



121 West 27th Street, 702
 New York, NY 10001
 (646) 606-2332

February 23, 2023

New York State Department of Environmental Conservation
 Division of Environmental Remediation
 625 Broadway, 12th Floor
 Albany, NY 12233-7016

Attn: Mr. Michael McCabe, P.E., Project Manager/Senior Environmental Engineer

Re: Offsite Environmental Assessment
 36-08 Review Avenue, Long Island City, NY 11101
 BCP Site No. C241218

Dear Michael,

Tenen Environmental, LLC (Tenen) has prepared this offsite environmental assessment for the above-referenced Site. This letter is intended as a response to the comments provided by NYSDEC to Tenen in an email dated November 22, 2022 and during a phone call on December 20, 2022.

Offsite Groundwater

Collection of data downgradient of the Site along Railroad Avenue is limited due to access issues. Railroad Avenue is private property currently owned, in the area downgradient of the Site, by New York Paving Inc. (NY Paving). During the Remedial Investigation (RI), three attempts were made in June 2020 to access Railroad Avenue and access was either denied or no response was received during each attempt. On July 20, 2020, Tenen requested to NYSDEC that the Railroad Avenue locations be relocated to allow the RI to proceed. NYSDEC agreed to the new locations in an email dated August 11, 2020. A summary of all access attempts and correspondence with NYSDEC is included as Attachment 1.

Despite the inability to gain access to Railroad Avenue, it is Tenen’s opinion that the chlorinated VOC (cVOC) plume in shallow and deep groundwater has been horizontally delineated in the shallow and deep intervals and at concentrations that do not require remediation along Railroad Avenue other than as proposed in the draft Remedial Action Work Plan (RAWP).

As shown on Figure 10a included in the July 2021 Remedial Investigation Report (RIR) (and included in Attachment 2), within the cVOC source area in the northwestern portion of the Site, the highest concentrations of cVOCs were detected in monitoring well MW-1S (shallow well) and MW-1D (deep well). Two monitoring well clusters, MW-8S/D and MW-13S/D are located on-site and downgradient of MW-1S/D. One monitoring well cluster, MW-7S/D, is located downgradient of the Site, across Railroad Avenue in the sidewalk of the Greenpoint Avenue access road. The concentrations of all cVOCs detected above the Class GA Standards in these wells are presented below with exceedances highlighted in yellow.

Interval	Shallow				Deep			
	On-site			Off-site	On-site			Off-site
Location	MW-1S	MW-8S	MW-13S	MW-7S	MW-1D	MW-8D	MW-13D	MW-7D
Compound	MW-1S	MW-8S	MW-13S	MW-7S	MW-1D	MW-8D	MW-13D	MW-7D
Carbon tetrachloride	92,000	0.46 J	3	ND	140	ND	ND	ND
1,1,1-TCA	53,000	8.4	3.5	ND	63	8.4	2.3 J	ND
Trichloroethene	34,000	13	9.7	0.21	39	8.6	8.1	ND
Chloroform	20,000	7.6	5.8	ND	54	14	14	ND
1,1,-Dichloroethene	92	ND	ND	ND	0.4 J	32	ND	1.9 J

Concentrations are in micrograms per liter (ug/L). ND – not detected above the Method Detection Limit (MDL). J – detected at an estimated concentration. Highlighted concentrations exceed the Class GA Standards.

No cVOCs were detected above the Class GA Standards in the off-site wells. Carbon tetrachloride and 1,1-dichloroethene were not detected in exceedance of Class GA Standards in any offsite groundwater monitoring wells. The concentrations of 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE) and chloroform detected in the shallow downgradient monitoring wells are three to four orders of magnitude lower than in the cVOC hotspot (and generally one to two orders lower in the deep interval).

Based upon the concentrations of cVOCs detected in these three sets of cluster wells and the distance between these wells, it is unlikely that groundwater beneath Railroad Avenue or properties west of Railroad Avenue contains significant concentrations of cVOCs requiring remediation in addition to what is proposed in the draft RAWP.

Offsite Soil Vapor

During Tenen's 2020 RI, exterior soil vapor samples were collected to the north, south, west and east of the Site to assess the potential for contaminants detected in soil vapor onsite to migrate offsite. Sub-slab soil vapor samples were also collected beneath Site buildings. Figures depicting the concentrations of VOCs detected in sub-slab soil vapor and exterior soil vapor samples are included in Attachment 3.

The results of the exterior soil vapor sampling indicated concentrations of cVOCs are generally low and below mitigation thresholds to the north (SV-3 and SV-4) and south (SV-1). Tenen also notes that the southern adjoining property is in the BCP as Site No. C241089.

Higher concentrations of the cVOCs carbon tetrachloride, 1,1,1-TCA, tetrachloroethene (PCE) and TCE were detected in two offsite samples: SV-2, collected from the western perimeter of the Site, immediately downgradient of the cVOC hotspot in the northwestern portion of the Site, and SV-5, collected from the eastern sidewalk of Review Avenue, adjacent to a mixed-use commercial and residential building.

SV-2

To the west, in sample SV-2, carbon tetrachloride was detected at 14,800 micrograms per cubic meter (ug/m³), PCE was detected at a concentration of 29,200 ug/m³, TCE was detected at concentrations of 3,500 ug/m³ and 1,1,1-trichloroethane was detected at 5,950 ug/m³. As noted above in the groundwater section, Tenen has not been able to access Railroad Avenue for additional sampling. However, all VOCs were non-detect in a soil sample collected next to the New York Paving facility [SB-32 (6-8)] and, also noted above, all groundwater concentrations are below the Class GA Standards in this area. Given the low concentrations of VOCs in soil and groundwater in the sidewalk adjoining the downgradient property, it is Tenen's opinion that the concentrations in soil vapor are also low.

SV-5

To the east, in sample SV-5, the detected concentrations in soil vapor are one to three orders of magnitude lower than in SV-2 (near the source area). Carbon tetrachloride was detected at 48.9 ug/m³, PCE was detected at 130 ug/m³, TCE was detected at 239 ug/m³ and 1,1,1-trichloroethane was detected at 68.2 ug/m³. However, the on-site sub-slab soil vapor concentrations in sample SS-6, which is the nearest on-site vapor sample to SV-5, only contained one of these compounds, 1,1,1-trichloroethane at only 3.52 ug/m³.

The hydrology of the Site, and therefore the fate and transport analysis, is complicated by the presence of clay mounding at the groundwater interface, in particular at the location of the cVOC source area. Regionally, SV-5 would be upgradient of the Site; however, there is a northern component to flow around the source area. Tenen

notes that PCE was not detected in on-site sub-slab soil vapor concentrations between the source area and SV-5 indicating the on-site distribution of cVOCs is not similar to those found in off-site sample SV-5.

A review of historic Sanborn fire insurance maps and tax photographs shows the following non-residential uses on the same block as, and regionally upgradient to, SV-5: machine shop, auto repair (including fender/body repair), lumber yard, warehousing, storage, commercial parking, blacksmith, unspecified commercial and offices.

Given the hydrogeology of the area, other potential sources upgradient of SV-5 and the inconsistent chemical signature, it is Tenen's opinion that the Site is not the main source of VOCs detected in SV-5.

Soil Vapor Extraction System/Air Sparging System

In NYSDEC's email dated November 22, 2022, the following comment was provided: "Regarding the carbon tetrachloride; the data indicate off site migration via groundwater and probably soil vapor. Excavation and chemox may not be sufficient to prevent off-site migration and a perimeter [soil vapor extraction system] (SVE), maybe [air sparging] (AS)/SVE, is recommended."

After careful review of all data collected as part of the RI, as detailed above, it is Tenen's opinion that a SVE system would not significantly improve the carbon tetrachloride source area cleanup at the Site compared to the remedy that was proposed in the draft RAWP. The chosen remedy proposed in the draft RAWP includes excavation and offsite disposal of the carbon tetrachloride source soil to approximately 20 feet below grade (ft-bg) and all residual cVOCs will be below the Protection of Groundwater soil cleanup objectives (SCOs) within the building extents (consistent with the highest detected concentrations). This excavation would extend approximately ten feet below the water table (encountered at approximately 10 ft-bg in this portion of the Site). Following excavation, the hotspot would be backfilled with clean fill material meeting the lesser of the Protection of Groundwater SCOs and Restricted Commercial Use SCOs. Based on the RI findings, the highest concentrations of cVOCs were detected below the groundwater interface. As detailed in the preceding sections and the RIR, residual concentrations of cVOCs in soil are not meaningfully impacting off-site soil vapor or groundwater and, therefore, a perimeter SVE system to address off-site impacts would only treat low concentrations of residual impacts and, given the area of the hot spot, only below a railroad or roadways (Greenpoint Avenue extension) in a heavily industrialized area.

Regarding the AS recommendation, it is Tenen's opinion that an AS system is not a feasible remedial technology for the carbon tetrachloride source area below the groundwater table. As discussed above, the remedy chosen in the draft RAWP will result in the excavation and offsite disposal of all soil/fill to approximately 20 ft-bg in the carbon tetrachloride source area in the northwestern portion of the Site. Below 15 ft-bg in the northwestern portion of the Site, numerous dense clay layers begin to appear between the sand layers in the subsurface at thicknesses ranging from three to eleven feet. Air sparging works best with sandy soils and a homogenous subsurface. Due to the presence of these clay layers and the varied stratification of the subsurface, it is Tenen's opinion that an AS system would not be well suited as a remedial technology to address the carbon tetrachloride impacts below the groundwater table. As discussed in the SVE response section, any off-site remedy in these areas would have limited benefit given the locations of the railroad and roadways.

In the SB-33/MW-8 and SB-40/MW-13 clusters, Tenen notes that while some cVOCs are present above the Protection of Groundwater SCOs, the groundwater concentrations are generally low and unlikely to require active remediation.

In addition to excavation and offsite disposal of the upper 20 feet in the northwestern source area, the preferred remedy proposed in the draft RAWP also includes the remediation of groundwater by in-situ chemical oxidation (ISCO) treatment via open excavation casting and mixing. The oxidant chosen for the ISCO remedy would be mixed within and at the terminus of the carbon tetrachloride source area excavation in order to break down cVOC

contaminants in groundwater into less toxic compounds. Based on data collected as part of the RI, it is Tenen's opinion that the ISCO application will be sufficient to address residual contaminated groundwater on-site.

The carbon tetrachloride source area excavation will remove the bulk of contaminants in soil that are contributing to the groundwater contamination, which will contribute to improved groundwater quality over time and mitigate the potential for recontamination. The ISCO application will speed up the cVOC biodegradation process in groundwater on- and offsite, addressing the limited residual groundwater contamination. CVOC concentrations in shallow, intermediate, and deep groundwater monitoring wells (MW-1S/I/D) within the carbon tetrachloride source area in the northwestern portion of the Site are three to four orders of magnitude greater than the cVOC concentrations detected in downgradient shallow and deep monitoring wells located at the western perimeter of the Site (MW-8S/D and MW-13S/D) less than 50 feet from the source area, indicating that although the cVOC contamination has spread downgradient of the source area, it is spreading at a very slow rate, consistent with the presence of clay in the subsurface in this portion of the Site.

Based on the above analysis, it is Tenen's opinion that the remedy currently proposed in the draft RAWP (excavation of the carbon tetrachloride source area to 20 ft-bg and ISCO application in the source area) will appropriately address residual cVOC contamination in groundwater and soil vapor on- and offsite.

Let me know if you need any additional information.

Sincerely,

Tenen Environmental, LLC



Matthew Carroll, P.E.

Principal / Environmental Engineer

Attachment 1 – Neighboring Property Access Attempts and Correspondence with NYSDEC

Attachment 2 – Groundwater Analytical Results – Chlorinated Volatile Organic Compounds

Attachment 3 – Exterior Soil Vapor and Sub-Slab Soil Vapor Analytical Results

Attachment 4 – Hydrogeologic Cross-Section

Attachment 1 Neighboring Property Access Attempts and Correspondence with NYSDEC

Appendix G. Access Requests to Neighboring Property
 Remedial Investigation Report
 36-08 Review Avenue
 Long Island City, NY

Block: 312

Lot	Adjoining Property Address	Operator's Name and Mailing Address	Owner's Name and Mailing Address	Dates of Attempts to Gain Access Consent	Communication Mechanism	Response (Yes/No)
2	37-18 Railroad Avenue, Long Island City, NY 11101 Industrial and Manufacturing	New York Paving Inc. 37-18 Railroad Avenue, Long Island City, NY 11101	New York Paving Inc. 37-18 Railroad Avenue, Long Island City, NY 11101	Tenen Visited the Property 6/10/2020	Tenen representative spoke in person to a representative of New York Paving	New York Paving indicated that Tenen could not drill on west side of Railroad Avenue, which is part of New York Paving's property, without coordinating with New York Paving's attorney.
				Periconi, LLC calls New York Paving 6/25/2020	The Participant's counsel, Periconi, LLC, called two phone numbers associated with New York Paving with no response. Voicemail boxes were not set up on either line to leave a message	No Response
				Access Request Delivered 6/26/2020	Federal Express Signature Required	No Response

Re: C241218, 36-08 Review Avenue: off-site access update

Alana Carroll <acarroll@tenen-env.com>

Wed, Aug 12, 2020 at 10:13 AM

To: Matthew Carroll <mcarroll@tenen-env.com>, "aplatt@tenen-env.com" <aplatt@tenen-env.com>, "O'Connell, Jane H (DEC)" <jane.oconnell@dec.ny.gov>, "Quandt, Sarah M (DEC)" <Sarah.Quandt@dec.ny.gov>

All,

I spoke to Mike Maccabe yesterday (who informed me that he is now the DEC PM for this project, replacing Charlie) regarding our request to relocate some of the RI locations due to access issues. His response below indicates that the proposed locations are acceptable, therefore we will begin preparations to remobilize and complete the RI.

Regarding Charlie's question of data. We have soil data, however we have not collected groundwater or soil vapor data yet, both of which will inform any additional offsite work that may need to be completed.

As always, feel free to contact me with any questions.

Sincerely,

Alana

Alana Carroll, PG

Tenen Environmental LLC

121 West 27th Street, Suite 702

New York, NY 10001

646.248.6795 Direct

917.428.2094 Cell

acarroll@tenen-env.com

From: "MacCabe, Michael (DEC)" <michael.maccabe@dec.ny.gov>
Date: Tuesday, August 11, 2020 at 4:26 PM
To: Alana Carroll <acarroll@tenen-env.com>
Subject: FW: C241218, 36-08 Review Avenue: off-site access update

Alana,

Based on the access issues presented in your email and discussed in our phone call, the alternate locations for monitoring wells MW-11, MW-12 and MW-13 are acceptable.

Thanks,

Michael D. MacCabe, P.E.

Senior Environmental Engineer

 **Division of Environmental Remediation**

New York State Department of Environmental Conservation

625 Broadway, Albany, NY 12233-7016

518-402-9687 | michael.maccabe@dec.ny.gov

www.dec.ny.gov



From: Alana Carroll <acarroll@tenen-env.com>

Date: Tuesday, August 11, 2020 at 2:48 PM

To: "Post, Charles H (DEC)" <charles.post@dec.ny.gov>

Cc: "aplatt@tenen-env.com" <aplatt@tenen-env.com>, "O'Connell, Jane H (DEC)" <jane.oconnell@dec.ny.gov>, "Quandt, Sarah M (DEC)" <Sarah.Quandt@dec.ny.gov>, "mcarroll@tenen-env.com" <mcarroll@tenen-env.com>

Subject: Re: C241218, 36-08 Review Avenue: off-site access update

Charlie,

I am following up on the below update and request. Since the date of this email, we have not made any headway gaining access to Railroad Ave or getting Prince Metals to move their equipment. Please advise, we would like to finish this RI before the end of the month.

Thank you,

Alana

Alana Carroll, PG

Tenen Environmental LLC

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New York, NY 10001

646.248.6795 Direct

917.428.2094 Cell

acarroll@tenen-env.com

From: Alana Carroll <acarroll@tenen-env.com>
Date: Monday, July 20, 2020 at 11:44 AM
To: Matthew Carroll <mc Carroll@tenen-env.com>, "Post, Charles H (DEC)" <charles.post@dec.ny.gov>
Cc: Ashley Platt <aplatt@tenen-env.com>
Subject: Re: C241218, [36-08 Review Avenue](#): off-site access update

Good Afternoon Charlie,

We wanted to give you an update on access for the remaining well locations: To date we have interfaced with Prince Metals twice with no outcome on them agreeing to move their materials so that we can shut down Greenpoint Ave Outer Roadway. We have sent access request letters (for Railroad Ave) to both the general council and the owner of NY Paving without any response. We are going to send another round of letters this week and also reach out to Prince Metals again. That being said, realistically, we do not believe that NY Paving is going to allow us access and Prince Metals seem to have no desire to work with us on getting the road closure. In an effort to move the RI along we are proposing the following adjustments to the locations of the remaining well locations that require access from others (see attached map with arrows indicating adjustments):

- MW-12: the area beneath the bridge is owned by NYCDOT, we are requesting access to place this well in the parking area beneath the bridge
- MW-13: Place along the building as DEC had requested, have confirmed that railroad access is not necessary and that we should be able to advance both wells in this location
- SV-2: Move across the tracks to our property
- MW-11: Move across the tracks to our property in the vicinity of SC-7

Please advise if these modifications are acceptable. As always, feel free to contact me with any questions/comments.

Sincerely,

Alana

Alana Carroll, PG

Tenen Environmental LLC

[121 West 27th Street, Suite 702](#)

New York, NY 10001

646.248.6795 Direct

917.428.2094 Cell

acarroll@tenen-env.com

From: Matthew Carroll <mcarrroll@tenen-env.com>
Date: Wednesday, July 1, 2020 at 8:46 AM
To: "Post, Charles H (DEC)" <charles.post@dec.ny.gov>
Cc: Alana Carroll <acarroll@tenen-env.com>, Ashley Platt <aplatt@tenen-env.com>
Subject: C241218, [36-08 Review Avenue](#): off-site access

Hi Charlie, we hope you are doing well and wanted to give you an update on access for the few remaining off-site locations.

After discussing with the drillers, we will need to close the road to install SB-37/MW-12. NYC Department of Transportation (NYCDOT) has agreed to this full roadway closure but we do need to notify interested parties (facilities affected, EMS, etc.). As further discussed below, a portion of Railroad Avenue is on private property so we are also coordinating with a facility to move equipment that is stored in the roadway so that traffic can be rerouted. Attached is our proposed letter which we are sending to you as it references the BCP and includes your contact information.

Three other locations, SB-32/MW-7, SB-36/MW-11 and contingent location SB-38B/MW-13, are located on private property. While NYCDOT issued a sidewalk/road opening permit for those borings, it has come to our attention that the private tax lot extends over the majority of Railroad Avenue at this location. We are coordinating for site access through counsel.

We will keep you updated on our progress. Please let us know if you have any comments on the attached letter.

Sincerely,

Matthew Carroll, PE

Tenen Environmental

Main: 646.606.2332 x103

Direct: 347.391.2585

Attachment 2

Groundwater Analytical Results – Chlorinated Volatile Organic Compounds

Remedial Investigation Report
36-08 Review Avenue
Queens, New York
Block 312, Lots 19, 34 & 39

TENEN ENVIRONMENTAL
 Tenen Environmental, LLC
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Groundwater Analytical Results
Chlorinated VOCs

Figure 10a

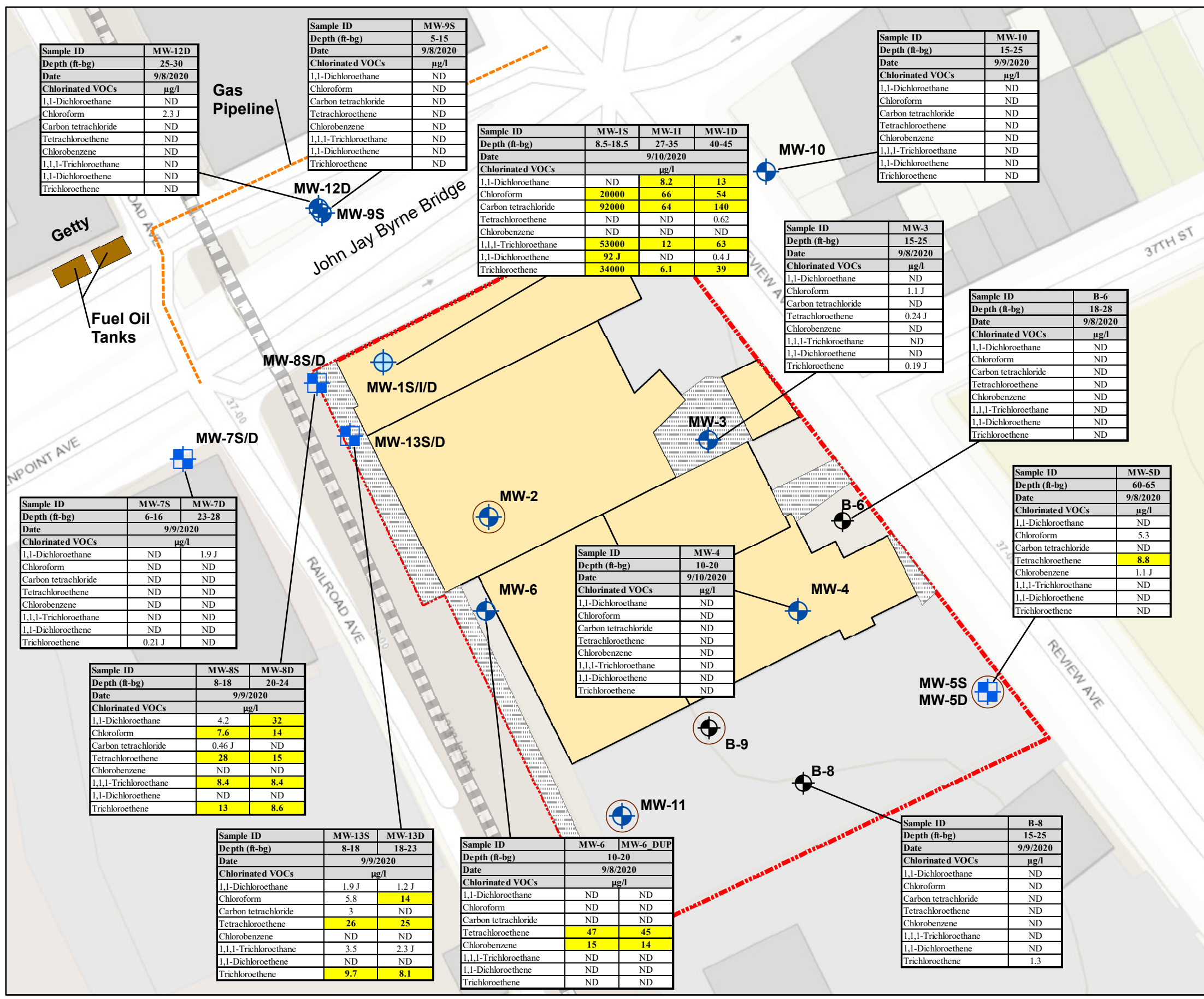
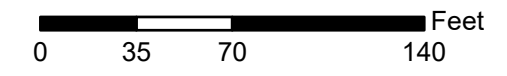
Analyte	NY-AWQS
Chlorinated VOCs	µg/l
1,1-Dichloroethane	5
Chloroform	7
Carbon tetrachloride	5
Tetrachloroethene	5
Chlorobenzene	5
1,1,1-Trichloroethane	5
1,1-Dichloroethene	5
Trichloroethene	5



Notes:
 1. Bold and shaded yellow value indicates concentration exceeds NY-AWQS
 2. NY-AWQS = NYSDEC Division of Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS)
 3. J = Estimated value
 4. ND = Not detected
 5. µg/l = micrograms per liter

Legend

- Soil Boring/ Monitoring Well Location
- Soil Boring/Deep and Shallow Monitoring Well Location
- Soil Boring/Deep, Intermediate, and Shallow Monitoring Well Location
- Groundwater Sampling Location at Existing Monitoring Well
- Monitoring Wells Not Sampled Due to the Presence of LNAPL
- Gas Pipeline
- Railroad
- Fuel Oil Tanks
- Uncapped/Grassed Areas
- Site Boundary
- On-site Buildings



Sample ID	MW-7S	MW-7D
Depth (ft-bg)	6-16	23-28
Date	9/9/2020	
Chlorinated VOCs	µg/l	
1,1-Dichloroethane	ND	1.9 J
Chloroform	ND	ND
Carbon tetrachloride	ND	ND
Tetrachloroethene	ND	ND
Chlorobenzene	ND	ND
1,1,1-Trichloroethane	ND	ND
1,1-Dichloroethene	ND	ND
Trichloroethene	0.21 J	ND

Sample ID	MW-8S	MW-8D
Depth (ft-bg)	8-18	20-24
Date	9/9/2020	
Chlorinated VOCs	µg/l	
1,1-Dichloroethane	4.2	32
Chloroform	7.6	14
Carbon tetrachloride	0.46 J	ND
Tetrachloroethene	28	15
Chlorobenzene	ND	ND
1,1,1-Trichloroethane	8.4	8.4
1,1-Dichloroethene	ND	ND
Trichloroethene	13	8.6

Sample ID	MW-13S	MW-13D
Depth (ft-bg)	8-18	18-23
Date	9/9/2020	
Chlorinated VOCs	µg/l	
1,1-Dichloroethane	1.9 J	1.2 J
Chloroform	5.8	14
Carbon tetrachloride	3	ND
Tetrachloroethene	26	25
Chlorobenzene	ND	ND
1,1,1-Trichloroethane	3.5	2.3 J
1,1-Dichloroethene	ND	ND
Trichloroethene	9.7	8.1

Sample ID	MW-6	MW-6 DUP
Depth (ft-bg)	10-20	
Date	9/8/2020	
Chlorinated VOCs	µg/l	
1,1-Dichloroethane	ND	ND
Chloroform	ND	ND
Carbon tetrachloride	ND	ND
Tetrachloroethene	47	45
Chlorobenzene	15	14
1,1,1-Trichloroethane	ND	ND
1,1-Dichloroethene	ND	ND
Trichloroethene	ND	ND

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
 NYC Department of City Planning, Information Technology Division MapPLUTO 2018 v1.
 Sample Locations from J.R.Holzmaier P.E., LLC. Boring Location Map, 36-04, 36-08 and 37-10 Review Ave. Long Island City, NY, 2/1/17.

Drawing Title

Drawing No

Drawn By LM

Checked By AP

Date December 2020

Scale As Noted

Attachment 3

Exterior Soil Vapor and Sub-Slab Soil Vapor Analytical Reports

Remedial Investigation Report
36-08 Review Avenue
Queens, New York
Block 312, Lots 19, 34 & 39









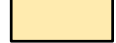
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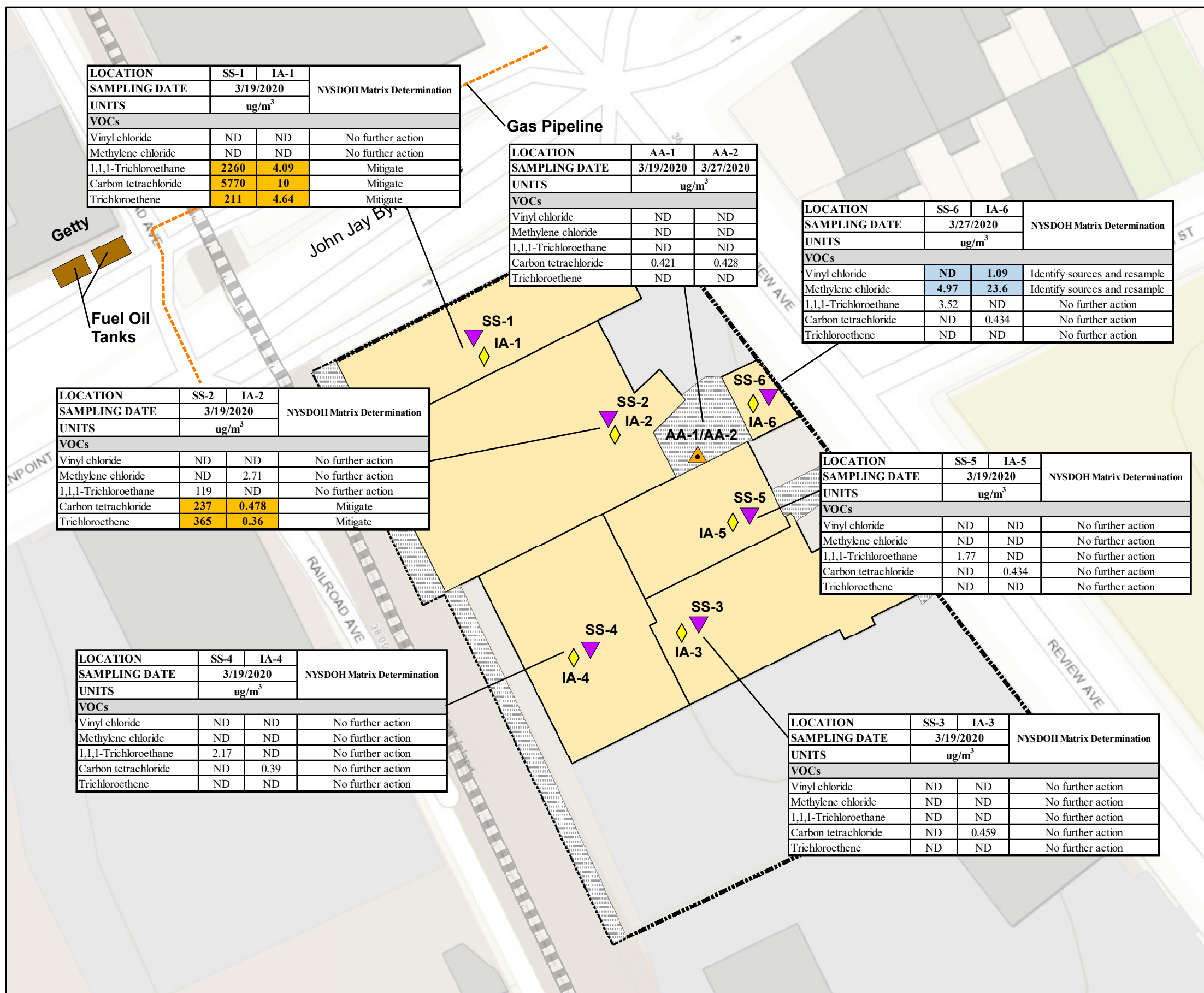
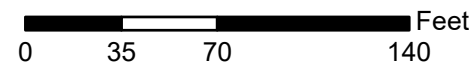
TENEN ENVIRONMENTAL

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Notes:
 1. Bold and shaded blue value indicates "Identify sources and resample or mitigate" matrix decision
 2. Bold and shaded orange value indicates "Mitigate" matrix decision
 3. NYSDOH matrix determinations are described in the report narrative and the NYSDOH Soil Vapor Guidance, with May 2017 updates
 4. ND = Not detected

Legend

-  Sub-Slab Soil Vapor Sample Location
-  Indoor Air Sample Location
-  Ambient Air Sample Location
-  Gas Pipeline
-  Railroad
-  Fuel Oil Tanks
-  Uncapped/Grassed Areas
-  Site Boundary
-  On-site Buildings



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
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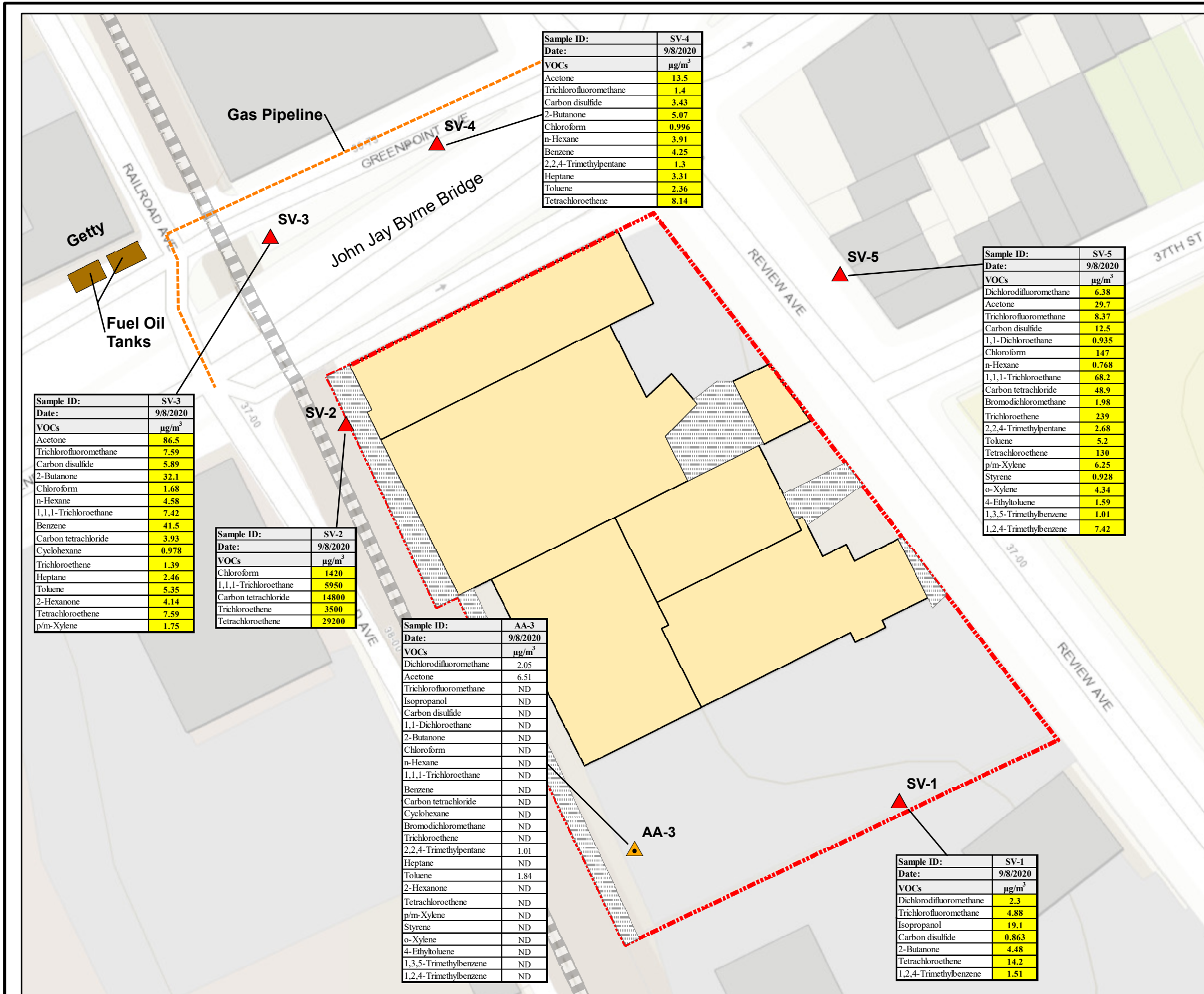
Sub-Slab Soil Vapor and Indoor Air Analytical Results

Figure 12

Drawn By LM
 Checked By AP
 Date June 2020
 Scale As Noted

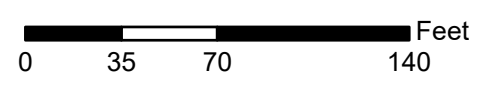
Drawing Title

Drawing No



Notes:
 1. Exterior soil vapor concentrations are compared to ambient air (AA-3) concentrations.
 2. **Bold and shaded yellow value indicates concentration exceeds ambient air concentration.**
 3. ND = Not Detected
 4. µg/m³ = micrograms per cubic meter

- Legend**
- ▲ Soil Vapor Sample Location
 - ▲ Ambient Air Sample Location
 - Gas Pipeline
 - ▬ Railroad
 - Fuel Oil Tanks
 - ░ Uncapped/Grassed Areas
 - ▭ Site Boundary
 - On-site Buildings



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
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Remedial Investigation Report
36-08 Review Avenue
Queens, New York
Block 312, Lots 19, 34 & 39

TENEN ENVIRONMENTAL

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 F: (646) 606-2379

Site

Drawn By: LM
 Checked By: AP
 Date: September 2020
 Scale: As Noted

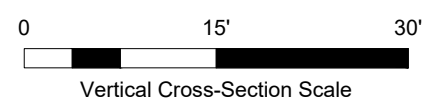
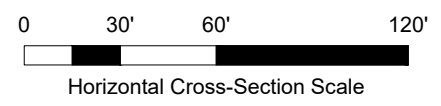
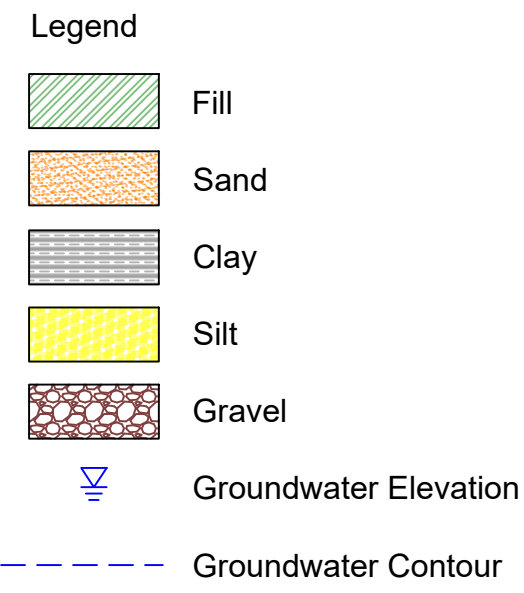
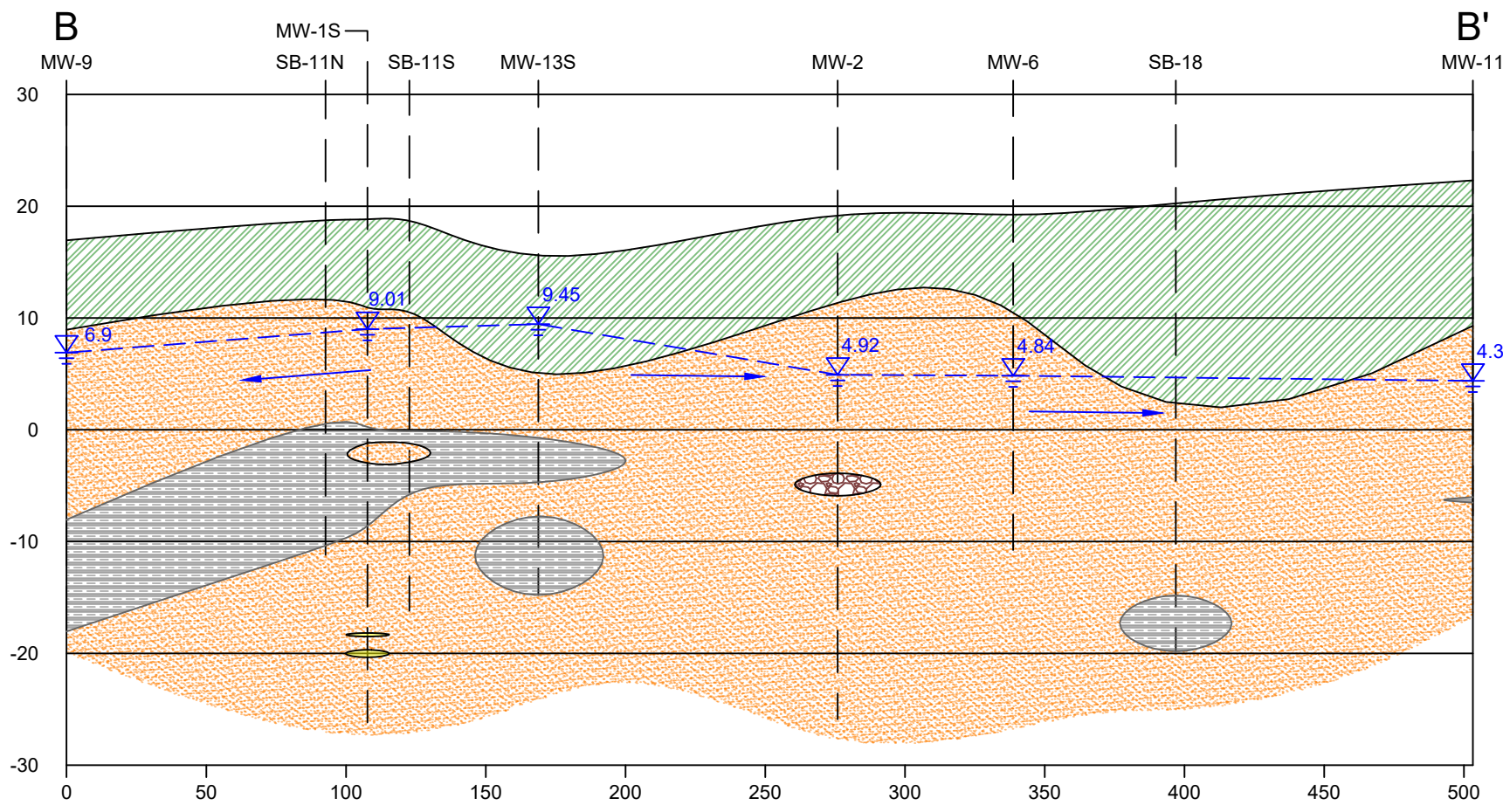
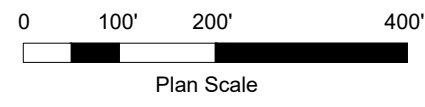
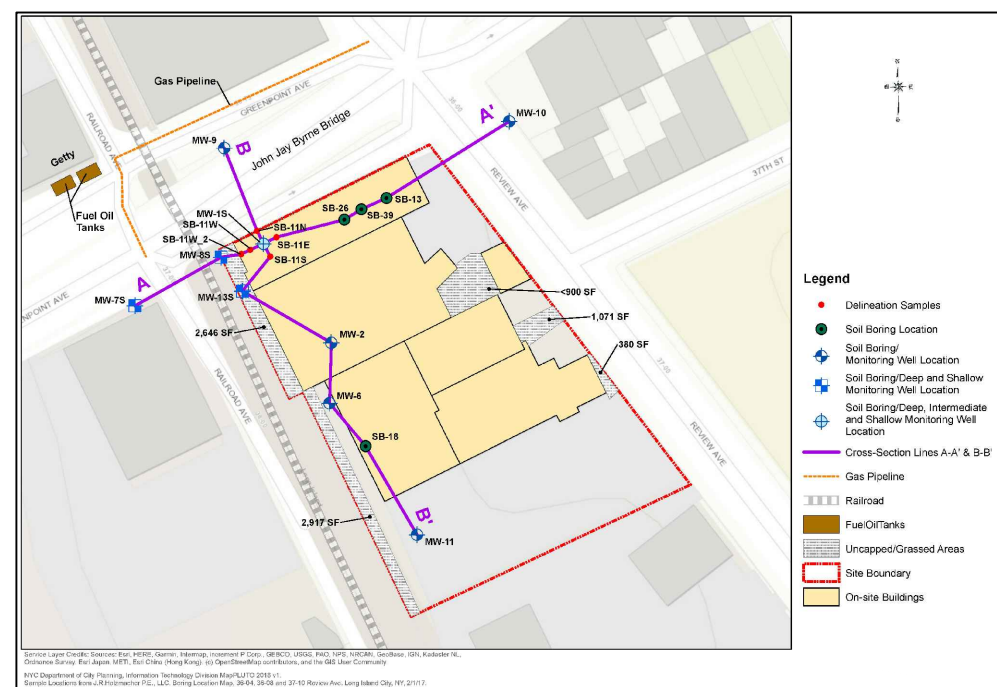
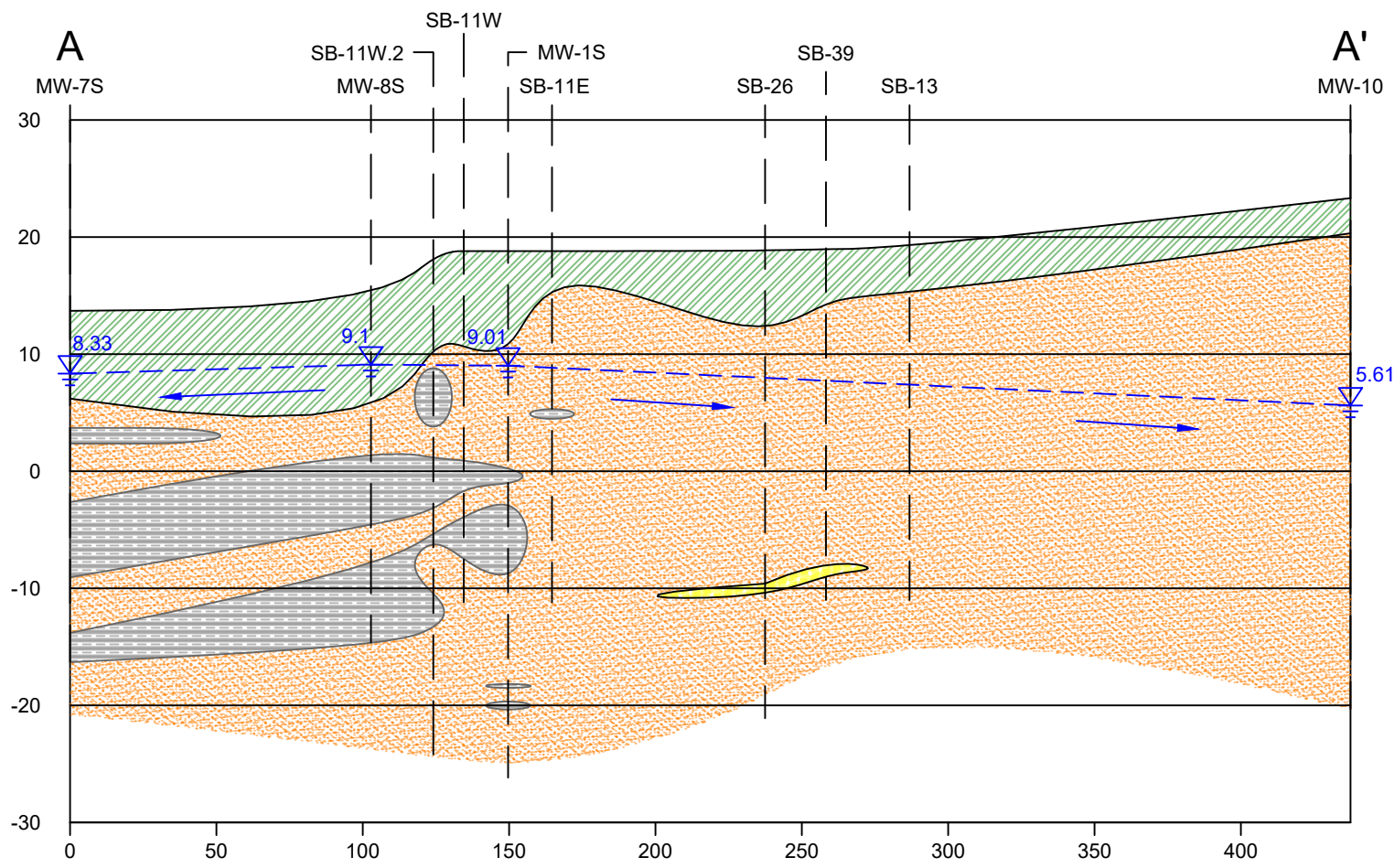
Exterior Soil Vapor Analytical Results

Figure 13

Drawing Title
 Drawing No

Attachment 4

Hydrogeologic Cross-Section



SITE
Remedial Investigation Report
 36-08 Review Avenue
 Queens, New York
 Block 312, Lots 19, 34 & 39

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DRAWN BY	LM
CHECKED BY	AP
DATE	10/5/2020
SCALE	As Noted

DRAWING TITLE:
Hydrogeologic Cross-Sections

DRAWING NO.:
Figure 3