grade, located directly above bedrock or till stratigraphically, (Unconsolidated Semi-confined Aquifer) separated by a leaky aquitard and 3) a shallow or perched water table aquifer from approximately 5 to 15 feet below grade (Perched or Water Table Aquifer).

The distinction of each of the three (3) aquifers categorized above stems from the identification of two (2) confining units, or more likely, leaky aquitards: The first being the interface of the weathered bedrock surface and basal till, where encountered, and the second being a clayey silt and/or sand unit encountered at several deep monitoring well locations which extends from about 10-15 feet below the water table to about 20-40 feet below the water table.

2.2 Environmental Site History

Previously, the NYSDEC had classified the Site as a potential IHWDS (P-Site #314129) due to the presence of the PFAS substances PFOA and PFOS detected in May 2016 at concentrations exceeding regulatory criteria in an on-Site potable drinking water supply well. Concentrations of the PFAS, PFOA, and PFOS were also detected in nearby off-Site private water supply wells. Based on the Site's P-Site designation, NYSDEC mandated a Site Characterization Investigation (SCI) of the Site. Nine (9) areas of concern (AOCs) were identified and investigated during the SCI. AOCs included the aqueous film forming foam AFFF firefighting testing area (AOC-1) located at the ends of Runway 15-33; the former Balefill Landfill (AOC-2) located in northwestern portions of the Site; the former Dutchess County Landfill (AOC-3) located in northwestern portions of the Site; the former Jackson Road petroleum spill (AOC-4) located in southwestern portion of the Site; several stormwater outfalls that may have received AFFF during routine testing (AOC-5) located in southern and west central portions of the Site; the Associated Aircraft Ground (AAG) hangars, former IBM and Flagship Hangers, (AOC-6) located in southeastern portions of the Site; the Airport Rescue and Firefighting Facilities (ARFF)[1]/maintenance building (AOC-7) located in southeastern portions of the Site; the

[1] A new ARFF building, situated in the northwest corner of the property, has since been constructed to replace the old ARFF building and is currently operational. References to the ARFF building in this report refer to the former ARFF building, which remains situated in the southeast corner of the property.

Fire Pond (AOC-8) located in southeastern portions of the Site; and the ends of Runway 6-24 (AOC-9) where AFFF may have been applied at the ground surface.

The PFAS compounds PFOS and PFOA were detected at concentrations exceeding regulatory criteria in various media samples in all of the AOCs with the exception of AOC-9 (ends of Runway 6-24). Other analytes detected above regulatory criteria included metals in soil; 1,4-dioxane (AOC-2 and -3 only), SVOCs and metals in groundwater; and SVOCs and metals in surface water collected from a single sampling location in AOC-5 (Outfalls).

Results of the SCI are summarized in Section 2.3.1 of this work plan; however, it is important to note that the AAECS project work area is not located in any of the identified AOCs (refer to **Figure 2 –** *Site Overview Map*). The closest AOC (AOC-5 - Outfall 001 is located approximately 170 feet down-grade and down-gradient of the work area.

2.3 Previous Environmental Investigations

The following sections summarize pertinent environmental investigations that have been conducted at the Site since execution of the Order on Consent in March 2018. The investigations were conducted from 2018 to 2026. One (1) investigation was a site characterization (site-wide) conducted by the County (December 2019) pursuant to the Consent Order. The other investigation was limited to a specific area of the site where construction was proposed for the Sky Harbour south hangar site. These investigations focused primarily on the presence of the PFAS, PFOS, and PFOA in the Site's media, and to a lesser degree on the presence of other potential contaminants.

2.3.1 Summary of Previous Investigations

The following summarizes the two (2) pertinent previous investigations conducted either site-wide, or in the general vicinity of the proposed project area at the AAECS Site.

Site Characterization Report, prepared by C.T. Male Associates, December 2019, Revised October 2021, August 2022, May, June, and October of 2023 (hereinafter referred to as the 2019 C.T. Male Site Characterization Report).

In general, the SCI included the collection of surface soil, near-surface soil, subsurface soil, surface water, sediment, stormwater, groundwater, and potable drinking water

samples from seven (7) Areas of Concern (AOCs) identified within the Site. The SCI also included the collection and analysis of PFAS in drinking water from one on-site and multiple off-site private potable water supply wells.

The SCI revealed, among other things, that PFOA and PFOS were found throughout Site media and in one on-site and multiple off-site potable wells, and off-site surface water and sediment.

Draft Summary Report – PFAS Test Pit Investigation at Proposed Sky Harbour Hanger, South Side Expansion, prepared by C.T. Male Associates, January 24, 2024.

The Sky Harbour South Hangar Test Pit investigation was focused on the location of the proposed Sky Harbour South Hanger, the location of which is depicted in **Figure 2 –** *Site Overview Map*. The investigation included the advancement of twenty (20) test pits to aid in the collection of discrete surface (0-2"), and subsurface (varying depth) soil samples for laboratory analyses for PFAS. The investigation identified PFAS impacted soil above Protection of Groundwater Interim Guidance Values (PG IGVs) at sixteen of the twenty test pits. The highest concentrations, primarily PFOS, were observed in the surface interval, though impact was identified to at least seven (7) ft-bgs. During this previous investigation, groundwater was encountered at about 8'-4" ft-bgs in one test pit. This test pit investigation was performed outside of a NYSDEC approved work plan.

2.3.2 Shallow Groundwater Flow as Presented in the Supplemental Site Characterization Report

Six monitoring wells were installed under the supervision and direction of C.T. Male Associates (CTM) Field Staff in August 2019 during the SCI in accordance with the Site Characterization Work Plan (2018). The wells were intended to supplement the pre-existing monitoring well network and to address immediately identifiable data gaps at the Site. They target the shallow groundwater aquifer at the ends of both major runways, the Jackson Road Spill area, and the Maintenance/ARFF Building.

Based on groundwater well gauging performed between March and May of 2021, the shallow groundwater aquifer generally flows west and northwest, across the Site in the direction of Wappinger Creek, mirroring the topography and drainage characteristics of the area surrounding the Site. Groundwater in the shallow unconsolidated soils exists under typical unconfined aquifer conditions. Based on the observed shallow

groundwater flow pattern and local topography, the shallow aquifer likely discharges at the Wappinger Creek, which exists at an elevation approximately 60 feet lower than the central portion of the Site. In general, the proposed AAECS project area is hydro-geologically downgradient from the Areas of Concern where PFAS was reportedly applied to the ground surface as part of FAA mandated testing (e.g. AOC-1). The AAECS project area may also be hydro-geologically downgradient from the AAG Hangars within AOC-6: the area where chlorinated solvents were found in the subsurface, however, AOC-6 is located ~1,700 feet away. The proposed soil disturbance for this project is limited to the upper two (2) feet of soil and is not anticipated to require excavation dewatering.

2.3.3 Shallow Groundwater Sky Harbour South Hangar Test Pit Investigation

During the Sky Harbour South Hangar Test Pit Investigation, groundwater was encountered at about 8'-4" bgs in one test pit. Groundwater monitoring wells were not installed during that investigation; therefore area groundwater flow direction was not determined.

3.0 OBJECTIVES, SCOPE & RATIONALE

3.1 Objectives

The objective of this PCI is to identify if soil within the area of the Site where construction is proposed for the AAECS project is impacted at contaminant concentrations exceeding applicable IGVs/SCOs. Groundwater is not anticipated to be encountered by proposed construction excavation work for this project based on the anticipated depth (greater than eight feet) of area groundwater observed during the previous subsurface investigations.

The PCI data will be used to evaluate the need for mitigation based on applicable standards, criteria, and guidance (SCGs) in accordance with 6 NYCRR Part 375. If contamination is identified during this PCI exceeding SCGs, an IRM WP will be recommended that will include remedial measures to mitigate potential contaminant release during construction. Soil gas and/or ambient air sampling is not recommended for this investigation since no enclosed occupied structures are proposed by this project, and no releases of volatile organic compounds are known for this project area. The area of historic chlorinated solvent release at the site (AOC-6) is located ~1,800 feet away across predominantly unpaved areas.

Data obtained during this PCI will be incorporated into the future site-wide Remedial Investigation. The intent of this focused environmental assessment is to evaluate what remedial alternatives, if any, should be developed and implemented during construction in this area.

3.2 Scope and Rationale

The scope of work for this PCI was developed based on the proposed preliminary construction design plans for the project titled *BETA Poughkeepsie – EV564* provided by Apex Energy Tek. LLC., dated March 8, 2023. These drawings are provided as **Exhibit 1**. Site conditions, and existing data collected from previous Site investigations were also assessed during preparation of this work plan.

This PCI investigation will include collection and laboratory analysis of soil, and if encountered groundwater, within the footprint and associated off sets (~10 foot margin) of the AAECS project which is proposed west/adjacent to the existing HVRA terminal

building. The location of the proposed project footprint is depicted in **Figure 2 –** *Site Overview Map*.

3.3 Proposed Sampling

3.3.1 Soil Sampling

Soil samples will be collected from 18 soil boring locations as depicted on **Figure 3 –** *Proposed PCI Soil Sampling Plan – AAECS Project*. The soil boring locations, denoted PCI-B1 to PCI-B6, have been generally distributed along the proposed fence removal, trench routing and equipment pad areas. Data from these points will be used to characterize soil within the work areas. The soil borings denoted "PCI-OBXA and PCI-OB-XB" have been proposed at the limits of the off-set areas of each work area (generally 10-feet away) to characterize soils within the offset.

Proposed borings PCI-B1, PCI-OB1A, PCI-OB1B and PCI-B2, PCI-OB2A, and PCI-OB2B are the only borings located in a vegetated turf grass area. The remaining twelve borings are located within asphalt paved areas. **Table 1***: Summary of Proposed Soil Borings and Sampling* which details locations, depths, and analyses of all samples to be collected from the work area is included at the end of this report.

Soil at each location will be collected by either direct push geoprobe, backhoe, or hand-held sampling equipment to facilitate the collection of soil samples for laboratory analysis and to characterize the environmental quality of soils and geology. Soil borings will be advanced to eight (8) ft-bgs, which is beyond the anticipated two (2) foot maximum excavation depth of proposed construction. Soil borings will be advanced beyond the proposed construction excavation limit to allow for collection of lower interval discrete samples, in the event that the adjacent septic seepage pits are found to have impacted soil quality in the work area which may extend to lower intervals.

3.3.2 Soil Sampling Intervals

Soil interval sampling will vary between turf and paved areas since surficial soil in turf areas may pose a potential human health exposure scenario, and soil within asphalt paved areas generally do not. Within the turf grass areas where soil borings PCI-B1, PCI-OB1A, PCI-OB1B, PCI-B2, PCI-OB2A, and PCI-OB2B are proposed, soil from nine (9) discrete sample intervals will be collected as follows:

(1) A surface soil sample from the two inches immediately beneath the vegetive root zone (0-0.17 foot depth interval).
(2) A near-surface soil sample from the 0.17-foot to 1.0-foot depth interval.
(3) A sub-surface soil sample from the 1 to 2-foot depth interval.
(4) A sub-surface soil sample from the 2 to 3-foot depth interval.
(5) A sub-surface soil sample from the 3 to 4-foot depth interval.
(6) A sub-surface soil sample from the 4 to 5-foot depth interval.
(7) A sub-surface soil sample from the 5 to 6-foot depth interval.
(8) A sub-surface soil sample from the 6 to 7-foot depth interval.
(9) A sub-surface soil sample from the 7 to 8-foot depth interval.

Within the asphalt paved areas where soil borings PCI-B3, PCI-OB3A, PCI-OB3B, PCI-B4, PCI-OB4A, PCI-OB4B, PCI-B5, PCI-OB5A, PCI-OB5B, PCI-B6, PCI-OB6A, and PCI-OB6B are proposed, soil from eight (8) discrete sample intervals will be collected from:

(1) Bottom of asphalt sub-base to 1.0-foot depth interval.
(2) 1.0-2.0-foot depth interval.
(3) 2.0-3.0-foot depth interval.
(4) 3.0-4.0-foot depth interval.
(5) 4.0-5.0-foot depth interval.
(6) 5.0-6.0-foot depth interval.
(7) 6.0-7.0-foot depth interval.
(8) 7.0-8.0-foot depth interval.

The number of samples proposed for collection, and the distribution of the sampling points will provide overall coverage within the construction disturbance area and associated adjacent off-sets on either side of buried conduit.

Sampling locations, intervals, and analyses are detailed within the attached **Table** 1.

3.3.3 Soil Sample Laboratory Analysis

3.3.3.1 PFAS

Soil samples collected from the initial six (6) soil borings PCI-B1 through PCI-B6 will be submitted for PFAS laboratory analysis via EPA Method 1633 as noted on Table 1.

Soil samples collected from the upper three (3) intervals (0-0.17', 0.17'-1.0 and 1.0-2.0') at borings PCI-B1 and PCI-B2 located within the turf grass area will be submitted to the laboratory for PFAS analysis. Samples collected from the seven (7) one-foot intervals between two (2) ft-bgs. and eight (8) ft-bgs. will be submitted to the laboratory as HOLD samples. The laboratory will not be directed to analyze these held samples unless directed. The lab will be directed to analyze these samples only if the PFAS concentration in overlying intervals exceeds the PG IGV for PFAS.

Soil samples collected from the upper two (2) intervals (bottom of asphalt sub-base-1.0' and 1.0'-2.0') at borings PCI-B3 through PCI-B6 located within the asphalt paved area will be submitted to the laboratory for PFAS analysis. Samples collected from the seven (7) one-foot intervals between two (2) ft-bgs. and eight (8) ft-bgs will be submitted to the laboratory as HOLD samples. The laboratory will not be directed to analyze these held samples unless directed. The lab will be directed to analyze these samples only if the PFAS concentration in overlying intervals exceeds the PG IGV for PFAS.

Soil samples collected for PFAS analysis will be homogenized in a decontaminated stainless-steel bowl or equivalent, prior to filling laboratory provided sample containers.

3.3.3.2 Full Suite Analysis

Soil samples from two (2) of the borings will also be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) plus 10 tentatively identified compounds (TICs), TCL SVOCs (including 1,4-dioxane) plus 20 TICs, pesticides and PCBs; Target Analyte List (TAL) metals; and cyanide (herein referred to as TCL/TAL or Full Suite Analysis), in accordance with the requirements outlined in the NYSDEC's DER-10, Technical Guidance for Site Investigation and Remediation. The soil boring locations proposed for full suite analysis are PCI-B1, which is the closest boring to the terminal building septic tank leaching structures, and boring PCI-B6 which is adjacent to the airport tarmac.

One discrete interval from each of these two (2) borings will be submitted for Full Suite Analysis. The interval submitted for Full Suite Analysis will be selected based on the presence of odors, staining, or elevated photo ionizing detector (PID) readings. If such FEC is observed, then the discrete soil interval exhibiting the highest degree of FEC will be selected for Full Suite Analysis. If no FEC is observed, then the soil sample collected from the lowest foot of the boring above groundwater will be analyzed for Full Suite

Analysis. Additional samples may be collected from other boring locations where FEC is observed. If FEC is observed in other borings, one interval may be selected from an additional boring for Full Suite Analysis as described above.

Discrete soil samples collected for VOC analysis will be collected directly from the 5-foot acetate geoprobe liner. Soil samples collected for SVOCs, pesticides, PCBs, metals and cyanide analysis will be homogenized in a decontaminated stainless-steel bowl, or equivalent, prior to filling laboratory provided sample containers.

3.3.4 Soil Sampling Procedures

The proposed soil borings will be advanced by direct push geoprobe, backhoe, or handheld methods to facilitate the collection of soil samples and characterize the environmental quality of soils and geology. Refer to **Table 1** for proposed discrete soil sampling intervals.

Soil sampling will be performed in accordance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation and NYSDEC Sampling, Analysis, and Assessment of Per- and polyfluoroalkyl substances (PFAS) Guidance dated April 2023. Soil samples will be collected immediately beneath the vegetative layer in the grassy area of the Site, and immediately beneath the asphalt sub-base in the paved areas. The soil samples will be collected using geoprobe tube fitted with a disposable acetate liner, field-decontaminated hand auger, shovel, trowel, split spoon sampler, or other equal method. Decontamination will include an Alconox and PFAS-free water wash followed by a PFAS-free water rinse. Liquinox will not be used.

The soil samples will be assessed in the field for FEC, then placed in laboratory provided sampling containers in a laboratory provided cooler containing wet ice. PFAS samples will be collected prior to any samples utilizing polytetrafluoroethylene lids (e.g., sample jars for volatile organic compound analysis) and stored in separate coolers due to potential cross contamination. A small quantity of soil will be removed from each sample interval of the 5-foot acetate liner, added to a new Ziploc bag and screened with a PID for headspace analysis. Soils selected for headspace analysis will be based on changes in lithology, or in 2-foot intervals as applicable. Soil retained for PID field screening will not be used as the sample aliquot for PFAS, VOC, or SVOC analysis. Samples retained for laboratory analysis will be collected directly from the Geoprobe 5-foot acetate liner. A

chain of custody form(s) will be completed and will accompany the samples to the laboratory.

3.3.5 Groundwater Monitoring Wells

Groundwater is not anticipated to be encountered by proposed construction. Groundwater depth in the work area is expected to be greater than eight (8) ft-bgs. based on data from test pits excavated in 2024 for the proposed Sky Harbour Group, LLC (Sky Harbour) South Hanger Project in the area west of the DCC @ HVR Airport building located approximately 700-feet west of the proposed project area.

The proposed construction depth for the AAECS project is approximately two (2) feet below ground surface.

If groundwater is encountered during advancement of soil borings, a temporary one-inch diameter PVC monitoring well with slotted screen and solid riser will be installed at one (1) location to facilitate groundwater sampling. Well screen will be installed at a depth to provide five (5) feet of screen above the water table and five (5) feet of screen below the water table, if possible. The length of well screen may vary if refusal is encountered. The monitoring well terminal depth and well screening interval will be calculated by C.T. Male Associates' field environmental scientist/geologist by maintaining accurate measurements of sampling depth, casing depth, and screen and riser placement in the borehole. Since this well will be temporary, a road box or standpipe will not be installed.

3.3.6 Monitoring Well Development and Sampling

If a well is installed, it will be developed by hand bailer. The well will be developed at least 24-hours post-installation. Refer to Section 3.4 below for handling and disposal of purge water.

One (1) groundwater sample will be collected for laboratory analysis if a well is installed. If a groundwater sample is collected from the installed monitoring well, it will be analyzed for TCL VOCs plus TICs, TCL SVOCs plus TICs, pesticides, PCBs; TAL metals, cyanide, PFAS (1633), and 1,4-dioxane.

Prior to groundwater sampling, the well will be purged employing low-stress pumping techniques (e.g., peristaltic pump) utilizing pumps capable of achieving low-flow pumping rates with new factory supplied tubing for the well. Field parameter readings

of pH, specific conductance, oxidation-reduction potential, and dissolved oxygen will be recorded in 5-minute intervals from the start of purging using a multi-parameter water quality instrument. The water level and turbidity will be recorded at the same interval using separate meters. The well will be sampled after three (3) consecutive 5-minute readings whereby the parameters meet the criteria listed in USEPA low stress sampling guidance document. If the formation cannot support low-flow rates, the well will be purged dry or for deep wells to the top of the well screen, then groundwater within the wells will be allowed to recover to at least 90% of their initial static water level, to the extent possible and practical. A slow recharging well will be allowed to recover for a period of up to four (4) hours before sampling.

Groundwater samples will be placed in laboratory-provided sampling containers, and the containers will be placed in a laboratory provided cooler containing wet ice. A chain of custody form will be completed and will accompany the samples to the laboratory. Refer to Section 3.4 below for handling and disposal of purge water.

3.4 Field Quality Control

Source Materials Quality Control

Water used to decontaminate drilling equipment will be sourced from a PFAS-free water source as demonstrated through laboratory analysis or the latest available municipal water quality report.

Field Quality Control

Field Quality Control samples will include Equipment Blanks, Duplicates, and Matrix Spike/Matrix Spike Duplicates (MS/MSD). Quality Control samples will be prepared for each media type at a ratio of one (1) set of Quality Control samples per 20 media samples, with the exception of Equipment Blanks for PFAS analyses, which will be collected during each PFAS sampling event. Frequency of QA/QC might be modified in consultation with the NYSDEC.

3.5 Laboratory Reporting and Data Validation

The laboratory will generate NYSDEC ASP Category B data deliverable packages of the PCI analytical data. A Data Usability Summary Report (DUSR) of the analytical data developed during this PCI will be prepared to confirm that it is valid and usable for

subsequent decision-making purposes. The DUSR will be completed by an independent third-party data validator. The data validation company for this project has not yet been selected.

3.6 Survey

Soil boring locations and groundwater monitoring well location(s), as applicable, will be located in the field via GPS for this PCI investigation.

3.7 Project Standards, Criteria and Guidance

This PCI will include collection of soil and possible groundwater for laboratory analysis.

3.7.1 Soil

Soil samples will be analyzed for either PFAS (EPA 1633) and/or Full Suite Analysis consisting of TCL VOCs plus TICs, TCL SVOCs (including 1,4-dioxane) plus TICs, PFAS (EPA 1633), pesticides and PCBs; TAL metals; and cyanide.

Soil analytical results for PFAS will be compared to PG IGVs promulgated in Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, April 2023.

Soil analytical results for the TCL/TAL/CN Parameters will be compared to PG SCOs promulgated at NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs.

3.7.2 Groundwater

Groundwater samples, if collected, will be analyzed for PFAS (EPA 1633) and TCL VOCs plus TICs, TCL SVOCs plus TICs, pesticides, PCBs, TAL metals, cyanide, and 1,4-dioxane.

Groundwater analytical results for the TCL/TAL/CN Parameters and PFAS will be compared to Class GA ambient water quality standards and guidance values promulgated in the DEC Division of Water TOGS 1.1.1 and addendums.

3.8 Investigation Derived Wastes

Investigation derived wastes from the PCI may include soil from borings that could not be returned to their original location, water from well development and well purging, decontamination water from manual tool cleaning, and disposable items such as bailers, nitrile gloves, plastic, wipes, et cetera.

Soil from soil borings will be drummed unless they can be returned to their origins per DER-10-3.3(e). Any drummed soils will be labeled and staged at a secure location within the Site pending characterization and off-site disposal.

Decontamination water from tool cleaning will be captured and transferred into 55-gallon drums. Drums of decontamination water will be staged within a secure area of the site pending characterization and off-site disposal at a permitted treatment/disposal facility. If contaminants are not detected above SCGs by laboratory analysis, this water may be returned to the ground surface for infiltration. Disposable items such as nitrile gloves, plastic, wipes, etc. will be disposed of off-site as solid waste.

3.9 Decontamination

A decontamination program will be employed. Equipment that comes into contact with Site soils including drilling rig tooling will be decontaminated between sampling intervals, boring locations, and prior to demobilizing from the Site. Decontamination procedures will include removal of soil adhered to tools and portions of the drill rig at the location of excavation, before moving to a subsequent location or demobilization from the Site. The soil removed from the equipment will be returned to the bore hole of origin. The equipment will then be washed via high pressure wash and/or wash with a non-phosphate environmental detergent (e.g., Alconox) followed by a rinse. Liquinox will not be used for decontamination, due to potential 1-4 Dioxane cross contamination. Water used for decontamination washing and rinsing will be PFAS-free. All fluids generated during decontamination of equipment will be captured and transferred into 55-gallon drums on a daily basis, at minimum. Drums of decontamination water will be staged within a secure area of the site pending characterization and off-site disposal at a permitted treatment/disposal facility. If contaminants are not detected above SCGs by laboratory analysis, this water may be returned to the ground surface for infiltration.

Water misting (PFAS-free water) will be used to prevent generation of dust during the decontamination process as required.

3.10 Subcontractors

Subcontractors will be retained to aid in the completion of the PCI. These may include a GPR/private utility locator subcontractor to locate underground utilities at the proposed soil borings, a drilling subcontractor to perform soil borings and install groundwater monitoring wells as applicable, an environmental laboratory for laboratory analyses of the media samples; and a data validation company to provide independent third-party validation of the laboratory data. The subcontractors that will be utilized to assist in this investigation have not yet been selected.

4.0 SUPPLEMENTAL PLANS

4.1 Quality Assurance/ Quality Control Plan (QAPP)

The QAPP describes the quality assurance and quality control procedures to be followed from the time media samples are collected to the time they are analyzed by the environmental analytical laboratory and data is evaluated by a third party according to USEPA and NYSDEC DUSR guidelines. The QAPP prepared for this PCI WP is presented as **Appendix A**.

The QAPP will be followed by field personnel during the PCI activities and media sampling events to ensure the data collected and generated is representative and accurate. The laboratory results will be reported with NYSDEC ASP Category B deliverables, which will be subjected to USEPA and NYSDEC's DUSR guidelines to determine if the data is valid and usable.

4.2 Health and Safety Plan and Community Air Monitoring Plan

A site-specific Health and Safety Plan (HASP) is presented as **Appendix B**. This HASP has been prepared for use by C.T. Male personnel during the PCI. Subcontractors will be required to develop their own HASP for the work that their employees will perform.

A stand-alone, site-specific Community Air Monitoring Plan (CAMP), is presented as **Appendix C**. This CAMP has been prepared for use during the PCI field activities in accordance with the New York State Department of Health Generic CAMP and Fugitive Dust and Particulate Monitoring DEC Guidance (DER-10 Appendix 1B). CAMP exceedances, if any, will be relayed to the Department and NYSDOH representative within 24-hours as occurrence, along with mitigation actions taken.

5.0 REPORTING AND SCHEDULE

5.1 Reporting

Upon completion of field activities and receipt and independent validation of the analytical laboratory data, a PCI Report will be prepared. The PCI Report will summarize the investigation, any NYSDEC-approved deviations from the work plan, and present the findings in a manner that can be used for construction purposes. The report will present the investigations, analytical results of samples collected, and interpretations of the data.

If the PCI results identify impacted media at the Site, preparation of an IRM WP will be recommended. This IRM WP will recommend remedial measures to be employed during construction to address impacted soil and/or groundwater as applicable.

The IRM WP will include reference to the site-specific Community Air Monitoring Plan (CAMP) as applicable.

5.2 Schedule

Table 2 below provides the estimated schedule for the completion of the PCI. The overall progress of the project will be dependent upon a number of factors including, but not limited to, weather, contractor availability, NYSDEC review and approval timeframes, et cetera. The client (AET) may elect to expedite laboratory analysis, which may accelerate the below schedule.

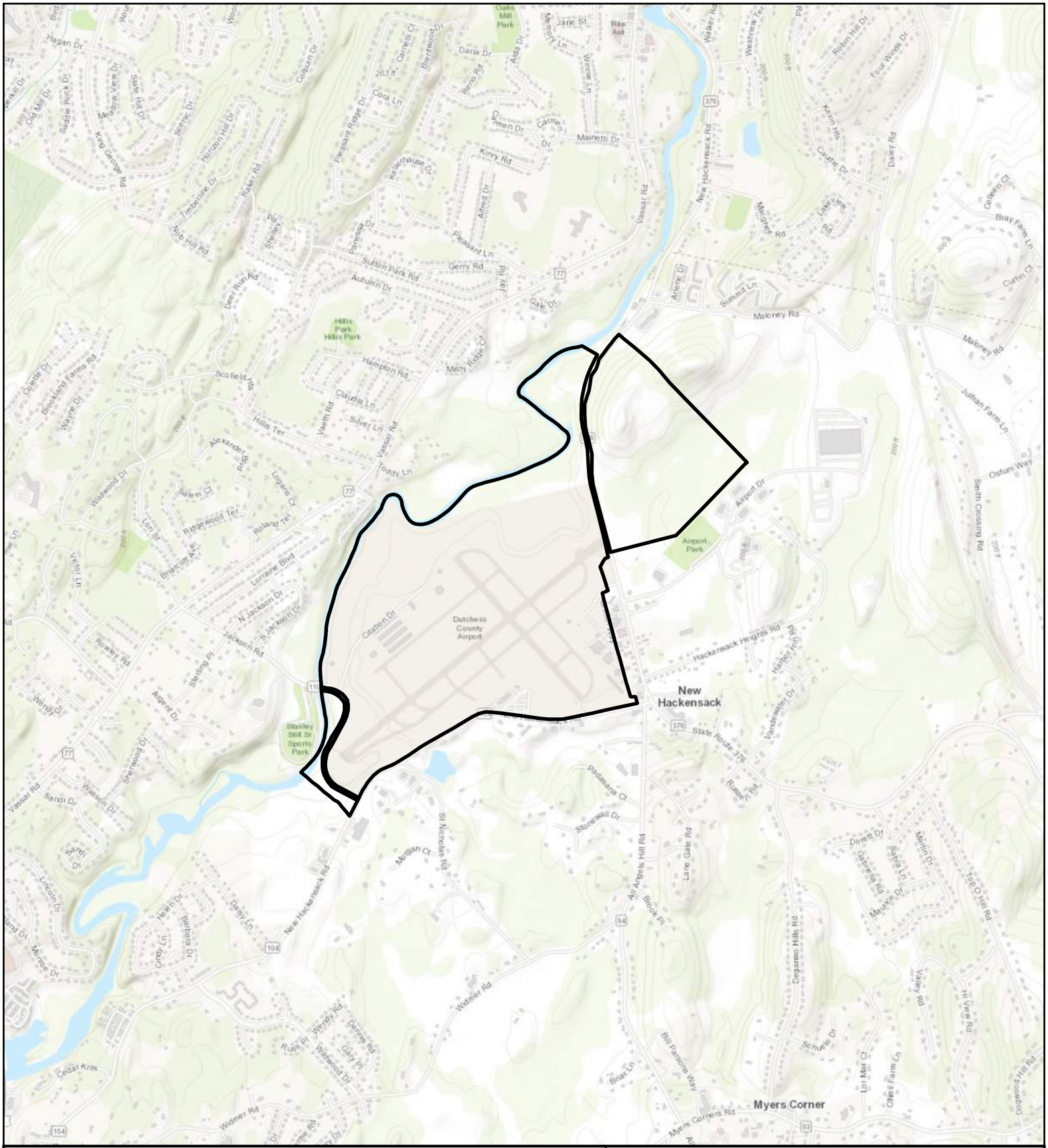
Table 2: Anticipated Project Schedule

Anticipated PCI Project Schedule* Aircraft & Automobile Charging Station Project Hudson Valley Regional Airport	
Investigation Milestone	**Anticipated Date**
Submittal of Draft Pre-Construction Investigation Work Plan (PCI WP) to DEC for Review	22 July 2026
Receipt of DEC/DOH Approval and/or Comments on Draft PCI WP Expected on or Before 90 Days	2 December 2026
PCI Field Activities & Laboratory Analysis	16 Dec – 8 January 2027
Submittal of Draft PCI Report to DEC for Review	12 February 2027
Anticipated Receipt of DEC Approval of Draft PCI Report on or Before 90 Days	23 June 2027

Notes

*The above project schedule estimate is subject to delays based on any of the following: duration of regulatory review, NYSDEC mandated revisions/re-submittals or work plan and/or report, and subcontractor delays.

FIGURES


New Hackensack
Myers Corner
Dutchess County Airport
Stanley Still Sr Sports Park
Airport Park
Hillis Park
Hillis Park
Hampton Rd
Autumn Dr
Gerry Rd
Sutton Park Rd
Pleasant Ln
Maloney Rd
Hackensack Heights Rd
State Route 376
Lorraine Blvd
Jackson Rd
Rowley Rd
Vassar Rd
New Hackensack Rd
Widmer Rd
Myers Corners Rd
Airport Dr
Citation Dr
Stonewall Dr
St Nicholas Rd
All Angels Hill Rd
Lane Gate Rd
Degarmo Hills Rd
Toro Hill Rd
Vanderwater Dr
Russell Rd
Kinny Rd
Mainetti Dr
Vassar Rd
New Hackensack Rd
Maloney Rd
Juffian Farm Ln
Ostuni Way
Smith Crossing Rd
Bray Farm Ln
Curtin Ct
Colleen Ct
Caudle Dr
Daley Rd
Four Winds Dr
Robin Hill Dr
Westview Ter
Walker Rd
Jane St
Rite Aid
Oaks Mill Park
Daria Dr
Cora Ln
Carmen Dr
Alda Dr
Memory Ln
Monroe Ln
Pheasant Ridge Dr
Kellerhouse Dr
Alfred Dr
Parnessa Dr
Timberline Dr
Horizon Hill Dr
King George Rd
Saddle Rock Dr
Meadow View Dr
Scenic Dr
Raker Rd
Old Shelvey Rd
Nob Hill Rd
Deer Run Rd
Jay Rd
Gale Dr
Misty Ridge Ct
Scofield Hts
Claudia Ln
Silver Ln
Valerie Rd
Toddy Ln
Hillis Ter
Alexander Rd
Wildwood Dr
Salem Ct
Ridgewood Ter
Rolling Ter
Logans Ct
Lori St
Briarcliff Ave
Vichy Ln
N Jackson Dr
S Jackson Dr
Sterling Pl
Advent Dr
Wendy Dr
Sherwood Dr
Wesson Dr
Sandi Dr
Lincoln Dr
Helen Dr
Barbara Dr
Gary Ln
Cindy Ln
Monroe Dr
Cedar Knls
Wersely Rd
Dennis Rd
Gary Pl
Wellwood Dr
Rose Pl
Pardesana Ct
Morgan Ct
Book Pl
Lane Gate Rd
Bill Passino Way
Briar Ln
Schade Dr
Lor Mar Ct
O'Neil Farm Ln
Dogwood Hill Rd
Hi View Rd
Valley Rd
Martin Dr
Maurice Dr
Gabriela Rd
Sabra Ln
Dorett Dr
Cedar Hill Rd
Hanford Hill Rd
Airport Dr
Summit Ln
Avere Dr
Mahopac Rd
Lake View Rd
Kelvin Hts
Four Winds Dr
Robin Hill Dr
Westview Ter
Walker Rd
Jane St
Rite Aid
Oaks Mill Park
Hagan Dr
Old Mill Dr
Saddle Rock Dr
Meadow View Dr
Scenic Dr
King George Rd
Horizon Hill Dr
Timberline Dr
Raker Rd
Old Shelvey Rd
Nob Hill Rd
Deer Run Rd
Autumn Dr
Gerry Rd
Sutton Park Rd
Pleasant Ln
Hampton Rd

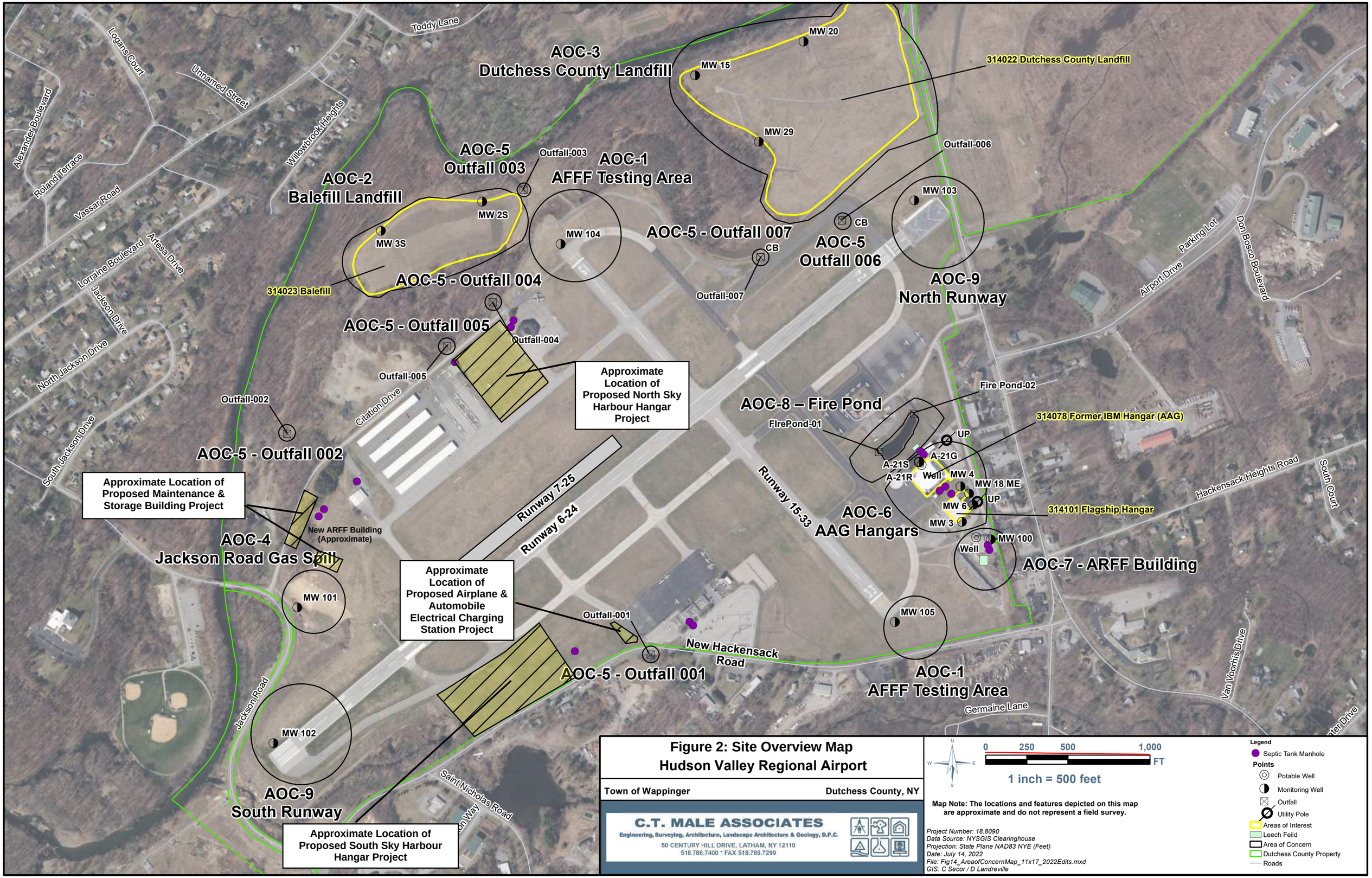


Figure 2: Site Overview Map
Hudson Valley Regional Airport

Town of Wappinger — Dutchess County, NY

C.T. MALE ASSOCIATES
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518.786.7400 * FAX 518.785.7299

N W E S

0 250 500 1,000 FT

1 inch = 500 feet

Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

Project Number: 18.8090
Data Source: NYSGIS Clearinghouse
Projection: State Plane NAD83 NYE (Feet)
Date: July 14, 2022
File: Fig14_AreaofConcernMap_11x17_2022Edits.mxd
GIS: C Secor / D Landreville

Legend
- Septic Tank Manhole

Points
- Potable Well
- Monitoring Well
- Outfall
- Utility Pole
- Areas of Interest
- Leech Feild
- Area of Concern
- Dutchess County Property
- Roads

NOTES:
1. BETA TO CONFIRM FENCE DOES NOT CONFLICT WITH ALIA AIRCRAFT WING TIP REQUIRED CLEARANCE.
2. PROPOSED EQUIPMENT MAY BLOCK VIEW OF EXISTING SIGN TO EASTBOUND TRAFFIC.
3. PROPOSED EQUIPMENT IS TO BE PLACED OUTSIDE OF SLOPED AREAS AND AT LEAST 15' FROM EXISTING 3-PHASE POWER LINES.

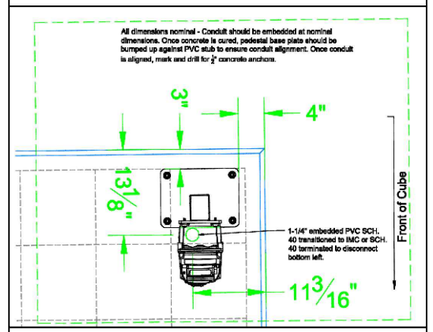
NORTH

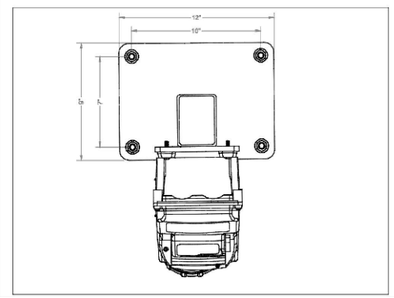
PCI-OB5A
PCI-B5
1'' PVC SCH40 TYPE CONDUIT FROM INVERTER TO DISPENSER THROUGH UNDERGROUND TRENCH
EXISTING PERIMETER FENCE
EXISTING FUEL SIGN
PROPOSED LEVEL 2 DUAL-PORT CHARGER (AUTOMOBILE)
PCI-OB3B
PCI-B3
PCI-OB5B
CONCRETE FOOTING
PROPOSED DCFC DISPENSER(AIRPLANE)
41.624103°
-73.883467°
NOTE 1
PCI-OB3A
Existing transformer
100A CIRCUIT/PEDESTAL
PCI-OB6A
50'-0"
11'
5'
25'
PCI-B6
PCI-OB6B
71'-6"
25'
~40 FT UNDERGROUND TRENCH CONTAINING PRIMARY CONDUIT AND CABLES (1)4'' PVC SCH 40
PCI-OB1A
PCI-B1
PROPOSED PAD MOUNT UTILITY TRANSFORMER (NOTE 3)
PCI-OB1B
PCI-B4
PROPOSED RELOCATED FENCE (BY OTHERS)
PROPOSED ELECTRICAL SWITCHBOARD, MILBANKS TRANSFORMER & PANELBOARD ENCLOSURE, AND (1) INVERTER
EXISTING SIGN(NOTE 2)
PCI-OB4A
PCI-OB2B
PCI-OB4B
2x 3'' PVC SCH40 TYPE CONDUIT THROUGH UNDERGROUND TRENCH
1X 2'' PVC SCH40 TYPE SPARE CONDUIT FOR FUTURE TMS, FROM SWITCHGEAR TO DISPENSER THROUGH UNDERGROUND TRENCH
5'-0"
3'-5"
10'
AREA WITH STEEP GRADE NOT SUITABLE FOR BUILDING
PCI-B2
PCI-OB2A
1'' PVC SCH40 TYPE CONDUIT FROM SWITCHGEAR TO DUAL PORT EV CHARGER THROUGH UNDERGROUND TRENCH
EXISTING 3-PHASE POWER LINES

Approximate location of septic tank, grease trap and 7 seepage pits below grade

Actual soil boring locations may shift in field to avoid existing septic tanks/piping and off-sets from utilities.

100A CIRCUIT/PEDESTAL DETAILS





Legend

- Proposed geoprobe soil boring location in grass area, PFAS soil sampling
- Proposed geoprobe soil boring location in asphalt paved area, PFAS soil sampling
- Proposed geoprobe soil boring location, full suite (TCL/TAL) soil sampling in addition to PFAS soil sampling

PCI-BX — Proposed geoprobe soil boring location with initial soil analysis

PCI-OBX — Proposed offset geoprobe soil boring location with secondary soil analysis only if initial analysis exceeds PG IGVs.

PG IGVs: Protection of Groundwater Interim Guidance Values.

Drawing Adapted from Drawing by Apex Energy Tek, LLC. dated March 8, 2023

CONTRACTOR

apexenergytek

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12 Raymond Avenue
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Airplane & Automobile Electrical Charging Station Project

Hudson Valley Regional Airport
18 Griffith Way,
Wappinger, NY

NYSDEC Project No.
C314129
CTM Project No.
26.0423

DRAWING TITLE:

Figure 3 - Proposed PCI Soil Sampling, AAECS Project HVRA

SCALE

0 20
10 40Ft

Date: July 1, 2026
Scale: As Indicated
Project: PV System
Drawn by: Vahan M.
Sheet Number

TABLES

Table 1

Summary of Proposed Soil Borings and Soil Sampling

Location Name	Ground Surface	Installation Method	Boring Depth (Ft. bgs.)	Proposed Sample Intervals (Ft. bgs.)	Sample Type	Laboratory Analysis
PCI-B1	Turf Grass	Geoprobe	8	Bottom of turf -0.17	Discrete	PFAS via 1633
				0.17-1.0		
				1.0-2.0		
				2.0-3.0		HOLD for PFAS via 1633
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
				One of the Above Intervals Exhibiting FEC or Lowest Interval Above Groundwater		PFAS via 1633, Full Suite TAL/TCL
PCI-OB1A & PCI-OB1B	Turf Grass	Geoprobe	8	Bottom of turf -0.17	Discrete	HOLD for PFAS via 1633
				0.17-1.0		
				1.0-2.0		
				2.0-3.0		
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
				One of the Above Intervals Exhibiting FEC or Lowest Interval Above Groundwater		HOLD for PFAS via 1633, HOLD for Full Suite TAL/TCL

Table 1

Summary of Proposed Soil Borings and Soil Sampling

Location Name	Ground Surface	Installation Method	Boring Depth (Ft. bgs.)	Proposed Sample Intervals (Ft. bgs.)	Sample Type	Laboratory Analysis
PCI-B2	Turf Grass	Geoprobe	8	Bottom of turf -0.17	Discrete	PFAS via 1633
				0.17-1.0		
				1.0-2.0		
				2.0-3.0		HOLD for PFAS via 1633
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
PCI-OB2A, PCI-OB2B	Turf Grass	Geoprobe	8	Bottom of turf -0.17	Discrete	HOLD for PFAS via 1633
				0.17-1.0		
				1.0-2.0		
				2.0-3.0		
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
PCI-B3, PCI-B4, & PCI-B5,	Asphalt	Geoprobe	8	Bottom of asphalt sub-base – 1.0	Discrete	PFAS, 1633
				1.0-2.0		
				2.0-3.0		HOLD for PFAS via 1633
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		

Table 1

Summary of Proposed Soil Borings and Soil Sampling

Location Name	Ground Surface	Installation Method	Boring Depth (Ft. bgs.)	Proposed Sample Intervals (Ft. bgs.)	Sample Type	Laboratory Analysis
PCI-OB3A, PCI-OB3B, PCI-OB4A, PCI-OB4B, PCI-OB5A & PCI-OB5B	Asphalt	Geoprobe	8	Bottom of asphalt sub-base – 1.0	Discrete	HOLD for PFAS via 1633
				1.0-2.0		
				2.0-3.0		
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
PCI-B6	Asphalt	Geoprobe	8	Bottom of asphalt sub-base – 1.0	Discrete	PFAS via 1633
				1.0-2.0		HOLD for PFAS via 1633
				2.0-3.0		
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
				One of the Above Intervals Exhibiting FEC or Lowest Interval		PFAS via 1633, Full Suite TAL/TCL

Table 1

Summary of Proposed Soil Borings and Soil Sampling

Location Name	Ground Surface	Installation Method	Boring Depth (Ft. bgs.)	Proposed Sample Intervals (Ft. bgs.)	Sample Type	Laboratory Analysis
PCI-OB6A & PCI-OB6B	Asphalt	Geoprobe	8	Bottom of asphalt sub-base – 1.0	Discrete	HOLD for PFAS via 1633
				1.0-2.0		
				2.0-3.0		
				3.0-4.0		
				4.0-5.0		
				5.0-6.0		
				6.0-7.0		
				7.0-8.0		
				One of the Above Intervals Exhibiting FEC or Lowest Interval Above Groundwater		HOLD for PFAS via 1633, HOLD for Full Suite TAL/TCL

Notes

Bgs.: Below ground surface

Ft.: Feet

PFAS: polyfluoroalkyl substances

TAL: Target Analyte List

TCL: Target Compound List

1633: Environmental Protection Agency analytical method 1633

APPENDICES

APPENDIX A

QUALITY ASSURANCE PROJECT PLAN

July 22, 2026

QUALITY ASSURANCE PROJECT PLAN

Hudson Valley Regional Airport Site
Town of Wappinger
Dutchess County, New York
NYSDEC Site #C314129

Prepared for:

APEX ENERGY TEK, LLC
63 Main Street
Queensbury, New York, 12804

Prepared by:

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C.T. Male Associates Project No: 26.0423

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C.T. MALE ASSOCIATES, ENGINEERING, SURVEYING, ARCHITECTURE, LANDSCAPE ARCHITECTURE & GEOLOGY D.P.C.

QUALITY ASSURANCE PROJECT PLAN
HUDSON VALLEY REGIONAL AIRPORT SITE

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ACRONYM LIST

ARARs – Applicable or relevant and appropriate requirements

COC – Chain-of-custody

DER – Division of Environmental Remediation

DQO – Data quality objective

DUSR – Data Usability Summary Report

EPA – Environmental Protection Agency

FSP – Field Sampling Plan

HASP – Health & Safety Plan

HDPE – High Density Polyethylene

LCS – Laboratory control sample

MDL – Method detection limit

MS – Matrix spike

MSD – Matrix spike duplicate

NYSDEC – New York State Department of Environmental Conservation

PARCCS – Precision, accuracy, representativeness, completeness, comparability, and sensitivity

PFAS – Per-and polyfluoroalkyl substances

Name	Acronym	CAS Number
6:2-Fluorotelomersulfonic acid	6:2 FTS	27619-97-2
8:2-Fluorotelomersulfonic acid	8:2 FTS	39108-34-4
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorobutanoic acid	PFBA	375-22-4
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoDA	307-55-1
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4

Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonamide	PFOSA	754-91-6
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnDA	2058-94-8

21 individual PFAS listed above are in accordance with the most recent NYSDEC guidance (NYSDEC, 2021).

QA – Quality assurance

QAM – Quality Assurance Manual

QAPP – Quality Assurance Project Plan

QC – Quality control

RPD – Relative percent difference

RL – Reporting limit

SOP – Standard operating procedure

SPE – Solid phase extraction

SPLP – Synthetic Precipitation Leaching Procedure

TAL – Target Analyte List

TCL – Target Compound List

TOC – Total organic carbon

UFP – Uniform Federal Policy

VOA – Volatile organic analysis

VOC – Volatile organic compound

WAX – Weak ion exchange

1.0 INTRODUCTION

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology D.P.C. (C.T. Male Associates or C.T. Male) has prepared this Quality Assurance Project Plan (QAPP) for the Pre-Construction Investigation Work Plan (PCI WP). This investigation is to be conducted at the Hudson Valley Regional Airport (HVRA) (NYSDEC Site #C314129) located at 18 Griffith Way in the Town of Wappinger, Dutchess County, New York (the "Site").

The QAPP was prepared in a manner consistent with the following guidance documents:

- EPA Guidance for Quality Assurance Project Plans, EPA QA/G-5;
- EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5;
- Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs, June 2019;
- Sampling, Analysis and Assessment of Per-and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, April 2023;
- United States Environmental Protection Agency (EPA) Intergovernmental Data Quality Task Force environmental requirements as specified in the Uniform Federal Policy (UFP) QAPP guidance document Part 2A Revised (March 2012); and
- *USEPA, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review.*

This project specific QAPP provides details of the organizations and the project management, objectives, data acquisition, data assessment, oversight and data review procedures associated with the project Site. Protocols for sample collection, handling, storage, chain-of-custody (COC), laboratory and/or field analyses, data evaluation and validation, and reporting are addressed. Some project details are included in the PCI WP. Field activities performed under this QAPP will be conducted in accordance with the applicable Standard Operating Procedures (SOP) within the PCI WP and the site-specific Health & Safety Plan (HASP).

1.1 Site History and Background

The Site is located at 18 Griffith Way in the Town of Wappinger, Dutchess County, New York. The Site is approximately 510.8 acres in size and has primarily been used as an

airport since the 1930's. Prior to being developed, the Site appears to have been used for agricultural purposes. The airport occupies the majority of the Site and is currently referred to as the Hudson Valley Regional Airport. Two (2) closed landfills are located on northern and northeastern portions of the Site, and two NYSDEC inactive hazardous waste sites are located on the eastern portion of the site, that are currently used as airport hangars. The Site was designated as a potential inactive hazardous waste disposal site (P-Site #314129) by the New York State Department of Environmental Conservation (NYSDEC) based on the detection of perfluorinated compounds in a water supply well located on the Site and detections in nearby off-site water supply wells. The site has since been accepted into the Brownfield Cleanup Program as Site C314129.

The Site is currently owned by Dutchess County. The Site is accessed at multiple points via gated driveways along Route 376, New Hackensack Road, and Citation Drive. The Site includes a parking lot, airport terminal, and various support buildings and hangars. The airport is enclosed by a chain-link fence which is located inside the property boundary.

2.0 QAPP WORKSHEET #1 & 2 – TITLE AND APPROVAL PAGE

1. **Project Identifying Information**

   a. Site name/project name: Hudson Valley Regional Airport

   b. Site location/number: 18 Griffith Way, Town of Wappinger, Dutchess County, New York / NYSDEC Site ID No. C314129

   c. Property Owner: Dutchess County, David Whalen, Acting Commissioner, Dutchess County Department of Public Works

   d. C.T. Male Client: Apex Energy Tek LLC

2. **Lead Organization – Apex Energy Tek LLC**

   i. **Project Manager** (name/title/signature/date):

   Zack Shippee, EV Project Manager

3. **Other Stakeholders** (as needed)

   a. **Consulting Engineers: C.T. Male Associates**

      i. **Project Manager** Principal (name/title/signature/date):

      Jonathan Dippert, P.G. / Environmental Division Manager

      ii. **Project Manager** (name/title/signature/date):

      Steven Gustems, P.G. / Project Manager

iii. **Health & Safety Manager** (name/title/signature/date):

Nancy Garry, P.E., CSP / Sr. Environmental Engineer

iv. **Field Services Manager** (name/title/signature/date):

Eric White / Environmental Scientist

v. **Quality Assurance (QA) Manager** (name/title/signature/date):

Jeffrey A. Marx, P.E. / Managing Environmental Engineer

3.0 QAPP WORKSHEET #3 & 5 – PROJECT ORGANIZATIONAL AND QAPP DISTRIBUTION

This section identifies the reporting relationships between organizations involved in the project, including the lead organization and contractors and subcontractor organizations. It also includes recipients of controlled copies of the QAPP. The organizational chart in Attachment A identifies pertinent personnel, contractors and subcontractors who are responsible for document control within their organizations. Site-specific work plans may identify other personnel in similar roles.

4.0 QAPP WORKSHEET #4, 7 & 8 – PERSONNEL QUALIFICATIONS AND SIGN-OFF SHEET

This section identifies project personnel associated with each organization, contractor, and subcontractor participating in responsible roles. This includes the project manager, QA manager, project contacts for organizations involved in the project, the project health & safety officer, field operation personnel, and the analytical services provider. This worksheet also lists individuals' project titles or roles; qualifications; and any specialized/non-routine training, certifications, or clearances required by the project. Signatures indicate personnel have read and understand how to implement this QAPP as written and that the QAPP will be kept on-file at each organization.

ORGANIZATION: C.T. Male Associates (C.T. Male)

Name	Title/Role	Education/Experience/Certifications	Signature/Date
Jonathan Dippert, P.G.	Environmental Division Manager	See resumé included in Attachment B	See Section 2.0, titled worksheet #1 & 2
Steven Gustems, P.G.	Project Manager	See resumé included in Attachment B	See Section 2.0, titled worksheet #1 & 2
Nancy Garry, P.E., CSP	Health & Safety Manager	See resumé included in Attachment B	See Section 2.0, titled worksheet #1 & 2
Eric White	Field Services Manager	See resumé included in Attachment B	See Section 2.0, titled worksheet #1 & 2
Jeffrey A. Marx, P.E.	QA Manager	See resumé included in Attachment B	See Section 2.0, titled worksheet #1 & 2

ORGANIZATION: Laboratory of Record -To be Determined.

Name	Title/Role	Specialized Training/ Certifications	Signature/Date
To be Determined (TBD)	TBD	TBD	
To be Determined (TBD)	TBD	TBD	

ORGANIZATION: Environmental Data Services (EDS)

Name	Title/Role	Specialized Training/ Certifications	Signature/Date
Nancy Weaver	President	See resumé included in Attachment B	

5.0 QAPP WORKSHEET #6 – COMMUNICATION PATHWAYS

Communication pathways for this project are shown below.

Communication Driver	Organization	Name	Contact Information	Procedure (Timing, pathway, etc.)
Regulatory Agency Interface	NYSDEC	Greta Kowalski, P.G.	Office (O): 518-402-2029 Greta.kowalski@dec.ny.gov	C.T. Male will contact Jeff Durand and the regulatory agency (NYSDEC) via email if issues with the implementation of this QAPP occur impacting data quality, when comments to the submittals occur, and when new field sampling plans are identified for implementation.
	C.T. Male	Steven Gustems, P.G.	O: 845-454-4400 s.gustems@ctmale.com	
	Apex Energy Tek, LLC	Zack Shippee	Cell: 518-615-3875 zshipee@apexenergytek.com	
Laboratory Problems/ Corrective Actions	C.T. Male	Jeffrey A. Marx, P.E.	O: 518-786-7548 j.marx@ctmale.com	C.T. Male's QA Manager will be the contact for the laboratories should the laboratories experience issues with project samples. Environmental Data Services will contact the laboratories if issues are discovered from data validation.
	EDS	Nancy Weaver	O: 757-564-0090 nweaver@env-data.com	
	Lab of Record	TBD	TBD	

Field Problems/ Corrective Actions	C.T. Male	Eric White	O: 845.454.4400 e.white@ctmale.com	C.T. Male field staff will contact the C.T. Male Project Manager and/or Field Services Manger to discuss difficulties encountered during field activities. They will coordinate with their QA Manager, as needed and appropriate. C.T. Male will contact the NYSDEC via email.
		Jonathan Dippert, P.G.	O: 518-786-7563 j.dippert@ctmale.com	
	NYSDEC	Greta Kowalski , P.G.	Office (O): 518-402-2029 Greta.kowalski@dec.ny.gov	
Safety Issues	C.T. Male	Jonathan Dippert, P.G.	O: 518-786-7563 j.dippert@ctmale.com	C.T. Male field staff will contact the C.T. Field Services Manager and/or Health & Safety Officer and work may stop until safety issues are cleared. NYSDEC may be contacted if safety issues delay obtaining/reporting of data.
		Nancy Garry. P.E.	O: 518-786-7541 n.garry@ctmale.com	
Field Activity Modifications	NYSDEC	Greta Kowalski , P.G.	O: 518-897-1241 Greta.Kowalski@dec.ny.gov	Apex Energy Teck and C.T. Male will propose modifications to current sampling program via periodic updates or otherwise as needed. Reduction of testing parameters or frequencies will be performed in consultation with and approval from NYSDEC.
	C.T. Male	Eric White	O: 845.454.4400 e.white@ctmale.com	
	Apex Energy Tek, LLC	Zack Shippee	Cell: 518-615-3875 zshipee@apexenergytek.com	

6.0 QAPP WORKSHEET #9 – PROJECT SCOPING SESSION PARTICIPANTS SHEET

As noted in the introduction, investigation activities will be conducted in accordance with a PCI WP that has been approved by the NYSDEC. The sampling and analysis activities implemented as part of additional investigations or studies will follow the protocols set forth in this QAPP. Additionally, this QAPP will be updated as needed based on the planned sampling and analysis activities.

7.0 QAPP WORKSHEET #10 – SITE MODEL

Parameters that will be analyzed to evaluate the environmental quality of the Site's media include the Target Compound List (TCL) of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), the Target Analyte List (TAL) of metals and cyanide, per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. The laboratory performing the analytical services is identified in Table 1 (if known), which includes the laboratory's address and the list of parameters the laboratory will perform.

The sample type, laboratory analysis, sampling method and sampling rationale for the samples collected during the PCI are summarized in the site-specific work plans.

The proposed sampling activities are presented in the scope of work and are described in more detail in the PCI WP.

8.0 QAPP WORKSHEET #11 – PROJECT/DATA QUALITY OBJECTIVES

Data Quality Objectives (DQOs) are qualitative and quantitative statements that clearly state the objective of a proposed project, define the most appropriate type of data to collect, determine the appropriate conditions for data collection, and specify acceptable decision error limits that establish the quantity and quality of data needed for decision making.

DQOs for measurements during this project will be addressed in terms of the data quality indicators: precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS). The numerical PARCCS parameters will be determined from the project DQOs to ensure that they are met. The DQOs and resulting PARCCS parameters will require that the sampling be performed using standard methods with properly operated and calibrated equipment and conducted by trained personnel and are summarized in Worksheet #12.

The laboratories performing the analytical services are detailed in Table 1, which includes their addresses and the list of parameters that each lab may perform. Other laboratories may need to perform analyses if a laboratory has an unplanned event such as an instrument breakdown. The parameter would be analyzed by a subcontract laboratory that has accreditation in NY for the same method, where applicable. If possible, the subcontract laboratory would have similar limits as the primary laboratory. Any subcontracting of analyses will be approved by C.T. Male prior to sample submittal.

Parameters other than PFAS that may be analyzed to evaluate the environmental quality of the site's media may include the Target Compound List (TCL) of volatile organic compounds (VOCs), the Target Analyte List (TAL) of metals, and total organic carbon (TOC).

The sample type, laboratory analysis, sampling method and sampling rationale for the samples collected during the site investigations and routing monitoring is summarized in the site-specific work plans.

9.0 QAPP WORKSHEET #12 – MEASUREMENT PERFORMANCE CRITERIA TABLE

This worksheet displays the data quality indicator, QC activity, matrix, and measurement performance criteria for both the sampling and analytical measurement systems. Matrix groups may include but are not limited to the following:

- Water – groundwater, surface water and drinking water
- Solid – soil, sediment
- Air – soil vapor, indoor air, outdoor air

Data Quality Indicator	QC sample or measurement performance activity	Matrix Group	Measurement Performance Criteria
Precision (field)	Field duplicate samples	Water, solid, air	Values > 5x reporting limit (RL)/limit of quantitation (LOQ); relative percent difference (RPD) ≤ 30%
Precision (laboratory)	Laboratory duplicate samples or Laboratory control samples (LCS) and LCS duplicates	Water, solid, air	Values > RL; method-specific (See Table 2)
Overall accuracy/bias (field and laboratory) /representativeness	Field, equipment, rinsate blanks	Water, and solid	No target analyte concentrations ≥ RL/LOQ
	Laboratory Trip blanks	Water (VOCs and PFAS)	
Overall accuracy/bias (laboratory)	Method blanks	Water, solid, air	No target analyte concentrations ≥ RL/LOQ
Analytical accuracy/bias/precision (laboratory)	LCS and LCS duplicates	Water, solid, air	Analyte-specific (See Table 2)
Analytical accuracy/bias/precision (laboratory)	Matrix Spikes (MS) and Matrix Spike Duplicates (MSD)	Water, and solid	Analyte-specific (See Table 2)

Data Quality Indicator	QC sample or measurement performance activity	Matrix Group	Measurement Performance Criteria
Analytical accuracy/bias (laboratory)	Surrogate recoveries	Water, and solid	Analyte-specific (See Table 2)
Sensitivity	Samples reported to method detection limit (MDL-where applicable)	Water, solid, air	Analyte-specific (See Table 2)
Completeness	See Worksheet #34	Water, solid, air	See Worksheet #34

10.0 QAPP WORKSHEET #13 – SECONDARY DATA USES AND LIMITATIONS TABLE

Analytical data and information to be used for the project, prior to this QAPP, was collected in accordance with previous work plans. The originating sources are identified. Analytical data obtained prior to this QAPP is presented.

Data type	Source	Data uses relative to current project	Factors affecting the reliability of data and limitations on data use
Site Characterization Report, December 2019	C.T. Male Associates	Data used to determine if the Site's media (water) was impacted above regulatory standards and guidance values for the Site's intended use.	

11.0 QAPP WORKSHEET #14 & 16 – PROJECT TASKS & SCHEDULE TABLE

Listed are the project activities as well as the QA assessments that will be performed during the course of the project.

Activities	Organization	Dates		Deliverable(s)
		Anticipated Date(s) of Initiation	Anticipated Date of Completion	
Soil borings, well drilling and installing, as applicable	C.T. Male	July 2026	July 2026	Field reports and sample results
Collecting water, solids, air, and field QC samples	C.T. Male	September 2026	October 2026	Field reports and sample results
Laboratory analyses	TBD	Upon receipt of samples in October 2026	October 2026	Laboratory reports (Category B Data Package)
Data evaluation / validation	Environmental Data Services	After receipt of data reports in October 2026	October 2026	Evaluation or validation report entitled 'Data Usability Summary Report (DUSR)'
Summarizing data	C. T. Male	October 2026	October 2026	Telephone, email, progress reports
PCI Investigation Report	C.T. Male	October 2026	November 2026	Submission to NYSDEC
Uploading data to NYSDEC EQuIS	C. T. Male	After receipt and review of DUSRs in November 2026	December 2026	Submission of data packages to online NYSDEC EQuIS system

12.0 QAPP WORKSHEET #15 – PROJECT ACTION LIMITS AND LABORATORY-SPECIFIC DETECTION/QUANTITATION LIMITS

Analytical data quality objectives are used to ensure that the analysis will accurately and adequately identify the contaminants of concern. The applicable or relevant and appropriate requirements (ARARs) are related to defining satisfactory cleanup efforts. To be able to evaluate the data generated with respect to potential ARARs, the samples will be reported to the MDL (where applicable). The analytical methods selected for this project are designed to achieve ARAR values. The laboratory limits for specific parameters are included in Table 2.

13.0 QAPP WORKSHEET #17 – SAMPLING DESIGN AND RATIONALE

The design and rationale of the sampling program is outlined in Worksheet #10 and will be specified in the PCIWP.

14.0 QAPP WORKSHEET #18 – SAMPLING LOCATIONS AND METHODS

The PCIWP will provide specific detail regarding the individual sample locations and methods.

15.0 QAPP WORKSHEET #19 & 30 – SAMPLE CONTAINERS, PRESERVATION, AND HOLD TIMES TABLE

Sample Parameters, Matrix, Containers, Preservation, Hold Times per Analytical Group

Analytical Group	Matrix	Containers (number, size & type per sample)[1]	Preservation[2]	Preparation/ Analytical Holding Time[3]
PFAS	Water	250 mL high density polyethylene (HDPE)	Cool ≤6°C, Trizma (if chlorine residual present)	28 days
	Solid	4.5 oz HDPE jar	Cool ≤6°C	90 days until extraction; analysis within 40 days of extraction
PFAS, SPLP	Solid	4.5 oz HDPE jar	Cool ≤6°C	28 days until leachate or extraction; analysis within 28 days of extraction. Note that these holding times may be subject to change based on most current NYSDEC technical guidance.
TCL VOCs	Water	3-40 mL glass VOA vials	HCl to pH<2, cool ≤6°C, no headspace	14 days. Unpreserved samples - 7 days
	Soil	40 mL VOA vial or coring device kit	1:1 solvent or zero headspace, cool ≤6°C. Additional unpreserved for %moisture if solvent collection	48 hours from sample collection to preservation; 14 days
TCL SVOCs	Water	2-1000 mL amber glass	Cool ≤6°C	7 days until extraction/analysis within 40 days of extraction
	Soil	8 oz glass jar	Cool ≤6°C	14 days until extraction/analysis within 40 days of extraction
TCL Pesticides	Water	2-1000 mL amber glass	Cool ≤6°C	7 days until extraction/analysis within 40 days of extraction
	Soil	8 oz. glass jar	Cool ≤6°C	14 days until extraction/analysis within 40 days of extraction
TCL PCBs	Water	2-1000 mL amber glass	Cool ≤6°C	1 year until extraction / analysis within 40 days of extraction

Analytical Group	Matrix	Containers (number, size & type per sample)(1)	Preservation(2)	Preparation/ Analytical Holding Time(3)
	Soil	8 oz. glass jar / each analysis	Cool ≤6°C	1 year until extraction / analysis within 40 days of extraction
TAL Metals (Including Major Cations and Ions)	Water	250 ml plastic	HNO_3 to pH <2 Cool, 4°C	180 days to analysis
	Soil	4 oz. glass jar	Cool ≤6°C	
Mercury	Water	250 ml plastic	HNO_3 to pH <2 Cool, 4°C	28 days to analysis
	Soil	4 oz. glass jar	Cool ≤6°C	
Cyanide	Water	250 ml plastic	NaOH	14 days to analysis
	Soil	4 oz. glass jar	Cool ≤6°C	
1,4-Dioxane	Water	250 mL amber glass	Cool ≤6°C	7 days until extraction/analysis within 40 days of extraction
TOC	Solid	4 oz. glass jar	Cool ≤6°C	28 days
pH	Solid	4 oz. glass jar	Cool ≤6°C	As soon as possible
Moisture, %	Solid	4 oz. glass jar	Cool ≤6°C	Not applicable
TO-15	Air	Evacuated, certified clean canister	NA	30 days

(1) Container types and sizes listed are for guidance only. Laboratories may use different containers or combine analyses into larger volume containers.
(2) Cool ≤ 6 °C will be chilled using regular ice only.
(3) Holding time starts from date of collection unless otherwise noted.
Note: Laboratory standard operating procedures (SOPs) are retained at each laboratory's place of business and are available upon request for review.

16.0 QAPP WORKSHEET #20 – FIELD QUALITY CONTROL SUMMARY

The site-specific work plans may provide additional detail on the sample type, parameter, frequency, and sampling methods of field QC samples. Internal laboratory quality control checks will be those specified in EPA Methods or in the most recent NYSDEC ASP for the analytical method performed.

The laboratory will be responsible for performing what is necessary for complying with appropriate standards and certifications of the selected EPA method and NYSDEC ASP requirements. The laboratory quality control acceptance criterion is method-specific and will be the laboratory's responsibility to meet the most recent NYSDEC ASP criteria.

At a minimum the following field quality control samples will be collected.

Matrix	Analytical Group	No. of Field Duplicate Pairs	No. of MS/MSD	No. of Laboratory Trip Blanks	No. of Equip. Blanks	No. of Rinsate (Rinse) Blanks or Material Checks
Water, solid	All analytical groups	5% of total number sampled or one sample per media, whichever is greater	5% of total number sampled per media	One per sample shipment for VOC	5% of total number sampled per media or at a minimum of one per day per matrix when decontamination of sampling equipment has occurred for TAL/TCL, one per day per media for PFAS.	One per lot/batch of new equipment /material
Air	All analytical groups	1 per 20 samples	None	None	None	None

17.0 QAPP WORKSHEET #21 – PROJECT SAMPLING SOP REFERENCES

The field activities for this Site will include collecting samples of soil and possibly groundwater (see worksheet #12) for laboratory analysis. The procedures relative to implementing these field activities are included in the PCI WP. As described in the PCI WP specific precautions will be implemented when sampling for PFAS compounds to prevent cross contamination

18.0 QAPP WORKSHEET #22 – FIELD EQUIPMENT CALIBRATION, MAINTENANCE, TESTING, AND INSPECTION

The field equipment calibration, maintenance, testing, and inspection information are included in company SOPs available upon request.

19.0 QAPP WORKSHEET #23 – ANALYTICAL AND VALIDATION SOPS

The laboratory's SOPs and the data validation SOPs are retained at each place of business and are available upon request for review once each laboratory's specific protocols have been followed. Modifications to methods performed are summarized below.

EPA 1633 modifications for non-drinking water matrices.

- No Trizma preservation of non-drinking water samples.
- Weak anion exchange (WAX) solid phase extraction (SPE) column used for the effective extraction of the broader range of compounds instead of the SPE specified in EPA 1633.
- Isotopically labelled analogs used as pre-extraction internal standards (isotope dilution) instead of the EPA 1633 specified post-extraction addition of internal standards for the analysis of matrices that are not finished drinking waters (i.e., surface water, groundwater, wastewater and leachates) to correct results based on extraction efficiency.
- Alternate solvent used for extraction.
- Extracts are concentrated to dryness.
- Internal standards added post-extraction to calculate the recoveries of the isotopic analogs listed above.
- More PFAS analyzed than the EPA 1633 list of compounds.
- Laboratory control sample (LCS) concentration not rotated as listed in EPA 1633.
- RPD not controlled between the high and low areas for each internal standard in the initial calibration as listed in EPA 1633.
- Holding time of 14 days from extraction to analysis used for solid matrices. EPA 1633 only addresses holding times for drinking water samples.

TO-15 Low-level and SIM modifications

- < 30% RSD is allowed for 4 compounds instead of 2 compounds as listed in TO-15.
- UHP Nitrogen is used for blanks and standards instead of Zero Air since it provides a higher purity gas matrix.

20.0 QAPP WORKSHEET #24 – ANALYTICAL INSTRUMENT CALIBRATION

The analytical instrument calibration information is included in the laboratory QAM and/or the appropriate SOP. These documents are retained at each laboratory's place of business and are available upon request for review.

21.0 QAPP WORKSHEET #25 – ANALYTICAL INSTRUMENT AND EQUIPMENT MAINTENANCE, TESTING, AND INSPECTION

The analytical instrument and equipment maintenance, testing, and inspection information are included in the laboratory QAM and/or the appropriate SOP. These documents are retained at each laboratory's place of business and are available upon request for review.

22.0 QAPP WORKSHEET #26 & 27 – SAMPLE HANDLING, CUSTODY, AND DISPOSAL

Sampling Organization: C.T. Male Associates
Laboratories: To be Determined
Method of sample delivery (shipper/carrier): Lab courier or FedEx/UPS
Number of days from reporting until sample disposal: As documented in laboratory QAM.

The SOPs within the PCI WP describe the various methods and techniques to be followed during the completion of the sampling activities, instrument operation and calibration, and chain-of-custody procedures. As described, specific precautions will be implemented when sampling for PFAS compounds to prevent cross contamination.

23.0 QAPP WORKSHEET #28 –ANALYTICAL QUALITY CONTROL AND CORRECTIVE ACTION

The analytical quality control and corrective action information are included in the laboratory QAM and/or the appropriate laboratory SOP. These documents are retained at the laboratory's place of business and are available upon request for review. Corrective action may be requested of the laboratory if issues arise that affect the quality of the data.

24.0 QAPP WORKSHEET #29 – PROJECT DOCUMENTS AND RECORDS TABLE

The documents and records that will be generated for the project including, but not limited to, sample collection and field measurement, analysis, and data assessment, are noted below.

Sample Collection Documents and Records	Generation	Verification	Where Maintained
Field Documents Field Notes Field Sample Forms COC Records Field Instrument Calibration Logs Sampling Notes Photographs Health and Safety Plan	C.T. Male Field Staff	C.T. Male Project Manager or designees	Field documents generated by C.T. Male field staff will be maintained in the project file located at C.T. Male offices until scanned and electronically filed. Documents should be scanned as soon as possible upon return to the office.
Project Report Documents Project sign-off forms Project report submittals	C.T. Male Project Staff	C.T. Male Project Manager	Report documents will be maintained in the project file located at C.T. Male offices until scanned and electronically filed.
Laboratory Documents Sample receipt, custody, and tracking record Equipment calibration logs (electronically stored) Sample preparation logs (electronically stored) Analysis Run Logs (electronically stored) Raw data	Laboratory Project Manager	Laboratory QA Manager	As detailed in the laboratories QAM, data is typically retained for a period of 5 years from the report date.
Correspondence	C.T. Male Project Staff	C.T. Male Project Manager	Project communications regarding the work plans, QAPP and schedule will be kept at C.T. Male offices.

Laboratory Data Deliverables									
Laboratory Record	**TCL VOCs**	**TCL SVOCs (including 1,4-dioxane)**	**TCL Pesticides**	**TCL PCBs**	**TAL Metals**	**Cyanide**	**PFAS**	**Other (non-organic) ***	**TO-15**
Narrative	X	X	X	X	X	X	X	X	
COC and any additional receiving documentation	X	X	X	X	X	X	X	X	
Sample Results	X	X	X	X	X	X	X	X	
QC Results	X	X	X	X	X	X	X	X	
Raw Data (including but not limited to the following where appropriate - preparation logs, tune checks, ICALs, DDT/Endrin breakdown, instrument logs, tailing factor, chromatograms)	X	X	X	X	X	X	X	X	
NYSDEC ASP Category B deliverables	X	X	X	X	X	X	X	X	
EQuIS Version 4 EDDs	X	X	X	X	X	X	X	X	

Notes:
* pH, % moisture, TOC
COC = Chain of custody
EDD = Electronic Data Deliverables
QC = Quality Control
DDT = dichloro-diphenyl-trichloroethane
NYSDEC = New York State Department of Environmental Conservation
ASP = Analytical Service Protocols

25.0 QAPP WORKSHEET #31, 32, & 33 – ASSESSMENTS AND CORRECTIVE ACTION TABLE

Assessments:

Assessment Type	Responsible Party & Organization	Number/ Frequency	Estimated Dates	Assessment Deliverable	Deliverable due date
Review of field procedures	C.T. Male QA Manager and/or Field Service Manager and /or designee for work completed by C.T. Male	As warranted by identification of an exception to protocols	Determined in accordance to the level of exception	On-site audit and documentation of corrective action, as required by exception	1 month from completion of audit and assessment
Review of field notes/ deviations from work plans	C.T. Male QA Manager and/or Field Service Manager and/or designee for work completed by C.T. Male	Upon completion of routine monitoring round or investigation phase	Ongoing	Documentation of review	With the completion of an investigation or monitoring progress report.
Review of COCs	Laboratory, C. T. Male QA Manager and/or designee for samples collected by C.T. Male	Every event/report	Within 5 days of receipt	Documentation of review	Ongoing
Review/ validation analytical reports	Environmental Data Services Inc.	Level IIA every event / report and Level IV determined on a case-by-case basis	Ongoing	Evaluation or validation report entitled DUSR	Ongoing

Assessment Response and Corrective Action:

Assessment Type	Responsibility for responding to assessment findings	Assessment Response Documentation	Timeframe for Response	Responsibility for Implementing Corrective Action	Responsible for monitoring
Review of field procedures	C.T. Male - QA Manager and/or Project Manager	Written report	30 days	C.T. Male QA Manager and/or Field Service Manager and /or designee for work completed by C.T. Male	Project Manager and/or QA Manager, C.T. Male
Review of field notes/ deviations from work plans	C.T. Male – Project Manager	Note in field notes, project file, retained in correspondence	Immediately to within 3 days of deviation	C.T. Male QA Manager and/or Field Service Manager and/or designee for work completed by C.T. Male	QA Manager, C.T. Male
Review of COCs	C.T. Male - QA Manager / Laboratory	Note on COC	Immediately to within 3 days of discrepancy	Laboratory, C. T. Male QA Manager and/or designee for samples collected by C.T. Male	QA Manager, C.T. Male
Review analytical reports	C.T. Male – QA Manager	QA/QC Summary Sheet	Immediately to within 3 days of discrepancy	QA Manager, C.T. Male, Project Manager, Laboratory	QA Manager, C.T. Male or Project Manager or Laboratory
Review Validation Analytical Reports	Laboratory / Environmental Data Services	QA/QC Summary Sheet	Immediately to within 3 days of discrepancy	QA Manager, C.T. Male Project Manager, Laboratory	QA Manager, C.T. Male Project Manager, Laboratory

26.0 QAPP WORKSHEET #34 – DATA VERIFICATION AND VALIDATION INPUTS TABLE

The following worksheets define the data verification and validation process. This worksheet describes how each item will be verified. Worksheets #35 and #36 describe when specific activities will occur, what documentation is necessary and identifies the person(s) responsible for field and analytical data respectively.

Item	Description	Verification (Completeness)	Validation (conformance to specifications)
Planning Documents / Records			
1	Approved QAPP	X	
2	Contract	X	
3	Field SOP	X	
4	Laboratory SOP	X	
Field Records			
5	Field Notes	X	X
6	Equipment calibration records	X	X
7	COC forms	X	X
8	Sampling diagrams / surveys	X	X
9	Relevant correspondence	X	X
10	Change orders / deviations	X	X
11	Field audit reports	X	X
12	Field corrective action reports	X	X
Analytical Data Package (Verified by the Laboratory QA Officer)			
13	Cover sheet (laboratory identifying information)	X	X
14	Case narrative	X	X
15	Internal laboratory COC	X	X
16	Sample receipt records	X	X
17	Sample chronology (i.e., dates and times of receipt, preparation, and analysis	X	X
18	Definition of laboratory qualifiers	X	X
19	Results reporting forms	X	X
20	QC sample results	X	X
21	Compound(s) identified and reported in proper units	X	X
22	Labeled sample chromatograms (organics)	X	X

23	Electronic data deliverable	X	X
24	Communication records	X	X
25	MDL/RL establishment and verification	X	X
26	Standards traceability	X	X
27	Instrument calibration records	X	X
28	Corrective action reports	X	X
29	Raw data	X	X

27.0 QAPP WORKSHEET #35 – DATA VERIFICATION PROCEDURES TABLE

Described below are the processes that will be followed to validate project field data.

Records Reviewed	Requirement Documents	Process Description	Responsible Person, Organization
Field notes and forms	QAPP, Field SOPs	Verify that records are present and complete for each day of field activities. Verify that planned samples were collected and that sample collection locations are documented. Verify that changes/ exceptions are documented and reported in accordance with requirements. Verify that required field monitoring was performed and results are documented.	C.T. Male Project Manager and/or Field Services Manager for work completed by C.T. Male field staff.
COC forms	QAPP, Field SOPs	Verify the completeness of COC records. Examine entries for consistency with the field notes. Verify that required signatures and dates are present. Check for transcription errors.	C.T. Male Project Manager and/or Field Services Manager for work completed by C.T. Male field staff.
Laboratory analytical reports	QAPP	Level IIA data review is performed for every event/report. Level IV is determined on a case-by-case basis. The evaluation/validation report entitled DUSR will be provided to NYSDEC.	Environmental Data Services

28.0 QAPP WORKSHEET #36 – DATA VALIDATION PROCEDURES

The data validator is responsible for review of the analytical data generated for this Site. The data validator will review analytical data and prepare a report documenting if the analytical data is valid and usable. The report will also present data rejection and qualification, where necessary, based on laboratory performance. The data validation will conform to NYSDEC DER-10, Appendix 2B, Data Usability Summary Reports (DUSR).

External data validation will be performed by an independent data validator who will utilize the applicable analytical method, standard laboratory practices and where applicable, NYSDEC ASP Category B Data Deliverable, the USEPA National and Regional Validation Guidelines/Procedures to determine the applicable qualifications of the data. This will include an evaluation of the laboratory raw data which may include but is not limited to the following:

- Analytical holding times
- Instrument performance checks
- Initial and continuing calibration
- Blanks
- Laboratory control samples
- Deuterated/surrogate compounds
- Matrix spike and spike duplicate samples
- Internal standards
- Target compound identification
- Target compound quantitation
- System performance
- Overall assessment of data

The validator will then prepare a DUSR of the review. The data validation company for this project is Environmental Data Services Inc.

29.0 QAPP WORKSHEET #37 – DATA USABILITY ASSESSMENT

Described below are the procedures / methods / activities that will be used to determine whether data are of the right type, quality, and quantity to support environmental decision making for the project. Also noted are how data quality issues will be addressed and how limitations on the use of the data will be handled.

Personnel (organization and position/title) responsible for participating in the data usability assessment:

Laboratory QA manager, C.T. Male Project Manager, C.T. Male QA Manager, Environmental Data Services President

The usability of the data will be assessed based on a review of the field measurements and laboratory results. The laboratory results will be reviewed by the laboratory and EDS prior to submittal and by the C.T. Male QA Manager upon receipt.

Step 1	**Review the project's objectives and sampling design** Review the key outputs defined during systematic planning (i.e., DQOs) to make sure they are still applicable. Review the sampling design for consistency with stated objectives. This step provides the context for interpreting the data in subsequent steps.
Step 2	**Review the data verification and data validation outputs** Review available QA reports, including the data verification and/or data validation reports. Perform basic calculations and summarize the data (using graphs, maps, tables, etc.). Look for patterns, trends, and anomalies (i.e., unexpected results). Review deviations from planned activities (e.g., number and locations of samples, holding time exceedances, damaged samples, and SOP deviations) and determine their impacts on the data usability. Evaluate implications of unacceptable QC sample results.
Step 3	**Verify the assumptions of the selected statistical method** Verify whether underlying assumptions for selected statistical methods (if documented in the QAPP) are valid. Common assumptions include the distributional form of the data, independence of the data, dispersion characteristics, homogeneity, etc. Depending on the robustness of the statistical method, minor deviations from assumptions usually are not critical to statistical analysis and data interpretation. If serious deviations from assumptions are discovered, another statistical method may need to be selected.

Step 4	**Implement the statistical method** Implement the specified statistical procedures for analyzing the data and review underlying assumptions. For decision projects that involve hypothesis testing (e.g., "concentrations of lead in groundwater are below the action level") consider the consequences for selecting the incorrect alternative; for estimation projects (e.g., establishing a boundary for surface soil contamination), consider the tolerance for uncertainty in measurements.
Step 5	**Document data usability and draw conclusions** Determine if the data can be used as intended, considering implications of deviations and corrective actions. Discuss data quality indicators. Assess the performance of the sampling design and identify limitations on data use. Update the conceptual site model and document conclusions in the Pre-Construction Investigation report.

TABLES

Table 1
Laboratory Analyses
Hudson Valley Regional Airport, Town of Wappinger, NY QAPP

To Be Determined	<u>Matrices</u> PFAS (soil, water) – EPA Method 1633

TABLE 2A: PARAMETERS - METHODS, LIMITS, ACCURACY, AND PRECISION (SOIL)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Volatiles - EPA 8260C/5035 High&Low (SOIL)										
Methylene chloride	75-09-2	10	1.65	ug/kg	70-130	30	70-130	30	30	
1,1-Dichloroethane	75-34-3	1.5	0.27	ug/kg	70-130	30	70-130	30	30	
Chloroform	67-66-3	1.5	0.37	ug/kg	70-130	30	70-130	30	30	
Carbon tetrachloride	56-23-5	1	0.345	ug/kg	70-130	30	70-130	30	30	
1,2-Dichloropropane	78-87-5	3.5	0.228	ug/kg	70-130	30	70-130	30	30	
Dibromochloromethane	124-48-1	1	0.176	ug/kg	70-130	30	70-130	30	30	
1,1,2-Trichloroethane	79-00-5	1.5	0.313	ug/kg	70-130	30	70-130	30	30	
Tetrachloroethene	127-18-4	1	0.302	ug/kg	70-130	30	70-130	30	30	
Chlorobenzene	108-90-7	1	0.348	ug/kg	70-130	30	70-130	30	30	
Trichlorofluoromethane	75-69-4	5	0.417	ug/kg	70-139	30	70-139	30	30	
1,2-Dichloroethane	107-06-2	1	0.246	ug/kg	70-130	30	70-130	30	30	
1,1,1-Trichloroethane	71-55-6	1	0.35	ug/kg	70-130	30	70-130	30	30	
Bromodichloromethane	75-27-4	1	0.308	ug/kg	70-130	30	70-130	30	30	
trans-1,3-Dichloropropene	10061-02-6	1	0.208	ug/kg	70-130	30	70-130	30	30	
cis-1,3-Dichloropropene	10061-01-5	1	0.231	ug/kg	70-130	30	70-130	30	30	
1,3-Dichloropropene, Total	542-75-6	1	0.208	ug/kg				30	30	
1,3-Dichloropropene, Total	542-75-6	1	0.208	ug/kg				30	30	
Bromoform	75-25-2	4	0.237	ug/kg	70-130	30	70-130	30	30	
1,1,2,2-Tetrachloroethane	79-34-5	1	0.298	ug/kg	70-130	30	70-130	30	30	
Benzene	71-43-2	1	0.193	ug/kg	70-130	30	70-130	30	30	
Toluene	108-88-3	1.5	0.195	ug/kg	70-130	30	70-130	30	30	
Ethylbenzene	100-41-4	1	0.17	ug/kg	70-130	30	70-130	30	30	
Chloromethane	74-87-3	5	0.436	ug/kg	52-130	30	52-130	30	30	
Bromomethane	74-83-9	2	0.338	ug/kg	57-147	30	57-147	30	30	
Vinyl chloride	75-01-4	2	0.315	ug/kg	67-130	30	67-130	30	30	
Chloroethane	75-00-3	2	0.316	ug/kg	50-151	30	50-151	30	30	
1,1-Dichloroethene	75-35-4	1	0.372	ug/kg	65-135	30	65-135	30	30	
trans-1,2-Dichloroethene	156-60-5	1.5	0.241	ug/kg	70-130	30	70-130	30	30	
Trichloroethene	79-01-6	1	0.302	ug/kg	70-130	30	70-130	30	30	
1,2-Dichlorobenzene	95-50-1	5	0.182	ug/kg	70-130	30	70-130	30	30	
1,3-Dichlorobenzene	541-73-1	5	0.218	ug/kg	70-130	30	70-130	30	30	
1,4-Dichlorobenzene	106-46-7	5	0.182	ug/kg	70-130	30	70-130	30	30	
Methyl tert butyl ether	1634-04-4	2	0.153	ug/kg	66-130	30	66-130	30	30	
p/m-Xylene	179601-23-1	2	0.351	ug/kg	70-130	30	70-130	30	30	
o-Xylene	95-47-6	2	0.338	ug/kg	70-130	30	70-130	30	30	
Xylene (Total)	1330-20-7	2	0.338	ug/kg				30	30	
Xylene (Total)	1330-20-7	2	0.338	ug/kg				30	30	
cis-1,2-Dichloroethene	156-59-2	1	0.342	ug/kg	70-130	30	70-130	30	30	
1,2-Dichloroethene (total)	540-59-0	1	0.241	ug/kg				30	30	
1,2-Dichloroethene (total)	540-59-0	1	0.241	ug/kg				30	30	
Styrene	100-42-5	2	0.401	ug/kg	70-130	30	70-130	30	30	
Dichlorodifluoromethane	75-71-8	10	0.5	ug/kg	30-146	30	30-146	30	30	
Acetone	67-64-1	10	2.29	ug/kg	54-140	30	54-140	30	30	

TABLE 2A: PARAMETERS - METHODS, LIMITS, ACCURACY, AND PRECISION (SOIL)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Volatiles - EPA 8260C/5035 High&Low (SOIL)										
Carbon disulfide	75-15-0	10	1.1	ug/kg	59-130	30	59-130	30	30	
2-Butanone	78-93-3	10	0.69	ug/kg	70-130	30	70-130	30	30	
4-Methyl-2-pentanone	108-10-1	10	0.244	ug/kg	70-130	30	70-130	30	30	
2-Hexanone	591-78-6	10	0.666	ug/kg	70-130	30	70-130	30	30	
Bromochloromethane	74-97-5	5	0.357	ug/kg	70-130	30	70-130	30	30	
1,2-Dibromoethane	106-93-4	4	0.199	ug/kg	70-130	30	70-130	30	30	
n-Butylbenzene	104-51-8	1	0.228	ug/kg	70-130	30	70-130	30	30	
sec-Butylbenzene	135-98-8	1	0.217	ug/kg	70-130	30	70-130	30	30	
tert-Butylbenzene	98-06-6	5	0.247	ug/kg	70-130	30	70-130	30	30	
1,2-Dibromo-3-chloropropane	96-12-8	5	0.396	ug/kg	68-130	30	68-130	30	30	
Isopropylbenzene	98-82-8	1	0.194	ug/kg	70-130	30	70-130	30	30	
p-Isopropyltoluene	99-87-6	1	0.202	ug/kg	70-130	30	70-130	30	30	
Naphthalene	91-20-3	5	0.138	ug/kg	70-130	30	70-130	30	30	
n-Propylbenzene	103-65-1	1	0.215	ug/kg	70-130	30	70-130	30	30	
1,2,3-Trichlorobenzene	87-61-6	5	0.251	ug/kg	70-130	30	70-130	30	30	
1,2,4-Trichlorobenzene	120-82-1	5	0.215	ug/kg	70-130	30	70-130	30	30	
1,3,5-Trimethylbenzene	108-67-8	5	0.161	ug/kg	70-130	30	70-130	30	30	
1,2,4-Trimethylbenzene	95-63-6	5	0.186	ug/kg	70-130	30	70-130	30	30	
Methyl Acetate	79-20-9	20	0.463	ug/kg	51-146	30	51-146	30	30	
Cyclohexane	110-82-7	20	0.433	ug/kg	59-142	30	59-142	30	30	
1,4-Dioxane	123-91-1	40	14.4	ug/kg	65-136	30	65-136	30	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	20	0.514	ug/kg	50-139	30	50-139	30	30	
Methyl cyclohexane	108-87-2	4	0.24	ug/kg	70-130	30	70-130	30	30	
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*
Toluene-d8	*2037-26-5*									*70-130*
4-Bromofluorobenzene	*460-00-4*									*70-130*
Dibromofluoromethane	*1868-53-7*									*70-130*
TCL Semivolatiles - EPA 8270D (SOIL)										
Acenaphthene	83-32-9	133.6	17.3012	ug/kg	31-137	50	31-137	50	50	
1,2,4-Trichlorobenzene	120-82-1	167	19.1048	ug/kg	38-107	50	38-107	50	50	
Hexachlorobenzene	118-74-1	100.2	18.704	ug/kg	40-140	50	40-140	50	50	
Bis(2-chloroethyl)ether	111-44-4	150.3	22.6452	ug/kg	40-140	50	40-140	50	50	
2-Chloronaphthalene	91-58-7	167	16.5664	ug/kg	40-140	50	40-140	50	50	
1,2-Dichlorobenzene	95-50-1	167	29.9932	ug/kg	40-140	50	40-140	50	50	
1,3-Dichlorobenzene	541-73-1	167	28.724	ug/kg	40-140	50	40-140	50	50	
1,4-Dichlorobenzene	106-46-7	167	29.1582	ug/kg	28-104	50	28-104	50	50	
3,3'-Dichlorobenzidine	91-94-1	167	44.422	ug/kg	40-140	50	40-140	50	50	
2,4-Dinitrotoluene	121-14-2	167	33.4	ug/kg	40-132	50	40-132	50	50	
2,6-Dinitrotoluene	606-20-2	167	28.6572	ug/kg	40-140	50	40-140	50	50	
Fluoranthene	206-44-0	100.2	19.1716	ug/kg	40-140	50	40-140	50	50	
4-Chlorophenyl phenyl ether	7005-72-3	167	17.869	ug/kg	40-140	50	40-140	50	50	
4-Bromophenyl phenyl ether	101-55-3	167	25.4842	ug/kg	40-140	50	40-140	50	50	
Bis(2-chloroisopropyl)ether	108-60-1	200.4	28.5236	ug/kg	40-140	50	40-140	50	50	

TABLE 2A: PARAMETERS - METHODS, LIMITS, ACCURACY, AND PRECISION (SOIL)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Semivolatiles - EPA 8270D (SOIL)										
Bis(2-chloroethoxy)methane	111-91-1	180.36	16.7334	ug/kg	40-117	50	40-117	50	50	
Hexachlorobutadiene	87-68-3	167	24.4488	ug/kg	40-140	50	40-140	50	50	
Hexachlorocyclopentadiene	77-47-4	477.62	151.302	ug/kg	40-140	50	40-140	50	50	
Hexachloroethane	67-72-1	133.6	27.0206	ug/kg	40-140	50	40-140	50	50	
Isophorone	78-59-1	150.3	21.6766	ug/kg	40-140	50	40-140	50	50	
Naphthalene	91-20-3	167	20.3406	ug/kg	40-140	50	40-140	50	50	
Nitrobenzene	98-95-3	150.3	24.716	ug/kg	40-140	50	40-140	50	50	
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	133.6	19.0046	ug/kg	36-157	50	36-157	50	50	
n-Nitrosodi-n-propylamine	621-64-7	167	25.7848	ug/kg	32-121	50	32-121	50	50	
Bis(2-Ethylhexyl)phthalate	117-81-7	167	57.782	ug/kg	40-140	50	40-140	50	50	
Butyl benzyl phthalate	85-68-7	167	42.084	ug/kg	40-140	50	40-140	50	50	
Di-n-butylphthalate	84-74-2	167	31.6632	ug/kg	40-140	50	40-140	50	50	
Di-n-octylphthalate	117-84-0	167	56.78	ug/kg	40-140	50	40-140	50	50	
Diethyl phthalate	84-66-2	167	15.4642	ug/kg	40-140	50	40-140	50	50	
Dimethyl phthalate	131-11-3	167	35.07	ug/kg	40-140	50	40-140	50	50	
Benzo(a)anthracene	56-55-3	100.2	18.8042	ug/kg	40-140	50	40-140	50	50	
Benzo(a)pyrene	50-32-8	133.6	40.748	ug/kg	40-140	50	40-140	50	50	
Benzo(b)fluoranthene	205-99-2	100.2	28.1228	ug/kg	40-140	50	40-140	50	50	
Benzo(k)fluoranthene	207-08-9	100.2	26.72	ug/kg	40-140	50	40-140	50	50	
Chrysene	218-01-9	100.2	17.368	ug/kg	40-140	50	40-140	50	50	
Acenaphthylene	208-96-8	133.6	25.7848	ug/kg	40-140	50	40-140	50	50	
Anthracene	120-12-7	100.2	32.565	ug/kg	40-140	50	40-140	50	50	
Benzo(ghi)perylene	191-24-2	133.6	19.6392	ug/kg	40-140	50	40-140	50	50	
Fluorene	86-73-7	167	16.2324	ug/kg	40-140	50	40-140	50	50	
Phenanthrene	85-01-8	100.2	20.3072	ug/kg	40-140	50	40-140	50	50	
Dibenzo(a,h)anthracene	53-70-3	100.2	19.3052	ug/kg	40-140	50	40-140	50	50	
Indeno(1,2,3-cd)Pyrene	193-39-5	133.6	23.2798	ug/kg	40-140	50	40-140	50	50	
Pyrene	129-00-0	100.2	16.5998	ug/kg	35-142	50	35-142	50	50	
Biphenyl	92-52-4	380.76	38.744	ug/kg	54-104	50	54-104	50	50	
4-Chloroaniline	106-47-8	167	30.394	ug/kg	40-140	50	40-140	50	50	
2-Nitroaniline	88-74-4	167	32.1976	ug/kg	47-134	50	47-134	50	50	
3-Nitroaniline	99-09-2	167	31.4962	ug/kg	26-129	50	26-129	50	50	
4-Nitroaniline	100-01-6	167	69.138	ug/kg	41-125	50	41-125	50	50	
Dibenzofuran	132-64-9	167	15.7982	ug/kg	40-140	50	40-140	50	50	
2-Methylnaphthalene	91-57-6	200.4	20.1736	ug/kg	40-140	50	40-140	50	50	
Acetophenone	98-86-2	167	20.6746	ug/kg	14-144	50	14-144	50	50	
2,4,6-Trichlorophenol	88-06-2	100.2	31.6632	ug/kg	30-130	50	30-130	50	50	
P-Chloro-M-Cresol	59-50-7	167	24.883	ug/kg	26-103	50	26-103	50	50	
2-Chlorophenol	95-57-8	167	19.7394	ug/kg	25-102	50	25-102	50	50	
2,4-Dichlorophenol	120-83-2	150.3	26.8536	ug/kg	30-130	50	30-130	50	50	
2,4-Dimethylphenol	105-67-9	167	55.11	ug/kg	30-130	50	30-130	50	50	
2-Nitrophenol	88-75-5	360.72	62.792	ug/kg	30-130	50	30-130	50	50	
4-Nitrophenol	100-02-7	233.8	68.136	ug/kg	11-114	50	11-114	50	50	

TABLE 2A: PARAMETERS - METHODS, LIMITS, ACCURACY, AND PRECISION (SOIL)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Semivolatiles - EPA 8270D (SOIL)										
2,4-Dinitrophenol	51-28-5	801.6	77.822	ug/kg	4-130	50	4-130	50	50	
4,6-Dinitro-o-cresol	534-52-1	434.2	80.16	ug/kg	10-130	50	10-130	50	50	
Pentachlorophenol	87-86-5	133.6	36.74	ug/kg	17-109	50	17-109	50	50	
Phenol	108-95-2	167	25.217	ug/kg	26-90	50	26-90	50	50	
2-Methylphenol	95-48-7	167	25.885	ug/kg	30-130.	50	30-130.	50	50	
3-Methylphenol/4-Methylphenol	106-44-5	240.48	26.1522	ug/kg	30-130	50	30-130	50	50	
2,4,5-Trichlorophenol	95-95-4	167	31.9972	ug/kg	30-130	50	30-130	50	50	
Benzoic Acid	65-85-0	541.08	169.004	ug/kg	10-110	50	10-110	50	50	
Benzyl Alcohol	100-51-6	167	51.102	ug/kg	40-140	50	40-140	50	50	
Carbazole	86-74-8	167	16.2324	ug/kg	54-128	50	54-128	50	50	
2-Fluorophenol	*367-12-4*									*25-120*
Phenol-d6	*13127-88-3*									*10-120*
Nitrobenzene-d5	*4165-60-0*									*23-120*
2-Fluorobiphenyl	*321-60-8*									*30-120*
2,4,6-Tribromophenol	*118-79-6*									*10-136*
4-Terphenyl-d14	*1718-51-0*									*18-120*
TCL Pesticides - EPA 8081B (SOIL)										
Delta-BHC	319-86-8	7.992	1.5651	ug/kg	30-150	30	30-150	50	50	
Lindane	58-89-9	3.33	1.48851	ug/kg	30-150	30	30-150	50	50	
Alpha-BHC	319-84-6	3.33	0.94572	ug/kg	30-150	30	30-150	50	50	
Beta-BHC	319-85-7	7.992	3.0303	ug/kg	30-150	30	30-150	50	50	
Heptachlor	76-44-8	3.996	1.79154	ug/kg	30-150	30	30-150	50	50	
Aldrin	309-00-2	7.992	2.81385	ug/kg	30-150	30	30-150	50	50	
Heptachlor epoxide	1024-57-3	14.985	4.4955	ug/kg	30-150	30	30-150	50	50	
Endrin	72-20-8	3.33	1.3653	ug/kg	30-150	30	30-150	50	50	
Endrin aldehyde	7421-93-4	9.99	3.4965	ug/kg	30-150	30	30-150	50	50	
Endrin ketone	53494-70-5	7.992	2.05794	ug/kg	30-150	30	30-150	50	50	
Dieldrin	60-57-1	4.995	2.4975	ug/kg	30-150	30	30-150	50	50	
4,4'-DDE	72-55-9	7.992	1.84815	ug/kg	30-150	30	30-150	50	50	
4,4'-DDD	72-54-8	7.992	2.85048	ug/kg	30-150	30	30-150	50	50	
4,4'-DDT	50-29-3	14.985	6.4269	ug/kg	30-150	30	30-150	50	50	
Endosulfan I	959-98-8	7.992	1.88811	ug/kg	30-150	30	30-150	50	50	
Endosulfan II	33213-65-9	7.992	2.67066	ug/kg	30-150	30	30-150	50	50	
Endosulfan sulfate	1031-07-8	3.33	1.58508	ug/kg	30-150	30	30-150	50	50	
Methoxychlor	72-43-5	14.985	4.662	ug/kg	30-150	30	30-150	50	50	
Toxaphene	8001-35-2	149.85	41.958	ug/kg	30-150	30	30-150	50	50	
cis-Chlordane	5103-71-9	9.99	2.78388	ug/kg	30-150	30	30-150	50	50	
trans-Chlordane	5103-74-2	9.99	2.63736	ug/kg	30-150	30	30-150	50	50	
Chlordane	57-74-9	64.935	26.4735	ug/kg	30-150	30	30-150	50	50	
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*
Decachlorobiphenyl	*2051-24-3*									*30-150*
TCL PCBs - EPA 8082A (SOIL)										
Aroclor 1016	12674-11-2	33.5	3.7989	ug/kg	40-140	50	40-140	50	50	

TABLE 2A: PARAMETERS - METHODS, LIMITS, ACCURACY, AND PRECISION (SOIL)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL PCBs - EPA 8082A (SOIL)										
Aroclor 1221	11104-28-2	33.5	5.0987	ug/kg	40-140	50	40-140	50	50	
Aroclor 1232	11141-16-5	33.5	3.2964	ug/kg	40-140	50	40-140	50	50	
Aroclor 1242	53469-21-9	33.5	4.1004	ug/kg	40-140	50	40-140	50	50	
Aroclor 1248	12672-29-6	33.5	3.7587	ug/kg	40-140	50	40-140	50	50	
Aroclor 1254	11097-69-1	33.5	2.7336	ug/kg	40-140	50	40-140	50	50	
Aroclor 1260	11096-82-5	33.5	3.4974	ug/kg	40-140	50	40-140	50	50	
Aroclor 1262	37324-23-5	33.5	2.7537	ug/kg	40-140	50	40-140	50	50	
Aroclor 1268	11100-14-4	33.5	2.3718	ug/kg	40-140	50	40-140	50	50	
PCBs, Total	1336-36-3	33.5	1.541	ug/kg				50	50	
PCBs, Total	1336-36-3	33.5	1.541	ug/kg				50	50	
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*
Decachlorobiphenyl	*2051-24-3*									*30-150*
METALS by 6010C/7471B (SOIL)										
Aluminum, Total	7429-90-5	4	1.08	mg/kg	48-151		75-125	20	20	
Antimony, Total	7440-36-0	2	0.152	mg/kg	1-208		75-125	20	20	
Arsenic, Total	7440-38-2	0.4	0.0832	mg/kg	79-121		75-125	20	20	
Barium, Total	7440-39-3	0.4	0.0696	mg/kg	83-117		75-125	20	20	
Beryllium, Total	7440-41-7	0.2	0.0132	mg/kg	83-117		75-125	20	20	
Cadmium, Total	7440-43-9	0.4	0.0392	mg/kg	83-117		75-125	20	20	
Calcium, Total	7440-70-2	4	1.4	mg/kg	81-119		75-125	20	20	
Chromium, Total	7440-47-3	0.4	0.0384	mg/kg	80-120		75-125	20	20	
Cobalt, Total	7440-48-4	0.8	0.0664	mg/kg	84-115		75-125	20	20	
Copper, Total	7440-50-8	0.4	0.1032	mg/kg	81-118		75-125	20	20	
Iron, Total	7439-89-6	2	0.3612	mg/kg	45-155		75-125	20	20	
Lead, Total	7439-92-1	2	0.1072	mg/kg	81-117		75-125	20	20	
Magnesium, Total	7439-95-4	4	0.616	mg/kg	76-124		75-125	20	20	
Manganese, Total	7439-96-5	0.4	0.0636	mg/kg	81-117		75-125	20	20	
Mercury, Total	7439-97-6	0.08	0.016896	mg/kg	72-128		80-120	20	20	
Nickel, Total	7440-02-0	1	0.0968	mg/kg	83-117		75-125	20	20	
Potassium, Total	7440-09-7	100	5.76	mg/kg	71-129		75-125	20	20	
Selenium, Total	7782-49-2	0.8	0.1032	mg/kg	78-122		75-125	20	20	
Silver, Total	7440-22-4	0.4	0.1132	mg/kg	75-124		75-125	20	20	
Sodium, Total	7440-23-5	80	1.26	mg/kg	72-127		75-125	20	20	
Thallium, Total	7440-28-0	0.8	0.126	mg/kg	80-120		75-125	20	20	
Vanadium, Total	7440-62-2	0.4	0.0812	mg/kg	78-122		75-125	20	20	
Zinc, Total	7440-66-6	2	0.1172	mg/kg	82-118		75-125	20	20	
CYANIDE by 9010C/9012B (SOIL)										
Cyanide, Total	57-12-5	1	0.212	mg/kg	80-120	35	75-125	35	35	

TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
PFAS - EPA 537(M)-Isotope Dilution (WATER)										
Perfluorobutanoic Acid (PFBA)	375-22-4	2	0.1312	ng/l	50-150	30	50-150	30	30	
Perfluoropentanoic Acid (PFPeA)	2706-90-3	2	0.0856	ng/l	50-150	30	50-150	30	30	
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	2	0.11	ng/l	50-150	30	50-150	30	30	
Perfluorohexanoic Acid (PFHxA)	307-24-4	2	0.1264	ng/l	50-150	30	50-150	30	30	
Perfluoroheptanoic Acid (PFHpA)	375-85-9	2	0.0924	ng/l	50-150	30	50-150	30	30	
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	2	0.1076	ng/l	50-150	30	50-150	30	30	
Perfluorooctanoic Acid (PFOA)	335-67-1	2	0.0504	ng/l	50-150	30	50-150	30	30	
Perfluorononanoic Acid (PFNA)	375-95-1	2	0.1008	ng/l	50-150	30	50-150	30	30	
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	2	0.1116	ng/l	50-150	30	50-150	30	30	
Perfluorodecanoic Acid (PFDA)	335-76-2	2	0.1904	ng/l	50-150	30	50-150	30	30	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	2	0.2908	ng/l	50-150	30	50-150	30	30	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA	2355-31-9	2	0.2504	ng/l	50-150	30	50-150	30	30	
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	2	0.1912	ng/l	50-150	30	50-150	30	30	
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	2	0.2224	ng/l	50-150	30	50-150	30	30	
Perfluorooctanesulfonamide (FOSA)	754-91-6	2	0.2268	ng/l	50-150	30	50-150	30	30	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	2	0.3728	ng/l	50-150	30	50-150	30	30	
Perfluorododecanoic Acid (PFDoA)	307-55-1	2	0.0916	ng/l	50-150	30	50-150	30	30	
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	2	0.0904	ng/l	50-150	30	50-150	30	30	
Perfluorotetradecanoic Acid (PFTA)	376-06-7	2	0.072	ng/l	50-150	30	50-150	30	30	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)		2	0.194	ng/l	50-150	30	50-150	30	30	
Perfluoroheptanesulfonic Acid (PFHpS)		2	0.155	ng/l	50-150	30	50-150	30	30	
Perfluoro[13C4]Butanoic Acid (MPFBA)	*NONE*									*50-150*
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	*NONE*									*50-150*
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	*NONE*									*50-150*
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	*NONE*									*50-150*
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	*NONE*									*50-150*
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	*NONE*									*50-150*
Perfluoro[13C8]Octanoic Acid (M8PFOA)	*NONE*									*50-150*
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6.	*NONE*									*50-150*
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	*NONE*									*50-150*
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	*NONE*									*50-150*
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	*NONE*									*50-150*
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8	*NONE*									*50-150*
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (	*NONE*									*50-150*
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	*NONE*									*50-150*
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	*NONE*									*50-150*
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5	*NONE*									*50-150*
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	*NONE*									*50-150*
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	*NONE*									*50-150*
TCL Volatiles - EPA 8260C (WATER)										
Methylene chloride	75-09-2	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,1-Dichloroethane	75-34-3	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Chloroform	67-66-3	2.5	0.7	ug/l	70-130	20	70-130	20	20	

TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Volatiles - EPA 8260C (WATER)										
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20	
1,2-Dichloropropane	78-87-5	1	0.137	ug/l	70-130	20	70-130	20	20	
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20	
1,1,2-Trichloroethane	79-00-5	1.5	0.5	ug/l	70-130	20	70-130	20	20	
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20	
Chlorobenzene	108-90-7	2.5	0.7	ug/l	75-130	20	75-130	20	20	
Trichlorofluoromethane	75-69-4	2.5	0.7	ug/l	62-150	20	62-150	20	20	
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20	
1,1,1-Trichloroethane	71-55-6	2.5	0.7	ug/l	67-130	20	67-130	20	20	
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20	
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20	
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20	
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20	
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20	
Bromoform	75-25-2	2	0.65	ug/l	54-136	20	54-136	20	20	
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20	
Benzene	71-43-2	0.5	0.159	ug/l	70-130	20	70-130	20	20	
Toluene	108-88-3	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Ethylbenzene	100-41-4	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Chloromethane	74-87-3	2.5	0.7	ug/l	64-130	20	64-130	20	20	
Bromomethane	74-83-9	2.5	0.7	ug/l	39-139	20	39-139	20	20	
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20	
Chloroethane	75-00-3	2.5	0.7	ug/l	55-138	20	55-138	20	20	
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	20	61-145	20	20	
trans-1,2-Dichloroethene	156-60-5	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	20	70-130	20	20	
1,2-Dichlorobenzene	95-50-1	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,3-Dichlorobenzene	541-73-1	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,4-Dichlorobenzene	106-46-7	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Methyl tert butyl ether	1634-04-4	2.5	0.7	ug/l	63-130	20	63-130	20	20	
p/m-Xylene	179601-23-1	2.5	0.7	ug/l	70-130	20	70-130	20	20	
o-Xylene	95-47-6	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Xylene (Total)	1330-20-7	2.5	0.7	ug/l				20	20	
Xylene (Total)	1330-20-7	2.5	0.7	ug/l				20	20	
cis-1,2-Dichloroethene	156-59-2	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,2-Dichloroethene (total)	540-59-0	2.5	0.7	ug/l				20	20	
1,2-Dichloroethene (total)	540-59-0	2.5	0.7	ug/l				20	20	
Styrene	100-42-5	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Dichlorodifluoromethane	75-71-8	5	1	ug/l	36-147	20	36-147	20	20	
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20	
Carbon disulfide	75-15-0	5	1	ug/l	51-130	20	51-130	20	20	
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20	
4-Methyl-2-pentanone	108-10-1	5	1	ug/l	59-130	20	59-130	20	20	

TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Volatiles - EPA 8260C (WATER)										
2-Hexanone	591-78-6	5	1	ug/l	57-130	20	57-130	20	20	
Bromochloromethane	74-97-5	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,2-Dibromoethane	106-93-4	2	0.65	ug/l	70-130	20	70-130	20	20	
n-Butylbenzene	104-51-8	2.5	0.7	ug/l	53-136	20	53-136	20	20	
sec-Butylbenzene	135-98-8	2.5	0.7	ug/l	70-130	20	70-130	20	20	
tert-Butylbenzene	98-06-6	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.7	ug/l	41-144	20	41-144	20	20	
Isopropylbenzene	98-82-8	2.5	0.7	ug/l	70-130	20	70-130	20	20	
p-Isopropyltoluene	99-87-6	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Naphthalene	91-20-3	2.5	0.7	ug/l	70-130	20	70-130	20	20	
n-Propylbenzene	103-65-1	2.5	0.7	ug/l	69-130	20	69-130	20	20	
1,2,3-Trichlorobenzene	87-61-6	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,2,4-Trichlorobenzene	120-82-1	2.5	0.7	ug/l	70-130	20	70-130	20	20	
1,3,5-Trimethylbenzene	108-67-8	2.5	0.7	ug/l	64-130	20	64-130	20	20	
1,2,4-Trimethylbenzene	95-63-6	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Methyl Acetate	79-20-9	2	0.234	ug/l	70-130	20	70-130	20	20	
Cyclohexane	110-82-7	10	0.271	ug/l	70-130	20	70-130	20	20	
1,4-Dioxane	123-91-1	250	60.8	ug/l	56-162	20	56-162	20	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	2.5	0.7	ug/l	70-130	20	70-130	20	20	
Methyl cyclohexane	108-87-2	10	0.396	ug/l	70-130	20	70-130	20	20	
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*
Toluene-d8	*2037-26-5*									*70-130*
4-Bromofluorobenzene	*460-00-4*									*70-130*
Dibromofluoromethane	*1868-53-7*									*70-130*
TCL Semivolatiles - EPA 8270D (WATER)										
Acenaphthene	83-32-9	2	0.591	ug/l	37-111	30	37-111	30	30	
1,2,4-Trichlorobenzene	120-82-1	5	0.661	ug/l	39-98	30	39-98	30	30	
Hexachlorobenzene	118-74-1	2	0.579	ug/l	40-140	30	40-140	30	30	
Bis(2-chloroethyl)ether	111-44-4	2	0.669	ug/l	40-140	30	40-140	30	30	
2-Chloronaphthalene	91-58-7	2	0.64	ug/l	40-140	30	40-140	30	30	
1,2-Dichlorobenzene	95-50-1	2	0.732	ug/l	40-140	30	40-140	30	30	
1,3-Dichlorobenzene	541-73-1	2	0.688	ug/l	40-140	30	40-140	30	30	
1,4-Dichlorobenzene	106-46-7	2	0.708	ug/l	36-97	30	36-97	30	30	
3,3'-Dichlorobenzidine	91-94-1	5	1.39	ug/l	40-140	30	40-140	30	30	
2,4-Dinitrotoluene	121-14-2	5	0.845	ug/l	48-143	30	48-143	30	30	
2,6-Dinitrotoluene	606-20-2	5	1.12	ug/l	40-140	30	40-140	30	30	
Fluoranthene	206-44-0	2	0.568	ug/l	40-140	30	40-140	30	30	
4-Chlorophenyl phenyl ether	7005-72-3	2	0.625	ug/l	40-140	30	40-140	30	30	
4-Bromophenyl phenyl ether	101-55-3	2	0.731	ug/l	40-140	30	40-140	30	30	
Bis(2-chloroisopropyl)ether	108-60-1	2	0.696	ug/l	40-140	30	40-140	30	30	
Bis(2-chloroethoxy)methane	111-91-1	5	0.626	ug/l	40-140	30	40-140	30	30	
Hexachlorobutadiene	87-68-3	2	0.717	ug/l	40-140	30	40-140	30	30	
Hexachlorocyclopentadiene	77-47-4	20	7.84	ug/l	40-140	30	40-140	30	30	

TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Semivolatiles - EPA 8270D (WATER)										
Hexachloroethane	67-72-1	2	0.682	ug/l	40-140	30	40-140	30	30	
Isophorone	78-59-1	5	0.601	ug/l	40-140	30	40-140	30	30	
Naphthalene	91-20-3	2	0.68	ug/l	40-140	30	40-140	30	30	
Nitrobenzene	98-95-3	2	0.753	ug/l	40-140	30	40-140	30	30	
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	2	0.644	ug/l	40-140	30	40-140	30	30	
n-Nitrosodi-n-propylamine	621-64-7	5	0.7	ug/l	29-132	30	29-132	30	30	
Bis(2-Ethylhexyl)phthalate	117-81-7	3	0.91	ug/l	40-140	30	40-140	30	30	
Butyl benzyl phthalate	85-68-7	5	1.26	ug/l	40-140	30	40-140	30	30	
Di-n-butylphthalate	84-74-2	5	0.689	ug/l	40-140	30	40-140	30	30	
Di-n-octylphthalate	117-84-0	5	1.14	ug/l	40-140	30	40-140	30	30	
Diethyl phthalate	84-66-2	5	0.628	ug/l	40-140	30	40-140	30	30	
Dimethyl phthalate	131-11-3	5	0.65	ug/l	40-140	30	40-140	30	30	
Benzo(a)anthracene	56-55-3	2	0.61	ug/l	40-140	30	40-140	30	30	
Benzo(a)pyrene	50-32-8	2	0.539	ug/l	40-140	30	40-140	30	30	
Benzo(b)fluoranthene	205-99-2	2	0.635	ug/l	40-140	30	40-140	30	30	
Benzo(k)fluoranthene	207-08-9	2	0.597	ug/l	40-140	30	40-140	30	30	
Chrysene	218-01-9	2	0.543	ug/l	40-140	30	40-140	30	30	
Acenaphthylene	208-96-8	2	0.658	ug/l	45-123	30	45-123	30	30	
Anthracene	120-12-7	2	0.645	ug/l	40-140	30	40-140	30	30	
Benzo(ghi)perylene	191-24-2	2	0.611	ug/l	40-140	30	40-140	30	30	
Fluorene	86-73-7	2	0.619	ug/l	40-140	30	40-140	30	30	
Phenanthrene	85-01-8	2	0.613	ug/l	40-140	30	40-140	30	30	
Dibenzo(a,h)anthracene	53-70-3	2	0.548	ug/l	40-140	30	40-140	30	30	
Indeno(1,2,3-cd)Pyrene	193-39-5	2	0.707	ug/l	40-140	30	40-140	30	30	
Pyrene	129-00-0	2	0.569	ug/l	26-127	30	26-127	30	30	
Biphenyl	92-52-4	2	0.757	ug/l	40-140	30	40-140	30	30	
4-Chloroaniline	106-47-8	5	0.632	ug/l	40-140	30	40-140	30	30	
2-Nitroaniline	88-74-4	5	1.14	ug/l	52-143	30	52-143	30	30	
3-Nitroaniline	99-09-2	5	1.22	ug/l	25-145	30	25-145	30	30	
4-Nitroaniline	100-01-6	5	1.3	ug/l	51-143	30	51-143	30	30	
Dibenzofuran	132-64-9	2	0.656	ug/l	40-140	30	40-140	30	30	
2-Methylnaphthalene	91-57-6	2	0.72	ug/l	40-140	30	40-140	30	30	
Acetophenone	98-86-2	5	0.847	ug/l	39-129	30	39-129	30	30	
2,4,6-Trichlorophenol	88-06-2	5	0.681	ug/l	30-130	30	30-130	30	30	
P-Chloro-M-Cresol	59-50-7	2	0.617	ug/l	23-97	30	23-97	30	30	
2-Chlorophenol	95-57-8	2	0.631	ug/l	27-123	30	27-123	30	30	
2,4-Dichlorophenol	120-83-2	5	0.769	ug/l	30-130	30	30-130	30	30	
2,4-Dimethylphenol	105-67-9	5	1.64	ug/l	30-130	30	30-130	30	30	
2-Nitrophenol	88-75-5	10	1.52	ug/l	30-130	30	30-130	30	30	
4-Nitrophenol	100-02-7	10	1.77	ug/l	10-80	30	10-80	30	30	
2,4-Dinitrophenol	51-28-5	20	5.47	ug/l	20-130	30	20-130	30	30	
4,6-Dinitro-o-cresol	534-52-1	10	2.1	ug/l	20-164	30	20-164	30	30	
Pentachlorophenol	87-86-5	10	3.43	ug/l	9-103	30	9-103	30	30	

TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL Semivolatiles - EPA 8270D (WATER)										
Phenol	108-95-2	5	1.89	ug/l	12-110	30	12-110	30	30	
2-Methylphenol	95-48-7	5	1.02	ug/l	30-130	30	30-130	30	30	
3-Methylphenol/4-Methylphenol	106-44-5	5	1.11	ug/l	30-130	30	30-130	30	30	
2,4,5-Trichlorophenol	95-95-4	5	0.715	ug/l	30-130	30	30-130	30	30	
Benzoic Acid	65-85-0	50	12.9	ug/l	10-164	30	10-164	30	30	
Benzyl Alcohol	100-51-6	2	0.725	ug/l	26-116	30	26-116	30	30	
Carbazole	86-74-8	2	0.627	ug/l	55-144	30	55-144	30	30	
2-Fluorophenol	*367-12-4*									*21-120*
Phenol-d6	*13127-88-3*									*10-120*
Nitrobenzene-d5	*4165-60-0*									*23-120*
2-Fluorobiphenyl	*321-60-8*									*15-120*
2,4,6-Tribromophenol	*118-79-6*									*10-120*
4-Terphenyl-d14	*1718-51-0*									*41-149*
1,4 Dioxane - EPA 8270D-SIM (ug/L) (WATER)										
1,4-Dioxane	123-91-1	0.15	0.075	ug/l	40-140	30	40-140	30	30	
1,4-Dioxane-d8	*17647-74-4*									*15-110*
1,4-Dioxane-d8 (IS)	17647-74-4			ug/l						
TCL Pesticides - EPA 8081B (WATER)										
Delta-BHC	319-86-8	0.02	0.00467	ug/l	30-150	20	30-150	30	30	
Lindane	58-89-9	0.02	0.00434	ug/l	30-150	20	30-150	30	30	
Alpha-BHC	319-84-6	0.02	0.00439	ug/l	30-150	20	30-150	30	30	
Beta-BHC	319-85-7	0.02	0.0056	ug/l	30-150	20	30-150	30	30	
Heptachlor	76-44-8	0.02	0.0031	ug/l	30-150	20	30-150	30	30	
Aldrin	309-00-2	0.02	0.00216	ug/l	30-150	20	30-150	30	30	
Heptachlor epoxide	1024-57-3	0.02	0.00415	ug/l	30-150	20	30-150	30	30	
Endrin	72-20-8	0.04	0.00429	ug/l	30-150	20	30-150	30	30	
Endrin aldehyde	7421-93-4	0.04	0.0081	ug/l	30-150	20	30-150	30	30	
Endrin ketone	53494-70-5	0.04	0.00477	ug/l	30-150	20	30-150	30	30	
Dieldrin	60-57-1	0.04	0.00429	ug/l	30-150	20	30-150	30	30	
4,4'-DDE	72-55-9	0.04	0.00381	ug/l	30-150	20	30-150	30	30	
4,4'-DDD	72-54-8	0.04	0.00464	ug/l	30-150	20	30-150	30	30	
4,4'-DDT	50-29-3	0.04	0.00432	ug/l	30-150	20	30-150	30	30	
Endosulfan I	959-98-8	0.02	0.00345	ug/l	30-150	20	30-150	30	30	
Endosulfan II	33213-65-9	0.04	0.00519	ug/l	30-150	20	30-150	30	30	
Endosulfan sulfate	1031-07-8	0.04	0.00481	ug/l	30-150	20	30-150	30	30	
Methoxychlor	72-43-5	0.2	0.00684	ug/l	30-150	20	30-150	30	30	
Toxaphene	8001-35-2	0.2	0.0627	ug/l	30-150	20	30-150	30	30	
cis-Chlordane	5103-71-9	0.02	0.00666	ug/l	30-150	20	30-150	30	30	
trans-Chlordane	5103-74-2	0.02	0.00627	ug/l	30-150	20	30-150	30	30	
Chlordane	57-74-9	0.2	0.0463	ug/l	30-150	20	30-150	30	30	
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*
Decachlorobiphenyl	*2051-24-3*									*30-150*

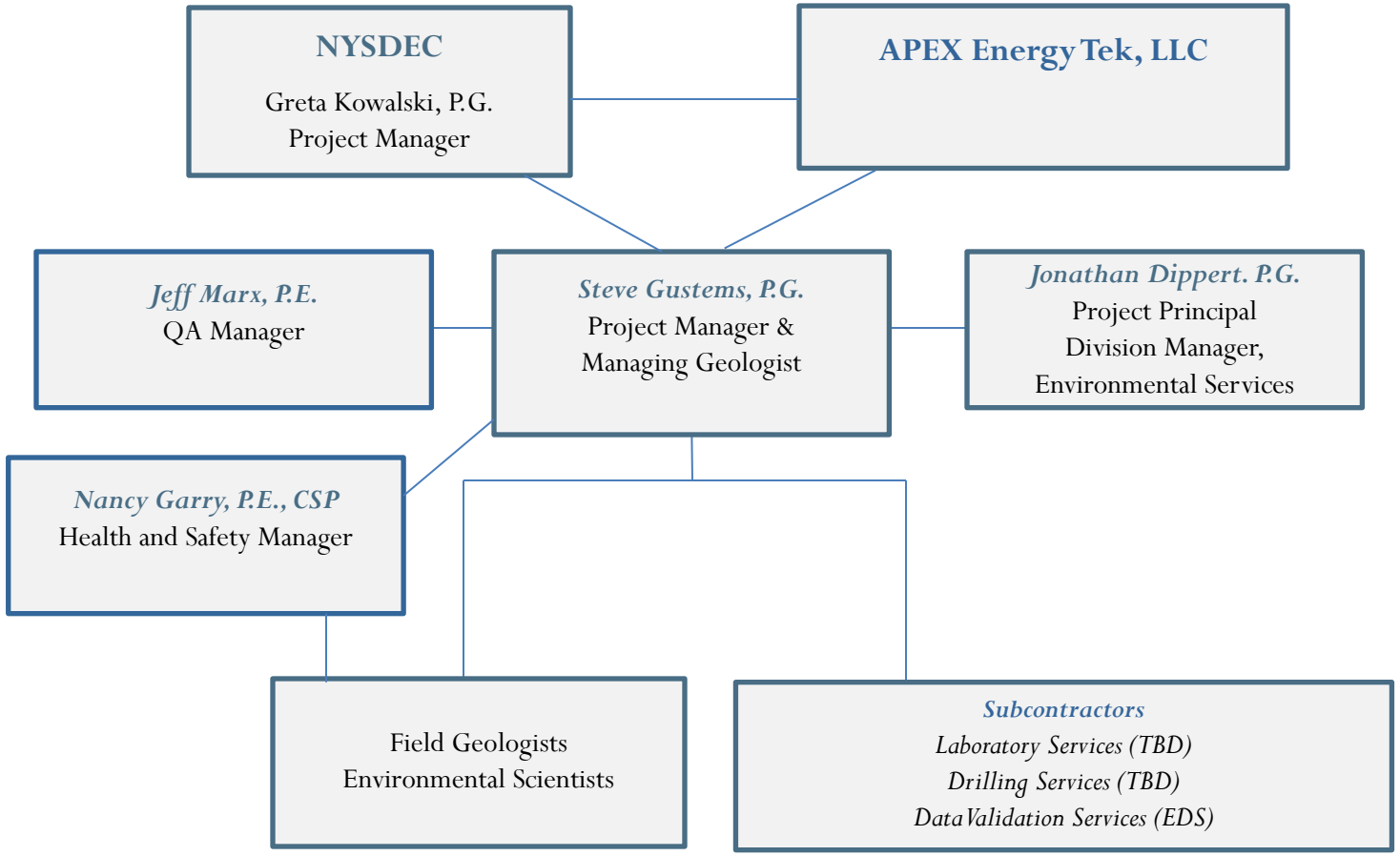
TABLE 2B: PARAMETERS - METHODS, LIMITS, ACCURACY AND PRECISION (WATER)
Hudson Valley Regional Airport, Town of Wappinger, NY

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria
TCL PCBs - EPA 8082A (WATER)										
Aroclor 1016	12674-11-2	0.083	0.019588	ug/l	40-140	50	40-140	50	50	
Aroclor 1221	11104-28-2	0.083	0.031872	ug/l	40-140	50	40-140	50	50	
Aroclor 1232	11141-16-5	0.083	0.027058	ug/l	40-140	50	40-140	50	50	
Aroclor 1242	53469-21-9	0.083	0.029548	ug/l	40-140	50	40-140	50	50	
Aroclor 1248	12672-29-6	0.083	0.022576	ug/l	40-140	50	40-140	50	50	
Aroclor 1254	11097-69-1	0.083	0.034611	ug/l	40-140	50	40-140	50	50	
Aroclor 1260	11096-82-5	0.083	0.01992	ug/l	40-140	50	40-140	50	50	
Aroclor 1262	37324-23-5	0.083	0.017098	ug/l	40-140	50	40-140	50	50	
Aroclor 1268	11100-14-4	0.083	0.027058	ug/l	40-140	50	40-140	50	50	
PCBs, Total	1336-36-3	0.083	0.017098	ug/l				50	50	
PCBs, Total	1336-36-3	0.083	0.017098	ug/l				50	50	
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*
Decachlorobiphenyl	*2051-24-3*									*30-150*
METALS by 6020A/7471B (WATER)										
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20	
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20	
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20	
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20	
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20	
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20	
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20	
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20	
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20	
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20	
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20	
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20	
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20	
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20	
Mercury, Total	7439-97-6	0.0002	0.000066	mg/l	80-120		75-125	20	20	
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20	
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20	
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20	
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20	
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20	
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20	
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20	
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20	
CYANIDE by 9010c/9012B (WATER)										
Cyanide, Total	57-12-5	0.005	0.0018	mg/l	85-115	20	80-120	20	20	

ATTACHMENT A

ORGANIZATIONAL CHART

C.T. MALE PROJECT ORGANIZATION – HUDSON VALLEY REGIONAL AIRPORT



ATTACHMENT B

PERSONNEL RESUMES



PROFESSIONAL BACKGROUND
Licensed Professional Geologist in NY

YEARS OF EXPERIENCE
Total Years of Experience: 21
Total Years with C.T. Male: 19

EDUCATION
BA in Geology and Geophysics
University of Connecticut

PROFESSIONAL AFFILIATIONS
Hudson Mohawk Professional Geologist Association (HMPGA)
Programming Chair, 2022-present

HMPGA
Board Member, 2023-present

SPECIALIZED TRAINING
OSHA 1910.120 HAZWOPER and Annual 8 Hour Certification

OSHA Confined Space Entry Training

OSHA Lockout/Tagout - Control of Hazardous Energy Training

Aquifer Testing for Improved Hydrogeologic Site Characterization Featuring AQTESOLV and In-Situ LevelTROLL, Colorado School of Mines

Certified Hazardous Materials Manager Review, University of Iowa

Midwest Geosciences Group Webinar Series, Aquifer Evaluation and various short courses

JONATHAN DIPPERT, P.G.
Project & Division Manager

SUMMARY
Mr. Dippert joined C.T. Male in 2007 with extensive experience as an environmental consultant, project manager and Professional Geologist. His experience include soil and groundwater investigations with an emphasis in emerging contaminants, Phase II Environmental Site Assessments, remedial action field oversight, hydrogeologic investigations involving public and private water supply, and participation in various other environmental projects.

The projects have included oversight of contractors, characterization of environmental media (e.g., soil) to support decision process, coordination with regulatory agencies to develop and implement work plans and reporting, and evaluation of the data to prepare remedial alternatives analysis.

Mr. Dippert is responsible for the preparation of technical reports, data research, staying current and training staff on new field technologies and methods, and management of staff capabilities, depth of services, coordinating/reviewing the quality of work for project team staff including relevant field logs and mapping, and adherence to applicable standard operating procedures, scopes of work, and state and federal regulations and guidelines.

NOTABLE PROJECT EXPERIENCE

Emerging Contaminant (EC) Projects

- 2 Sites, Hoosick Falls, New York
- 1 Site, North Bennington, Vermont
- 1 Site, Merrimack, New Hampshire
- 1 Site, Saranac Lake, New York

NYSDEC ERP & BCP Projects

- 312 Broadway ERP, Schenectady, New York
- 400 Broadway ERP, Saranac Lake, New York
- Public School 6, Yonkers, New York
- 188 Warburton Avenue, Yonkers, New York
- Former Miron Pre-Cast, Kingston, New York
- 354 Broadway, Fort Edward, New York

Water Supply Projects

- Hydrogeologic Evaluation, Saratoga Springs, NY
- Residential drinking water well replacement, North Bennington, VT

Facility Support/Environmental Services

- Remedial Spill Monitoring, Glens Falls, NY
- Confidential Client, Hoosick Falls, NY
- Long-Term Monitoring, Bennington, VT



STEVEN GUSTEMS, P.G.

Managing Geologist

SUMMARY

Mr. Gustems joined C.T. Male in 2026 and is currently a Managing Geologist within the Environmental Division. He has over 30 years of experience with Phase I environmental site assessments, Phase II environmental site assessments, and Phase III remedial investigations. Mr. Gustems has conducted subsurface investigations and remediation for various clients nationwide which includes financial institutions, developers, property management companies, and property owners. In addition Mr. Gustems has managed the investigation and remediation of multiple New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Sites.

YEARS OF EXPERIENCE

Total Years of Experience: 35
Total Years with C.T. Male: 1

EDUCATION

BS in Soil & Water Resources
University of Rhode Island

SPECIALIZED TRAINING

OSHA HASWAPER Health and Safety at Hazardous Waste Sites, 29 CFR 1910.120 (e), 40 hours

OSHA 10-Hour Construction Safety Certified

NOTABLE PROJECT EXPERIENCE

***Projects completed at prior firm**

NYSDEC BCP Projects

- Charcoal Tablet Mill Site (BCP C360186): Peekskill, NY
- Cottage-Garden Auto Repair Site (C360180), New Rochelle, NY
- Garden Street Apartments (C360188), New Rochelle, NY
- 14 Le Count Standard Printing Site (C360176), New Rochelle, NY
- Hope Fire Engine Co. Site (C360219), White Plains, NY
- WP Mall Cleaners & Gas Station Site (C360221), White Plains, NY
- Hamilton Green Site (C360177), White Plains, NY
- Broad Street Irving Ave Cleaners Site (C360213), Port Chester, NY
- St. Clair Hotel Dry Cleaning Site (C360220), Yonkers, NY
- Former Yonkers Firehouse Site (C360191), Yonkers, NY
- Kings Plaza Shopping Center (V00232), Brooklyn, NY

Phase II ESAs, Tank Closure & Remediation

- Roosevelt Building, Washington, DC
- Warwick Hotel, Houston, TX
- Pepsico Headquarters, Purchase, NY
- Radio Shack Warehouse, Forth Worth, TX
- Helen Hayes Hospital, West Haverstraw, NY
- Harlem Valley Psychiatric Center, Wingdale, NY
- Sparkill Well Field, Tappan, NY
- Alexandria Drafting Company, Alexandria, VA

JEFFREY A. MARX, P.E.

Managing Environmental Engineer/Principal

C.T. Male Associates | 518 786 7400 | ctmale.com

SUMMARY

Mr. Marx joined C.T. Male in 1997 as an environmental engineer and is currently a managing environmental engineer responsible for supervising five (5) technical staff members within the Environmental Division. His responsibilities include managing environmental field investigations and remedial activities for NYS Brownfield, Environmental Restoration and Spills Programs; tank assessment/closures; PFAS sampling and cleanup; supervising landfill monitoring; hazardous waste sampling, management and disposal; due diligence environmental assessments and scoping; remediation scoping and implementation; and QA/QC of environmental projects. He develops engineering and construction costs estimates; authors technical specifications and reports; manages multi-discipline projects and remedial construction activities; is the certifying engineer for water withdrawal permitting; and conducts/facilitates environmental compliance assistance (i.e., petroleum and chemical bulk storage, industrial wastewater management, hazardous waste, SPRs, SWPPPs, etc.) for industrial clients. This compliance work prepares for regulatory audits/inspections, helps maintain compliance with a variety of regulatory programs and assists with responding to/correcting Notices of Violation (NOV). Mr. Marx is a trusted advisor for many clients and internal staff on environmental topics and is the leader in EQuIS data management.

PROFESSIONAL BACKGROUND

Licensed Professional Engineer in NY

NYSDOL Licensed Asbestos Project Designer

YEARS OF EXPERIENCE

Total Years of Experience: 29
Total Years with C.T. Male: 27

EDUCATION

BS in Civil Engineering
Rochester Institute of Technology

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Hudson Mohawk Section, Member

The Practicing Institute of Engineering, Inc., Member and Continuing Education Course Evaluator

The Foundation for Engineering Education, Inc., E-Week Steering Committee Co-Chair

East Greenbush Branch YMCA Volunteer, Chair of Advisory Council Member and Capital District YMCA Board Member

Capital District YMCA Facilities Committee Member

SPECIALIZED TRAINING

OSHA 40-Hour Health & Safety Training

OSHA 10-Hour Construction Safety

Hazmat Ground Shipper Certification - 2023

NOTABLE PROJECT EXPERIENCE

NYSDEC ERP & BCP (Certifying Remedial Engineer)

- Hamilton Hill II BCP; Schenectady, NY
- Former Grand Union BCP; Fort Edward, NY
- Former Chalmers Knitting Mill ERP; Amsterdam, NY
- Former Tanneries (3 sites) ERPs; Gloversville, NY
- South Troy Industrial Park ERP; Troy, NY

Phase II ESAs, Tank Closures & Remediation

- Tobin Investments, Tank Closure; Champlain, NY
- Haleon (formerly GSK), Tank Closure and Spill Cleanup
- Confidential Site, Buried Drums Assessment & Removal; Malta, NY
- Bobby's Auto Decommissioning; Schenectady, NY

Environmental Compliance

- Regeneron Pharmaceuticals, Rensselaer & East Greenbush NY Facilities, Various Regulatory Programs
- Haleon (formerly GSK) , Durham, NY, SPCC Plan, SWPP Plan, BMP Plan, Hazardous Waste Reporting, Mercury Minimization Plan
- GlobalFoundries; Malta, NY, Various Regulatory Programs

Emergent Contaminant Work

- Fenix Parts, Inc., Queensbury, NY, PFAS Spill Cleanup
- Schuyler Heights Fire District, Menands, NY, PFAS Site Monitoring
- Saint-Gobain, Multiple Facilities, PFAS Lab Data Management

Water Withdrawal Permitting

- Rocking Horse Ranch; Highland, NY
- Indeck Corinth Energy Center; Corinth, NY

NANCY GARRY, P.E., CSP

Senior Environmental Engineer

C.T. Male Associates | 518 786 7400 | ctmale.com



PROFESSIONAL BACKGROUND

Licensed Professional Engineer in NY

Certified Safety Professional

YEARS OF EXPERIENCE

Total Years of Experience: 27
Total Years with C.T. Male: 7

EDUCATION

Master in Environmental Engineering
Rensselaer Polytechnic Institute

BA in Chemistry/Biology
College of St. Rose

PROFESSIONAL AFFILIATIONS

NYS Society of Professional Engineers

Capital District Chapter, NYS Society of Professional Engineers
Director 2017-2019 and MATHCOUNTS volunteer scorer (2019 - Present)

American Society of Safety Professionals
Member

VOLUNTEER AFFILIATIONS

Greater Johnstown School District BOE
2020 to present

Fulton County IDA
2016 to present

Nathan Littauer Foundation Board of Directors
2016 to present

C.T. Male Associates
A DESIGN PROFESSIONAL CORPORATION

SUMMARY

Ms. Garry joined C.T. Male in 2017 as a Senior Environmental Engineer. She has extensive experience in site investigation and remediation projects and environmental compliance. Ms. Garry also has extensive experience in OSHA and environmental, health and safety on-site compliance for industrial and government clients. Ms. Garry serves as the firm's Corporate Safety Manager.

Ms. Garry is responsible for projects including Clean Air Act assessments and compliance; Risk Management Plans; chemical and petroleum bulk storage assessments and compliance; environmental audits; Phase 1 & 2 environmental site assessments; and various environmental engineering projects.

NOTABLE PROJECT EXPERIENCE

Managed a three year (2015 -2018), New York State Office of General Services, Environmental Remediation Services Statewide Term Contract*. Projects under these contracts have included:

- Tank design packages for the removal of underground and aboveground storage tanks and installation of aboveground storage tanks for back up fuel sources and fueling stations at numerous Department of Corrections and Community Supervision facilities throughout NYS.
- Three New York State Department of Transportation former spills sites that required remediation, ongoing monitoring, and spill closure.

Managed a seven year (2008 -2015), New York State Department of Environmental Conservation, Standby Engineering Services for Remediation Statewide, Term Contract*. Projects under these contracts have included:

- Managed approx. twenty-five projects under the NYSDEC contract that included site characterizations, remedial investigations, feasibility studies, point of entry use systems, and site management throughout NYS. Management included submitting work plans, reports, health & safety plans, quality control plans, and review of subcontractors plans. (*Projects completed at previous employer).

Long term ongoing ground water remedial treatment system operation, that includes remote access and control, monthly sampling and weekly inspections. The remedial treatment system is part of an Interim Remedial Measure (IRM) for the project site per NYSDEC.

Preparing Site Safety Plans across company Divisions: Environmental, Civil, Mechanical/Electrical, Survey; for submission to various private, municipal and agency clients. This includes reviewing clients needs for the project, review scope of work with project teams for understanding of potential hazards for project work, and addressing comments from clients of the Site Safety Plans.

ATTACHMENT C

LABORATORY CERTIFICATIONS

Lab of Record To Be Determined

APPENDIX B

HEALTH AND SAFETY PLAN

July 17, 2026

SITE SPECIFIC HEALTH & SAFETY PLAN

Hudson Valley Regional Airport Site
Town of Wappinger
Dutchess County, New York
NYSDEC Site #C314129

Prepared for:

APEX ENERGY TEK, LLC
63 Main Street
Queensbury, New York, 12804

Prepared by:

C.T. MALE ASSOCIATES
12 Raymond Avenue
Poughkeepsie, New York 12603
(845) 454-4400

C.T. Male Associates Project No: 26.0423

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C.T. MALE ASSOCIATES, ENGINEERING, SURVEYING, ARCHITECTURE, LANDSCAPE ARCHITECTURE & GEOLOGY D.P.C.

SITE SPECIFIC HEALTH & SAFETY PLAN
HUDSON VALLEY REGIONAL AIRPORT SITE
18 GRIFFITH WAY, TOWN OF WAPPINGER
DUTCHESS COUNTY, NEW YORK

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FIGURES

Figure 1: Map Showing Route to Hospital

1.0 GENERAL

1.1 Overview

This Health and Safety Plan (HASP) has been prepared for use during implementation of the Pre-Construction Investigation (PCI) at the Hudson Valley Regional Airport Site ("the Site") located at 18 Griffith Way in the Town of Wappinger, Dutchess County, New York. This HASP has been developed as an integral part of the PCI as prepared by C.T. Male Associates. The PCI is being performed as part of the NYS Brownfield Cleanup Program.

A designated Office Health and Safety Officer (OHSO) and a Field Safety Officer will be responsible for implementing this HASP during the completion of the PCI field work. All persons or parties who enter the work area (support zone, decontamination zone or exclusion zone) must review, sign and comply with this HASP. A list of individuals authorized to enter the exclusion zone at the Site is presented in Section 13.0 of this HASP. Others may be added to the list as needed. A copy of this HASP will be maintained at the Site throughout the duration of the project. A complete description of the PCI work scope is presented in the PCI Work Plans. A brief description of the proposed scope of work is outlined below.
The proposed PCI will generally include the following tasks:

- Advancement of soil borings to aid in the collection of surface, near-surface, and sub-surface soil samples for subjective field evidence of contamination (FEC) screening; a visual inspection for staining, and screening for organic vapors with a photoionization detector [PID], and for laboratory analysis.; installation of groundwater monitoring wells in overburden groundwater aquifer (if encountered); and hydrogeologic characterization of the Site's saturated subsurface materials (if encountered).
  Collection and laboratory analysis of groundwater samples from the newly installed groundwater monitoring wells, as applicable.

1.2 Contact Names & Numbers

For this project, the following NYSDEC, Site Representative, NYSDOH, C.T. Male Associates and Emergency Response names and telephone numbers are presented below as project Site contacts.

DUTCHESS COUNTY CONTACTS:

EHS MANAGER: David Whalen, Acting Commissioner
Dutchess County Department of Public Works
26 Dutchess Turnpike
Poughkeepsie, New York 12603
845.486.2085 (O)

HUDSON VALLEY REGIONAL AIRPORT CONTACTS:

DIRECTOR of AVIATION: Jeff Durand
38 Citation Drive
Wappingers Falls, New York 12590
845-337-1659 (C) 845-463-6000 (O)
845-462-0083 (F)

CONSULTANT CONTACTS:

CONSULTING ENGINEER: Steven Gustems, Managing Geologist
C.T. Male Associates
12 Raymond Avenue
Poughkeepsie, New York 12603
845.454.4400 (O) 845.762.4377 (D)
845.594.1788 (C) 518.786.7400 (O)

Nancy Garry, PE, CSP
Health & Safety Officer
518.786.7541 (O)

Dan Achtyl, P.G., HSO Designee
518.786.7501 (O)

STATE CONTACTS:

NYSDEC Greta Kowalski, Project Manager
625 Broadway
Albany, NY 12233-7014
518.402.2029 (O)

NYSDOH	Angela Martin, Project Manager Empire State Plaza Corning Tower, Room 1787 Albany, NY 12237 518.473.4671 (O	

EMERGENCY PHONE NUMBERS:

PERSONAL INJURY or EMERGENCY:	MidHudson Regional Hospital 241 North Road Poughkeepsie, New York 12601 (approx. 20 minutes)	845.483.5000
FIRE DEPARTMENT:	Emergency New Hackensack Fire Company 217 Myers Corners Road Wappinger Falls, New York 12590	911 845.297.3897
POLICE:	Emergency Dutchess County Sheriff 150 N. Hamilton Street Poughkeepsie, New York 12601	911 845.486.3800
NYS POLICE	Emergency NYS Police Department 18 Middlebush Road Wappinger Falls, New York 12590	911 845.298.0398
UPSTATE NEW YORK REGIONAL POISON CONTROL CENTER:	University Hospital Upstate Medical University SUNY Health Science Center 750 East Adams Street Syracuse, New York 13201	(800) 222-1222
NATIONAL RESPONSE CENTER:	c/o United States Coast Guard (G-OPF) 2100 2nd Street, Southwest - Room 2611 Washington, DC 20593-0001	(800) 424-8802
NYSDEC SPILL HOTLINE:		(800) 457-7362

2.0 HEATLH AND SAFETY PERSONNEL

The Health and Safety Officer (HSO) will be responsible for implementation of the HASP and the delegation of health and safety duties. The HSO will coordinate the resolution of safety issues that arise during site work. When field operations require only Level D protection, it will not be necessary for the HSO to be present on-Site at all times. When the HSO is not present on-Site, a designee will be authorized to perform the duties of the HSO, and the designee will be responsible for implementation of the HASP.

The HSO or designee has authority to stop work upon their determination of an imminent safety hazard, emergency situation or other potentially dangerous situations (e.g. weather conditions), when this action is deemed appropriate. Authorization to resume work will be issued by the HSO.

3.0 SITE LOCATION AND DESCRIPTION

The Hudson Valley Regional Airport Site is addressed as 18 Griffith Way in the Town of Wappinger, Dutchess County, New York. The Site is approximately 510.8 acres in size and is identified with tax number 135689-6259-03-225301-0000. Route 376 transects the northeastern portion of the Site. Jackson Road transects the southwestern portion of the Site.

The majority of the Site consists of an active airport that is owned and operated by Dutchess County. Two (2) closed landfills occupy northern portions of the Site. The landfills were reportedly used for the disposal of municipal wastes and have been designated as inactive hazardous waste sites by the NYS Department of Environmental Conservation (DEC). Two (2) hangars located on the southeastern portion of the Site, and currently occupied by Associated Aircraft Group, have been designated as inactive hazardous waste sites in relation to the discharge of spent solvents and petroleum to the Site's media.

The Site's topography is relatively flat within portions of the Site containing the aircraft runways and Site buildings. The topography slopes downwards towards Wappinger Creek on northern and western portions of the Site. The topography slopes upward on the northeastern portion of the Site located across New Hackensack Road (State Route 376).

Wappinger Creek is located adjacent to the Site's northern and western property boundaries. The Creek flows in a general southwesterly direction towards the Hudson River. An unnamed water body referred to as the Fire Pond is located on the southeastern portion of the Site adjacent north of the hangars occupied by the Associated Aircraft Group. The water body appears to discharge into an unnamed creek that flows in a general northeasterly direction to low lying areas to the northeast of the Site.

4.0 POTENTIAL SITE CONTAMINANTS

Data from previous environmental investigations at the Site have identified contaminants including volatile and semi-volatile organic compounds, solvents, PCBs, metals, and per- and polyfluoroalkyl substances (PFAS) in various Site media (soil, sediment, surface water, drinking water and groundwater), though the principal contaminant of concern has been PFAS.

5.0 HAZARD ASSESSMENT

5.1 General

The hazard assessment, use of specific protective equipment, and monitoring associated with each field work task of the PCI to be conducted at the subject Sare presented in following subsections.

For this project, C.T. Male Associates will be subcontracting portions of the PCI activities. Each subcontractor will be responsible for developing and implementing a site-specific health and safety plan for their activities, for protection of their employees, and use of personal protective equipment. The subcontractor will also be responsible for developing and following their own Respiratory Protection Program, as applicable.

5.2 Media Sampling

Soil and groundwater sampling (if encountered) are proposed for this project. The potential hazards to personnel during this work are dermal contact. Level D protection should be sufficient to protect against dermal contact during handling of soils and water. If organic vapors are present at the action levels described in Section 5.4, on the basis of organic vapor monitoring of the area during the work, it may be necessary to upgrade to Level C respiratory protection.

5.3 Subsurface Work

Exploratory test borings (including the installation of monitoring wells) into soils and the excavation of test pits are planned for the Site. The potential hazards to personnel during this work are dermal contact. Level D protection should be sufficient to protect against dermal contact during drilling of and/or handling of the subsurface soils and groundwater. If organic vapors are present at the action levels described in Section 5.4, on the basis of organic vapor monitoring of the area during the work, it may be necessary to upgrade to Level C respiratory protection.

5.4 Air Monitoring

During ground intrusive activities, the ambient air in the work area will be monitored with a photoionization detection meter (total volatile compounds – MiniRAE 2000 or

3000 or equivalent) prior to the start of work and periodically as conditions warrant. If a concentration of 10 ppm (sustained for 5 minutes) of total volatile compounds is detected within the work area on the instrument, relative to an isobutylene standard (used to calibrate the instrument), work will cease immediately, and the workers shall shut down equipment and leave the area immediately. The level of personal protective equipment (PPE) protection will be evaluated prior to continuing work. If a PPE upgrade to Level C is required, it will include: a half face air purifying respirator equipped with combination organic vapor and particulate cartridges for 10-15 ppm exposure levels If a concentration greater than 15 ppm is encountered, work will cease immediately, and the situation will be evaluated prior to continuation of work. **Table 1** below summarizes the action levels relative to the required respiratory protection.

Table 1
C.T. Male Associates Action Levels & Required Respiratory Protection

Action Level	Level of PPE	Type of Respiratory Protection
0-10 parts per million	Level D	No respiratory protection
10-15 parts per million	Level C	Negative pressure half-face respirator
15-50 parts per million	Level C	Positive pressure full-face respirator
Greater than 50	Cease Work	Evaluate work procedures

-Facial hair is not permitted while wearing most respirators.
-Workers required to wear a respirator must have a minimum of OSHA 40 Hour training with current medical monitoring and fit test documentation.

5.5 Community Air Monitoring Plan

A site-specific Community Air Monitoring Plan (CAMP) is attached to the PCI as Appendix C.

5.6 Airport Safety Regulations and Guidelines

Work on airport property will be completed in accordance with FAA regulations and guidance. PCI field activities will be coordinated with on-Site airport personnel and the airport Director of Aviation. Personnel will maintain high awareness of airport traffic during mobilization and subsequent activities. At minimum personnel will wear Level D PPE. C.T. Male Associates trucks used on-Site will use a yellow caution light on top during vehicle movement. Other items may be required based upon

airport requirements. Areas/locations where subsurface investigation will take place will be pre-approved/cleared by airport staff.

- **Site Access Guidelines:** In order to ensure the safety of all participants, airport staff will pre-approve daily work locations, provide access to the Site, and escort CTM employees and associated subcontractors across Site as required. If locations and or scope of work changes throughout the day, the airport staff will be contacted. For additional information on Site access, refer to section 7.0.
- **Vehicular and Aircraft Traffic Guidelines:** To protect workers' safety from hazards associated with vehicular and aircraft traffic, workers are expected to wear safety vests, remain within designated work locations approved by airport personnel, and use cones and vehicles to block and define work areas. In addition to these precautions, minimum off-sets from airport runways and taxiways have been established as follows:
    - **Runways:** 200 feet from center line
    - **Runway Ends:** 300 feet
    - **Taxiways:** 66 feet from center line
- **Emergency Contact Information:** In case of emergency and/or injury, all emergency vehicles should be directed to 38 Citation Drive, and airport staff should be contacted to escort personnel to emergency vehicles. Airport staff contact information are listed in Section 1.2 and as follows:
    - Director of Aviation; Jeff Durand
        - 845-463-6000 (O)
        - 845-462-0083 (F)
        - 845-337-1659 (C)

5.7 Hazard Identification and Control

The following **Table 2** below presents generalized hazards potentially involved with the tasks to be completed on this project. The table identifies general procedures to follow to prevent or reduce accident, injury or illness. Any worker on-Site who identifies a potential hazard must report the condition to the HSO or designee, and initiate control of the hazardous condition.

Table 2 Potential Hazards and Control	
Potential Hazard	**Control**
Vehicular and Aircraft Traffic	1. Wear safety vest when vehicular/aircraft hazards exist. 2. Use cones, flags, barricades, and caution tape to define work area. 3. Use vehicle to block work area. 4. Use vehicle caution lights in all areas within the Site. 5. Contact local and/or airport police for high traffic situations. 6. Airport personnel will need to approve location or activities each day and each time field personnel move to a new sampling location with the day's activities.
Slip, Trip, and Fall Protection	1. Assess work area to determine if there is a potential for falling. 2. Make sure work area is neat and tools are staged in one general area. 3. Wear steel-toe boots with adequate tread and always watch where the individual is walking. Carry flashlight when walking in poorly lighted areas.
Inclement Weather	1. Stop outdoor work during electrical storms and other extreme weather conditions such as extreme heat or cold temperatures. 2. Take cover indoors or in vehicle. 3. Listen to local forecasts for warnings about specific weather hazards such as tornadoes, hurricanes, and flash floods.
Utility Lines Contact	1. Contact UDig NY to have utility lines marked prior to any underground excavation, trenching or drilling. UDig NY must be contacted at least 72 hours prior to work. 2. Refer to Site drawings for utility locations. 3. Manually dig 3 to 5 feet below grade and 5 feet on each side of utility marked to avoid breaking utility lines.
Noise	1. Wear hearing protection when equipment such as a drill rig, excavator, jackhammer, or other heavy equipment is operating on-Site. 2. Wear hearing protection in the vicinity of operating aircraft. 3. Wear hearing protection whenever you need to raise your voice above normal conversational speech due to a loud noise source; as this much noise indicates the need for protection. 4. Hearing protection is required when measured sound exceeds 85 decibels (dB) where employees stand or conduct work.

Table 2 Potential Hazards and Control	
Potential Hazard	**Control**
Electrical Shock	1. Maintain appropriate distance between heavy equipment and overhead utilities; 20 foot minimum clearance from power lines; and 10 foot minimum clearance from shielded power lines. 2. Contact local underground utility locating service prior to penetrating the ground surface.
Physical Injury	1. Wear hard hats and safety glasses at all times when on-Site. 2. Maintain visual contact with equipment and aircraft operators and wear orange safety vest when heavy equipment and aircraft are operating on-Site. 3. Avoid loose clothing when working around rotary equipment. 4. Keep hands and feet away from drilling augers/casing/samplers and excavation equipment tracks/tires. 5. Test emergency shut-off switches on drill rigs and excavation equipment regularly.
Back Injury	1. Use a mechanical lifting device or a lifting aid where appropriate. 2. Ensure the route is free of obstructions. 3. Bend at the knees and use leg muscles when lifting. 4. Use the buddy system if lifting heavy or awkward objects. 5. Do not twist or jerk your body when lifting.
Heat Stress	1. Increase water intake while working. 2. Avoid excessive alcohol intake the night before working in heat stress situations. 3. Increase number of rest breaks as necessary and rest in a shaded area. 4. Watch for signs and symptoms of heat exhaustion and fatigue. 5. Rest in cool, dry areas. 6. In the event of heat stress or heat stroke, bring the victim to a cool environment and call 911.
Cold Stress	1. Wear cotton, wool or synthetics (polypropylene) undergarments to absorb perspiration from the body. 2. Wear additional layers of light clothing as needed for warmth. The layering effect holds in air, trapping body heat, and some layers could be removed as the temperature rises during the day.

Table 2 Potential Hazards and Control	
Potential Hazard	**Control**
	3. Pay close attention to body signals and feelings (hypothermia symptoms), especially to the extremities. Correct any problem indicators by breaking from the work activity and moving to a rest area to warm up and add additional clothing. 4. Increase water intake while working. 5. Avoid excessive alcohol intake the night before working in cold conditions. 6. Increase the number of rest breaks as necessary and rest in a warm area. 7. In the event of hypothermia or frost bite, bring the victim to a warm environment and call 911.
Fire Control	1. Smoking is not allowed on-Site. 2. Keep flammable liquids in closed containers. 3. Isolate flammable and combustible materials from ignition sources. 4. Keep fire extinguisher nearby and use only if deemed safe.
Media Sampling (water, soil, sediment, etc.)	1. Wear appropriate PPE to avoid skin, eye, and inhalation contact with contaminated media. 2. Stand upwind to minimize possible inhalation exposure, especially when opening monitoring wells or closed containers/vessels. 3. Conduct air monitoring, whenever necessary, to determine level of respiratory protection. 4. If necessary, employ engineering controls to assist in controlling chemical vapors. 5. When collecting samples on or near water bodies, wear a life jacket and employ the buddy system. 6. When collecting samples from water bodies, assess water conditions and the water current and ensure that the sampling vessel is stabilized.
Cleaning Equipment	1. Wear appropriate PPE to avoid skin and eye contact with Alconox or other cleaning materials. 2. Stand upwind to minimize possible inhalation exposure. 3. Properly dispose of spent chemical cleaning solutions and rinse accordingly.
Deer Ticks	1. Wear pants and long-sleeved shirts.

Table 2 Potential Hazards and Control	
Potential Hazard	**Control**
	2. Wear tick repellant coated pants and long sleeve shirts. 3. Use tick repellent. 4. Perform personal body checks for the presence of ticks. 5. Notify the Health and Safety Officer immediately if you have been bitten by a tick and contact your physician.
Note: A first aid kit and fire extinguisher will be located in the C.T. Male Associates company vehicle.	

Response actions to personal exposure from on-Site contaminants include skin contact, eye contact, inhalation, ingestion, and puncture or laceration. The recommended response actions are presented in Section 11.2.

6.0 TRAINING

Site specific training of workers and personnel will be conducted and provided by the HSO or designee prior to any on-Site activity. The training will specifically address the activities, procedures, monitoring and equipment for the Site operations. It will include area and facility layout, hazards, emergency services (police, hospital, fire, etc.), and review of this HASP. Questions by workers, field personnel, etc. will be addressed at this time. In addition, separate training may be provided by airport personnel as applicable.

Workers and personnel conducting and/or supervising the project must have attended and successfully completed a 24- or 40-Hour Health and Safety Training Course for Hazardous Waste Operations and an annual 8-hour Refresher Course, as applicable. Workers must take part in an employer medical surveillance program in accordance with OSHA 1910.120 requirements, including that the workers have had a medical physical within one (1) year prior to the date the work begins and that they are physically able to wear a respirator.

Documentation of training and medical surveillance will be submitted to the HSO or designee prior to the start of any on-Site work. A copy of the training certificates for C.T. Male Associates personnel are maintained at C.T. Male Associates place of business and are available on request.

7.0 SITE ACCESS

The PCI work will be conducted within and outside of the Site boundaries. Since the Site is an active airport, there is secure and controlled access to the Site. There is a possibility that workers from the airport or other services at the airport will be present at the time of work. The work on-Site will need to adhere to airport and FAA regulations. As such, the work area and exclusion zone will be considered as the following, dependent on the investigative tasks performed, and the regulations and operating procedures for the airport, as applicable.

- Caution tape and/or cones will be used to delineate an approximate 10-30-foot square around each test boring location. All work and equipment will remain within the designated work area/exclusion zone until completion of the test boring and installation of the monitoring well.

- Caution tape or another appropriate means designated by airport personnel, will be used to delineate an approximate 10-foot square around each surface water, sediment sampling location, and each soil sampling location not originating from a test boring. All work and equipment will remain within the designated work area/exclusion zone until completion of the sampling. If a boat is utilized to aid in the collection of the surface water and sediment samples, then the boat will be considered as the designated work area/exclusion zone.

Only OSHA trained individuals who are qualified to do the work and have read and signed this Site specific HASP will be allowed within the work/exclusion zone. The HSO or designee will be responsible for limiting access to unauthorized individuals.

The Contamination Reduction Zone (decontamination area), and Support Zone (clean area, everywhere else) will be established outside the Exclusion Zone, as necessary. The exclusion, contamination reduction, and support zone during the SCI work have been identified and designated as follows:

Work/Exclusion Zone - The location of the work/exclusion zone will be determined in the field prior to the start of work and will vary depending on the work activities conducted. For the most part, the work/exclusion zone is anticipated to be defined

with caution tape and/or cones, and a boat, if used (see above). Only authorized persons with proper training and protective gear will be allowed to enter the work/exclusion zone.

Contamination Reduction Zone – If applicable, this zone will generally be a 30'± x 30'± area, marked off with stakes, colored flagging, cones, or equal method, containing the decontamination pad. The location will be determined in the field prior to the start of work and will vary depending on the area(s) the work is being conducted. This zone is where decontamination of personnel and equipment will take place, as necessary, on the basis of the work being performed.

Support Zone - Area outside of the contamination reduction zone; not including the work/exclusion zone. Unauthorized or untrained individuals must remain in this zone.

Off-Site work will be conducted in remote areas including hiking through forested areas adjacent to nearby streams and ponds. Safety precautions will be taken including wearing appropriate PPE such as approved sturdy hiking/work boots and wearing tick-repellant clothing. Authorized personnel shall have a designated escort or employ the buddy-system when conducting off-Site remote sampling activities. A Dutchess County representative will coordinate access to off-Site locations and escort authorized personnel when entering residential homes for potable well sampling activities as necessary.

8.0 PERSONAL PROTECTION

8.1 Level of Protection

Based on an evaluation of the potential hazards, the minimum level of protection to be worn by workers during implementation of the PCI activities is defined as Level D protection and will be controlled by the HSO or designee.

The minimum level D protective equipment will consist of field clothes, rubber gloves (NITRILE and/or PVC ONLY), hard hats, safety glasses, and safety boots (steel-toe preferred). As appropriate, this level of protection may be modified to include protective suits (NOT TYVEK**)**, coveralls, leg chaps, or face shield for additional protection. Both full-face and half-face air purifying respirators should be readily available. Appropriate combination organic vapor and particulate cartridge filters will be available at the Site to use, if necessary, with the air purifying respirators.

If required, level C protective equipment will consist of the items listed for Level D protection with the added protection of full-face, air purifying (organic vapor and particulate) respirator, chemical resistant clothing (NOT TYVEK), inner and outer chemically resistant gloves (i.e. nitrile and/or PVC), and chemical resistant safety overboots.

Level B is not anticipated, but if required, level B protective equipment will consist of the items listed for Level D protection except a self-contained breathing apparatus (SCBA) will be worn dependent on the level of contaminants present in the work zone, and protective suits (NOT TYVEK) will be required. When Site conditions warrant the need for level B protective equipment, work will cease and the project will be re-evaluated to determine the necessity for employing engineering controls to reduce or eliminate the potential contaminants of concern.

8.2 Safety Equipment

Basic emergency and first aid equipment will be available at an area within the Support Zone clearly marked and available or within C.T. Male Associates company vehicle (if allowed on-Site). This shall include a first aid kit, fire extinguisher (if allowed by airport procedures), supply of potable water, soap and towels. The HSO or designee shall be equipped with a cellular phone in case of emergencies. If the

cellular phone is not available, or is inoperable, a phone in the airport support building will be utilized.

9.0 COMMUNICATIONS

The HSO or designee will be equipped with a cellular phone in case of emergencies. If the cellular phone is not available, or is inoperable, or not allowed within certain places within the airport investigation area, a phone in the airport support building will be utilized. The HSO or designee shall notify the C.T. Male Associates Project Manager as soon as safely possible in the event of an accident, injury or emergency action.

Hand signals for certain work tasks will be employed, as necessary, and the buddy system will be employed during drilling and installation of monitoring wells, and during open surface water and open water sediment sampling activities.

10.0 DECONTAMINATION PROCEDURES

10.1 Personnel Decontamination Procedures

Decontamination procedures will be carried out by all personnel leaving the Work/Exclusion Zone (except under emergency evacuation). The amount of decontamination performed will be dependent on the level of personal protection currently being worn within the exclusion zone.

1. Do not remove respiratory protection, if donned, until all steps have been completed.
2. Clean outer protective gloves and outer boots, if worn, with water (preferably with a pressurized washer) over designated wash tubs in the exclusion zone to remove the gross amount of contamination.
3. Deposit equipment used (tools, sampling devices, and containers) at designated drop stations - on plastic drop sheets or in plastic lined containers.
4. Rinse outer boots if worn and gloves with clean water in designated rinse tubs. Remove outer boots if worn and gloves and deposit in designated area to be determined in the field for use the next day or when necessary. If disposable outer boots are worn, remove and discard in designated container.
5. Remove hard hat & safety glasses, rinse with clean water as necessary and deposit in designated area for use the next day or when necessary.
6. Remove protective suit, if worn, and discard in designated container. Remove respirator at this time, if used; wash and rinse with clean water. Organic vapor and particulate cartridges, when used, will be replaced daily. Used cartridges will be discarded in the designated waste container. Remove inner gloves and discard in designated container.

10.2 Equipment and Sample Containers Decontamination

All decontamination will be completed by personnel in protective gear appropriate for the level of protection determined by the Site HSO or designee. Manual sampling equipment including scoops, hand augers, and shovels which come into contact with

the Site's soil and sediment, will be cleaned with a PFAS-free tap water/detergent wash and a bottled water rinse. The sampling equipment will be decontaminated after each sample is collected at the Contaminant Reduction Zone (Decontamination Station). The sampling equipment wash and rinse water will be captured in plastic pails or tubs and ultimately transferred to labeled DOT 17H approved 55-gallon open top steel drums and staged on-Site at a secure location.

Drill rig equipment (i.e., casing, drill rods, bits, core samplers) which comes into contact with the Site's soil will be decontaminated with a high pressure/hot water wash and/or other methods within the Contaminant Reduction Area. The cleaning will be performed at the completion of each boring location. Equipment decontamination wastes will be transferred to labeled DOT 17H approved 55-gallon open top steel drums and staged on-Site at a secure location.

Larger equipment (i.e., drill rig) which comes into contact with the Site's soils will be decontaminated with a high pressure/hot water wash and/or other methods within a decontamination pad. The decontamination procedure will focus on portions of the equipment that has come into contact with the Site's soils such as the tires and tracks. The cleaning will be performed prior to the equipment leaving the Site. Equipment decontamination wastes will be transferred to labeled DOT 17H approved 55-gallon open top steel drums and staged on-Site at a secure location.

If a boat is utilized for collection of surface water/sediment samples, portions of the boat that comes into contact with water will be decontaminated at the shoreline by scrubbing with a tap water/detergent wash and a tap water rinse. The wash/rinse water will be allowed to discharge to the shoreline.

Exterior surfaces of sample containers will be wiped clean with disposable paper towels in the decontamination zone and transferred to a clean cooler for transportation or shipment to the analytical laboratory. Sample identities will be noted and checked off against the chain-of-custody record. The disposable paper towels will be placed in the designated disposal container and disposed of as solid waste.

11.0 EMERGENCY RESPONSE PROCEDURES

THE PROJECT EMERGENCY COORDINATOR IS:

Site Health and Safety Officer (HSO)

The following standard emergency procedures will be used by on-Site personnel. The Project Manager and HSO shall be notified of any on-Site emergencies and be responsible for assuring that the appropriate procedures are followed.

11.1 Personal Injury

Emergency first aid shall be administered on-Site as deemed necessary and only by a trained individual, if available at the Site. If a trained individual is not available on-Site, decontaminate, if feasible, and transport individual to nearest medical facility (MidHudson Regional Hospital). The HSO will supply medical data sheets to appropriate medical personnel and be responsible for completing the incident report.

11.2 Personal Exposure

The recommended response to worker exposure from contaminants on-Site includes the following:

SKIN CONTACT: Use generous amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention, as necessary.

EYE CONTACT: Wash eyes thoroughly with potable water supply provided on Site. Eyes should be rinsed for at least 15 minutes subsequent to chemical contamination. Provide medical attention, as necessary.

INHALATION: Move worker to fresh air and outside of the work zone and/or, if necessary, decontaminate and transport to hospital (MidHudson Regional Hospital). If respirator use is implemented at the time of inhalation, worker must not remove respirator until completely away from the work zone.

INGESTION: Decontaminate, if feasible, and transport to hospital (MidHudson Regional Hospital).

PUNCTURE WOUND OR
LACERATION: Provide first aid at the Site and if wound needs medical attention, decontaminate, if feasible, and transport to hospital (MidHudson Regional Hospital).

If the affected worker is exposed to contaminants on-Site and the injury or accident prevents decontamination of the individual, the emergency responders must be notified of this condition, and the exposure must be kept to a minimum.

11.3 Potential or Actual Fire or Explosion

Immediately evacuate area in the event of potential or actual fire or explosion. Notify the local Fire and Police Departments, and other appropriate emergency response groups (i.e., airport security/police), as listed in Section 1.2. Perform off-Site decontamination and contain wastes for proper disposal. If a fire or explosion occurs, all on-Site personnel must meet in the designated area of the Site (established by the HSO or designee) for an accurate head count.

11.4 Equipment Failure

Should there be any equipment failure, breakdown, etc. the Project Manager and HSO shall be contacted immediately. The Project Manager or the HSO will make every effort to replace or repair the equipment in a timely manner.

11.5 Spill Response

The Site HSO or designee shall initiate a corrective action program with the subcontractors in the event of an accidental release of a hazardous material, suspected hazardous material or petroleum. The HSO or designee will act as the Emergency Coordinator with the subcontractors for the purposes of: spill prevention; identifying releases; implementing clean up measures; and notification of appropriate personnel.

The corrective action program will be implemented by the HSO and subcontractor to effectively control and minimize any impact accidental releases may have to the environment.

Effective control measures will include:

- Preliminary assessment of the release.
- Control of the release source.
- Containment of the released material.
- Effective clean-up of the released material.

Potential sources of accidental releases include: hydraulic oil spills or petroleum leaks from heavy equipment; cooling oils (potentially PCB containing) for electrical equipment handling and cleaning; and spills from drums, vats, vessels, and tanks. The HSO/Emergency Coordinator in conjunction with the subcontractor shall respond to an accidental release in the following manner:

- Identify the character, source, amount and area affected by the release.
- Have subcontractor take all reasonable steps to control the release.
- Notify facility personnel.
- Notify the NYSDEC Spill Hotline at 1-800-457-7362 if required.
- Contain the release with sorbent material which should include speedi-dry, spill socks and sorbent pads.
- Prevent the release from entering sensitive receptors (i.e., catch basins and surface water) using the specified sorbent material or sandbags.
- Coordinate cleanup of the released material.
- Oversee proper handling and storage of contaminated material for disposal.

At no time should personal health or safety be compromised or jeopardized in an attempt to control a release. All health and safety measures as outlined in this HASP should be adhered to.

12.0 ADDITIONAL WORK PRACTICES

Workers will be expected to adhere to the established safety practices. Work on the project will be conducted according to established protocol and guidelines for the safety and health of all involved. The following will be adhered to:

- Employ the buddy system when possible, and for those work tasks which require it. Establish and maintain communications.
- Minimize contact with potentially contaminated soil, sediment and water.
- Employ disposable items when possible to minimize risks during decontamination and possible cross-contamination during sample handling.
- Smoking, eating, or drinking after entering the work zone and before decontamination will not be allowed.
- Avoid heat and other work stress related to wearing personal protective equipment. Take breaks as necessary and drink plenty of fluids to prevent dehydration.
- Withdrawal from a suspected or actual hazardous situation to reassess procedures is the preferred course of action.
- The removal of facial hair (except mustaches) prior to working on-Site will be required to allow for a proper respiratory face piece fit.
- The Project Manager, the HSO, and sampling personnel shall maintain records recording daily activities, meetings, facts, incidents, data, etc. relating to the project. These records will remain at the project Site during the full duration of the project so that replacement personnel may add information while maintaining continuity. These daily records will become part of the permanent project file.

13.0 AUTHORIZATIONS

Personnel authorized to enter the exclusion zone at the Hudson Valley Regional Airport Site at 18 Griffith Way in the Town of Wappinger, Dutchess County, New York while operations are being conducted must be certified by the HSO. Authorization will involve completion of appropriate training courses and review and sign off of this HASP.

Personnel authorized to perform work on-Site are as follows:

1. Eric White C.T. Male Associates
2. Steven Gustems C.T. Male Associates
3. Mark Williams C.T. Male Associates
4. Jonathan Dippert C.T. Male Associates
5. Nancy Garry C.T. Male Associates
6. Dan Achtyl C.T. Male Associates
7. Mary Loughlin C.T. Male Associates
8. David Talbot C.T. Male Associates
9. Cliff Bondi C.T. Male Associates
10. Chris Ormsby C.T. Male Associates
11. Ryan Hubbard C.T. Male Associates
12. Lucas Hufnagel C.T. Male Associates
13. Kolby Mordecki C.T. Male Associates

14.0 FIELD TEAM REVIEW

Each field team member shall sign this section after Site specific training is completed and before being permitted to work on-Site.

I have read and understood this Site Specific Health and Safety Plan, and I will comply with the provisions contained therein.

PROJECT: Site Characterization Investigation
Hudson Valley Regional Airport Site
18 Griffith Way
Town of Wappinger
Dutchess County, New York

Name: Printed	Signature	Date

FIGURE 1

MAP SHOWING ROUTE TO MIDHUDSON REGIONAL HOSPITAL

APPENDIX C

Community Air Monitoring Plan

EXHIBITS

EXHIBIT 1

Design Development Drawings for the Aircraft and Automobile Charging Station Project by Apex Energy Tek, LLC.

PROJECT NAME & ADDRESS

BETA POUGHKEEPSIE - EV564
502 MARTIN RD, BIG MOOSE, NY 13331

APPLICABLE CODES

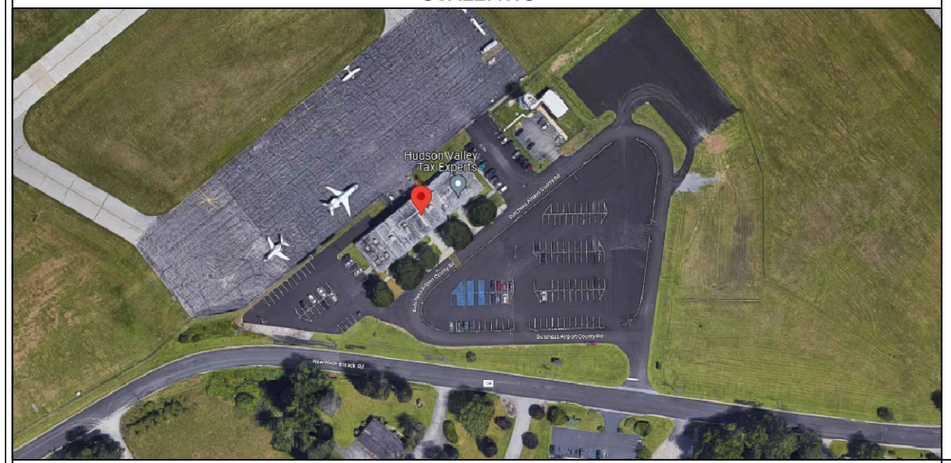
2020 IBC CODE
2020 IRC CODE
2017 NEC CODE

ELECTRICAL INFORMATION

NEW
1200A MAIN SWITCHBOARD (277/480V, 3PH, 4W)
REQUESTED EQUIPMENT:
1X DCFC DISPENSER 1 CAR CHARGER
(PAD MOUNTED)
1X DCFC DISPENSER 2 AIRCRAFT CHARGER
(PAD MOUNTED)

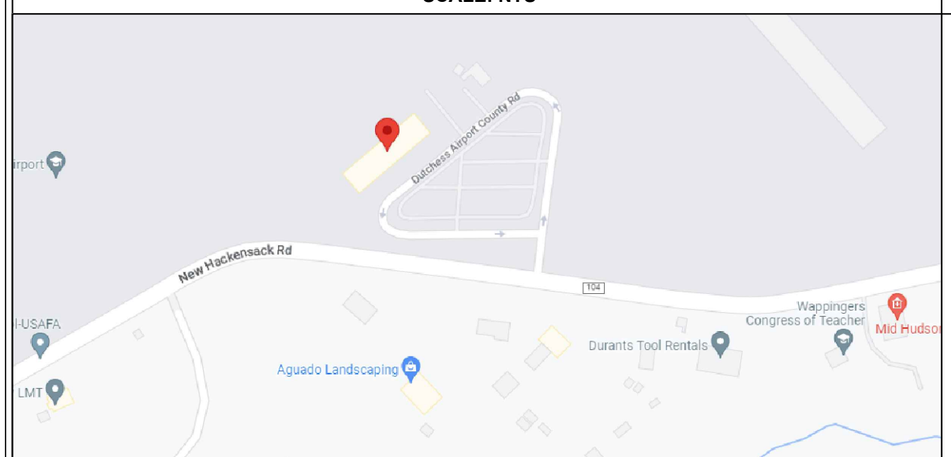
SATELLITE VIEW

SCALE: NTS



VICINITY MAP

SCALE: NTS



GENERAL NOTES

1. ALL ELECTRICAL MATERIALS SHALL BE NEW AND LISTED BY RECOGNIZED ELECTRICAL TESTING LABORATORY CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED BY THE MANUFACTURER ATTESTING TO ITS SAFETY.
3. ALL METALLIC EQUIPMENT SHALL BE GROUNDED.
4. ALL SPECIFIC WIRING IS BASED ON THE USE OF COPPER.
5. CONTRACTOR SHALL OBTAIN ELECTRICAL PERMITS PRIOR TO INSTALLATION AND SHALL COORDINATE ALL INSPECTIONS, TESTING COMMISSIONING AND ACCEPTANCE WITH THE CLIENT, UTILITY CO. AND CITY INSPECTORS AS NEEDED.
6. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF SERVICE POINTS AND SERVICE SIZES WITH THE SERVING UTILITY COMPANY AND COMPLY WITH ALL UTILITY COMPANIES REQUIREMENTS.
7. DRAWINGS ARE DIAGRAMMATIC ONLY, ROUTING OF RACEWAYS SHALL BE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER TRADES.
9. IF THE DISTANCES FOR CABLE RUNS ARE DIFFERENT THAN SHOWN, THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL ENGINEER TO VALIDATE THE WIRE SIZE. FINAL DRAWINGS WILL BE RED-LINED AND UPDATED AS APPROPRIATE.
10. WHENEVER A DISCREPANCY IN QUALITY OF EQUIPMENT ARISES ON THE DRAWING OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO ENSURE COMPLETE COMPLIANCE AND LONGEVITY OF THE OPERABLE SYSTEM REQUIRED BY THE ARCHITECT / ENGINEERS.
11. ALL BROCHURES, OPERATION MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE HANDED OVER TO OWNER`S REPRESENTATIVE AT THE COMPLETION OF WORK.

SHEET INDEX

1. **SCOPE OF WORK, GOVERNING CODES**
2. **SITE PLAN**
3. **THREE LINE DIAGRAM**

CONTRACTOR

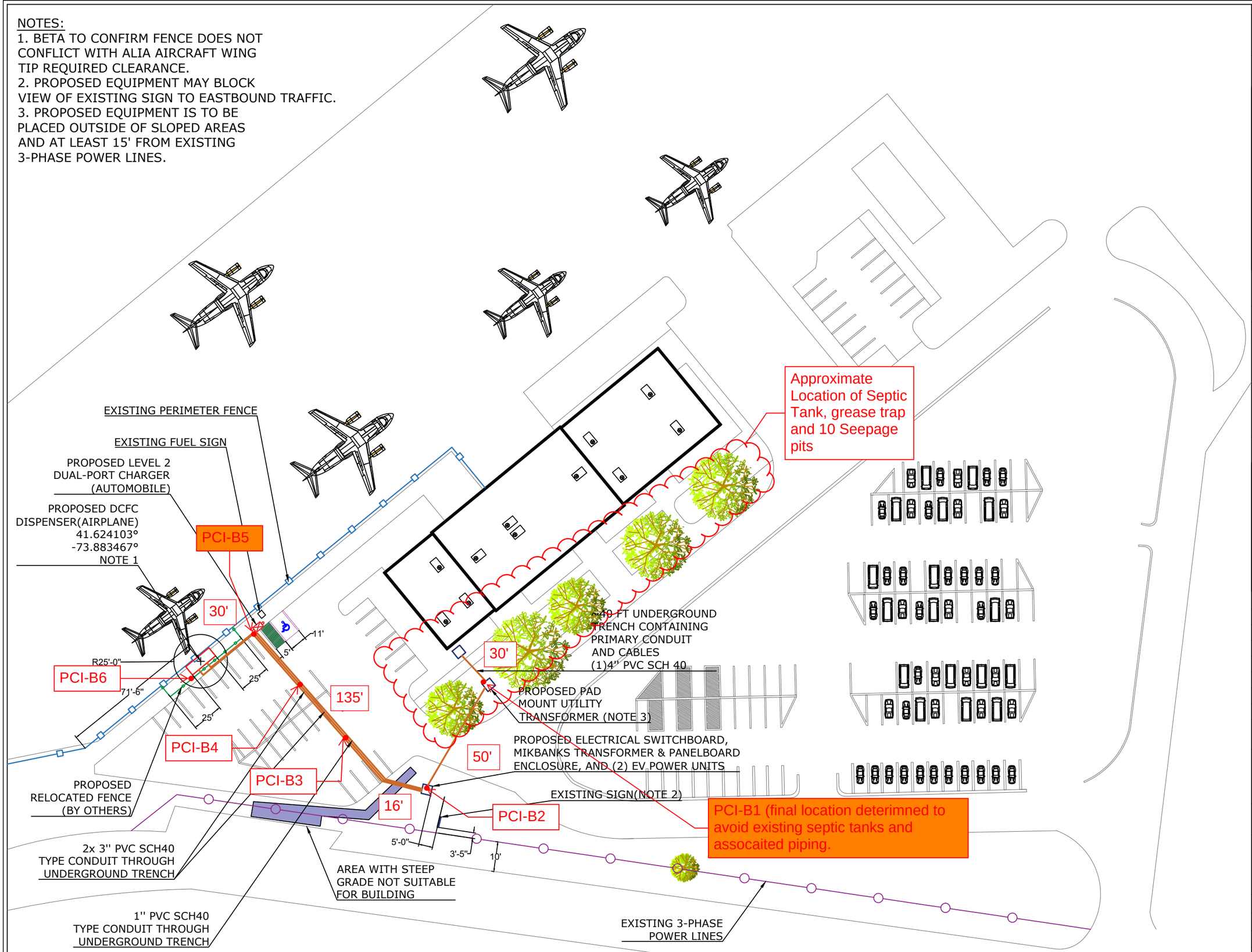
APEXENERGYTEK
64 MAIN STREET,
QUEENSBURY, NY 12804
(518)-309-2786
WWW.APEXSOLARPOWER.COM

apexenergytek

No.	Revision Notes	Date	Drawn by: Vahan M.
			Scale:As Indicated
			Project:PV System
			Date:03.08.23

Sheet Number
1

NOTES:
1. BETA TO CONFIRM FENCE DOES NOT CONFLICT WITH ALIA AIRCRAFT WING TIP REQUIRED CLEARANCE.
2. PROPOSED EQUIPMENT MAY BLOCK VIEW OF EXISTING SIGN TO EASTBOUND TRAFFIC.
3. PROPOSED EQUIPMENT IS TO BE PLACED OUTSIDE OF SLOPED AREAS AND AT LEAST 15' FROM EXISTING 3-PHASE POWER LINES.



CONTRACTOR

apexenergytek

CLIENT

Project name and address

BETA POUGHKEEPSIE
502 MARTIN RD,
BIG MOOSE, NY 13331

PROJECT #:EV564

No.	Revision Notes	Date

Description

DRAWING TITLE:

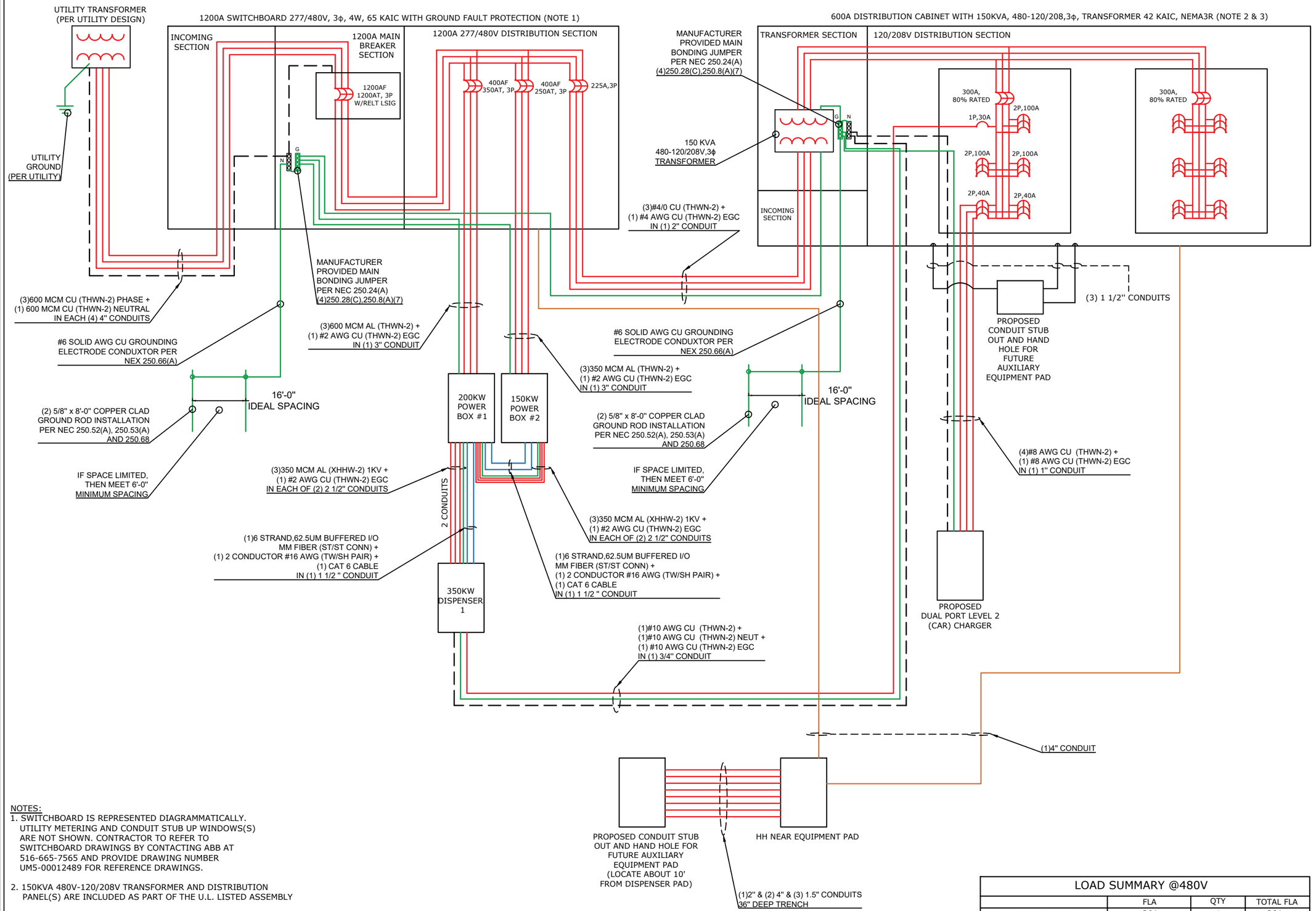
SITE PLAN

SCALE

0 20
10 40Ft

Date:03.08.23
Scale: As Indicated
Project: PV System
Drawn by: Vahan M.

Sheet Number
2



NOTES:
1. SWITCHBOARD IS REPRESENTED DIAGRAMMATICALLY. UTILITY METERING AND CONDUIT STUB UP WINDOWS(S) ARE NOT SHOWN. CONTRACTOR TO REFER TO SWITCHBOARD DRAWINGS BY CONTACTING ABB AT 516-665-7565 AND PROVIDE DRAWING NUMBER UM5-00012489 FOR REFERENCE DRAWINGS.

2. 150KVA 480V-120/208V TRANSFORMER AND DISTRIBUTION PANEL(S) ARE INCLUDED AS PART OF THE U.L. LISTED ASSEMBLY

3. CONTRACTOR TO REFER TO CABINET DRAWINGS BY CONTACTING MILBANK AT 414-374-6849 AND PROVIDE NUMBER: XXXXXXXXX FOR REFERENCE DRAWINGS

LOAD SUMMARY @480V			
	FLA	QTY	TOTAL FLA
200 KW POWER UNIT	264	1	264
150 KW POWER UNIT	198	1	198
150KVA TRANSFORMER	180	1	180

CONTRACTOR

apexenergytek

CLIENT

Project name and address

BETA POUGHKEEPSIE
502 MARTIN RD,
BIG MOOSE, NY 13331

PROJECT #:EV564

No.	Revision Notes	Date

Description

DRAWING TITLE:

THREE LINE DIAGRAM

SCALE

NTS

Date:03.08.23
Scale: As Indicated
Project: PV System
Drawn by: Vahan M.

Sheet Number
3