INTERIM SITE MANAGEMENT PLAN

FOR

FORMER ANSCO CAMERA FACTORY
9 AND 16 EMMA STREET
CITY OF BINGHAMTON, BROOME COUNTY, NEW YORK
SITE NO. C704059

Prepared by:

C&S ENGINEERS, INC.
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Prepared on Behalf of:

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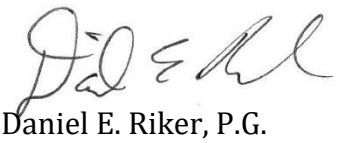
OCTOBER 29, 2018

Revisions to Final Approved Interim Site management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

CERTIFICATION

I, Daniel E. Riker, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Interim Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



Daniel E. Riker, P.G.
Commonwealth of Pennsylvania Professional Geologist No. PG003806E
State of New York Professional Geologist No. – Pending –

October 29, 2018

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1 INTRODUCTION

1.1 General

This Interim Site Management Plan (ISMP) is a required element of the remedial program for the Former ANSCO Camera Factory Site located at 9 & 16 Emma Street in Binghamton, New York (hereinafter referred to as the "Site"). See **Figures 1 and 2**. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) Site No. C704059 which is administered by New York State Department of Environmental Conservation (NYSDEC).

This ISMP was developed prior to the completion of the Remedial Investigation (RI) to manage contamination at the Site during redevelopment activities until a site wide remedy decision and final SMP is developed, approved, and implemented.

Freewheelin ANSCO, LLC entered into a Brownfield Cleanup Agreement (BCA) on April 30, 2018 with the NYSDEC to remediate the Site. The Site location and boundaries are shown in **Figure 2**. The boundaries of the Site are more fully described in the metes and bounds site description provided in **Appendix E**.

It is important to note that:

- Failure to comply with this ISMP is a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA Site #C704059 for the Site, and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in **Appendix A** of this ISMP.

This ISMP was prepared by C&S Engineers (C&S) on behalf of Freewheelin ANSCO, LLC, consistent with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This ISMP addresses management of contamination at the Site during redevelopment activities until a site wide remedy decision and final SMP are developed, approved, and implemented.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. The NYSDEC will provide a notice of any approved changes to the ISMP, and append these notices to the ISMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.

- 7-day advance notice of any field activity associated with the remedial program.

- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (**Appendix B**).

Any change in the ownership of the site or the responsibility for implementing this ISMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the BCA, and all approved work plans and reports, including this SMP.

- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1.3 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Appendix A**.

Table 1.3: Notifications*

Name	Contact Information
NYSDEC Project Manager Gary Priscott	(607) 775-2545 Gary.priscott@dec.ny.gov
NYSDEC Regional HW Engineer Harry Warner	(315) 426-7551 Harry.warner@dec.ny.gov
NYSDEC Site Control Kelly Lewandowski	(518) 402-9547 Kelly.lewandowski@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

2 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in the City of Binghamton on Emma Street, just north of Main Street. An active railroad adjoins the Site to the north. The Site consists of two parcels, one on the west side of Emma Street (9 Emma Street) and one on the east side of Emma Street (16 Emma Street). The Property includes tax parcels 143.75-1-5 and 143.75-1-16 and is approximately 4.2 acres in size (**see Figures 1 and 2**). The current owner is Freewheelin ANSCO, LLC.

2.2 Physical Setting

2.2.1 Land Use

The 9 Emma Street parcel is vacant and consists mainly of a dilapidated asphalt parking lot.

One large structure and the foundations of other former buildings are located on the 16 Emma Street parcel. The "main structure" is an active four-story commercial / industrial building that is approximately 145,000 square feet in size. The building was constructed in 1927-28, with an addition in 1950. The building is largely vacant with approximately 20,000 square feet being occupied by four commercial tenants. Also present on the Site is an "old" boiler house, which is out-of-service, and the concrete pads associated with the recently demolished "new" active boiler house and detached wood-framed garage.

The properties adjoining the Site are generally commercial in nature. A residential neighborhood is located beyond commercial properties to the north.

2.2.2 Geology

The Site is generally flat, although certain minor variations in elevation are present. The site lies at approximately 865 feet above mean sea level (msl). The Site contains a mix of buildings, asphalt parking / driveway areas and landscaped areas.

Based on the Remedial Investigation (RI) activities taken place to date, historic fill is located from the surface to approximately four to five feet below grade under portions of the Site. Per 6 NYCRR Part 375, historic fill is defined as: *non-indigenous or non-native material, historically deposited or disposed in the general area of, or on, a site to create useable land by filling water bodies, wetlands or topographic depressions, which is in no way connected with the subsequent operations at the location of the emplacement, and which was contaminated prior to emplacement*.

The historic fill at the Site contains:

- Rock
- Sand
- Silt
- Clay
- Ash
- Coal
- Brick

Native soil is located below the fill and consists of brown sand, silt, and clay with abundant fine to coarse gravel with some small cobble.

2.2.3 Hydrogeology

Groundwater in the monitoring wells installed during the RI is located at approximately 23 to 25 feet below ground surface (bgs). Groundwater flow is to the south, which is consistent with local topography and the locations and flow of local rivers (Susquehanna and Chenango). The locations of the wells and anticipated groundwater flow contours are shown in **Figure 6**. Based on a review of United States Geologic Service (USGS) and NYSDEC data, the local Chenango and Susquehanna River valleys are located in the Valley-Fill Aquifer in the Endicott-Johnson City Area, which is a primary aquifer. The Site is specifically located within the Clinton Street-Ballpark Aquifer. USGS mapping indicates that the expected depth of the aquifer in the vicinity of the Site is approximately 30 feet bgs, with an approximate thickness of 60 feet.

The primary drinking water source for the City of Binghamton is the Susquehanna River. Water processed in City of Binghamton potable water plants undergo varying levels of treatment to ensure that drinking water meets NYSDEC and United States Environmental Protection Agency (USEPA) standards. Groundwater at and in the vicinity of the Site is not known to be used for public drinking water supply. However, the City of Binghamton does not have a prohibition on utilizing groundwater for drinking water.

2.3 Investigation and Remedial History

2.3.1 Site History

The Site was originally developed in 1927/28. Since that time, the Property has been utilized by the following significant occupants:

<u>9 Emma Street</u>

In 1918, Achilles Rubber & Tire Company occupied a building along the western boundary of the parcel. The building was later occupied by AFGA-ANSCO.

Between 1940 and 1970 AFGA-ANSCO, Division of General Analine and Film Corporation occupied buildings along the western boundary of 9 Emma Street and

on 16 Emma Street. The Achilles and ANSCO buildings located along the western side of Emma Street appeared to be located directly adjacent to, but not on the current 9 Emma Street parcel. However, based on RI activities, contaminated historic fill was placed on the 9 Emma Street parcel at some point in its history, and SVOCs and metals were detected at concentrations greater than Restricted-Residential Use SCOs.

16 Emma Street

- 1927/28 to 1940: The General Cigar factory.

- 1940 to 1970: ANSCO Camera Factory.

1992 to present: Wilson Instruments / Electroplating, Glowa Manufacturing, Chamonix Industries, BC Reprographics, K&S Industries, Simcona Electronics, and Crysta Lyn Chemical Company (present occupant).

2.3.2 Prior Remedial Events

Several remedial events were completed prior to the RI.

In May / June 2010, a 10,000-gallon aboveground storage tank (AST) and a 15,000-gallon underground storage tank (UST) were removed. The AST was located in the old boiler house and the UST was located between the old and new boiler houses. Approximately 70 yards of contaminated soil was removed as part of the project. Soil analytical data generated from closure activities indicated that petroleum-related volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were below laboratory detection limits. However, the laboratory detections limits for the SVOCs were significantly elevated (as much as 370 parts per million - ppm) for the north, west, and south wall samples. Grossly impacted soils were found in the subsurface between the boiler houses during C&S' 2017 Investigation (referenced below).

In addition, seven spills have occurred at the Property, as follows:

- Spill number 18-07189 was reported on October 4, 2018. The spill was related to the discovery of petroleum impacted soil during the BCP Remedial Investigation in relation to the former 15,000 UST referenced above.

- Spill number 18-03106 was reported on June 20, 2018. The spill was related to an interior release of waste etching solution in the basement of the building.

- Spill number 90-00878 was reported in April 1990 due to the release of a white milky liquid. According to NYSDEC field records, the release

may have been as much as 2,000 gallons. The release was related to the intentional discharge of liquids from a former plating operation tank that was located outdoors. The release traveled across the parking lot into the stormwater system and was visible in five or six catch basins. The NYSDEC requested that the liquids that accumulated in the catch basins be pumped back to the tank and that the liquids be tested. The liquid contained methylene chloride, trichlorofluoromethane, 1,1,1-trichloroethene, trichloroethylene (TCE), and xylenes. The spill was closed as meeting standards in August 1991.

- Spill number 91-11890 was reported in February 1992 due to the release of 1 gallon of used oil and an unknown volume of transmission fluid. The spill report is unclear and indicates that the used oil was related to a tank excavation and the transmission fluid was found on the surface of the parking lot. It is unclear if the incidents are related. The spill was closed as meeting standards in February 1992.

- Spill number 9403491 was reported in June 1994 due to the report of an anonymous caller that there was 10 gallons of a green substance on the floor. The report indicates that nothing was found. The spill was closed as meeting standards in June 1994.

- Spill number 9406578 was reported in August 1994 due to the release of 500 gallons of number 4 fuel oil. The oil spilled into the boiler room, as well as a storm drain. 450 gallons of fuel was recovered. Product was pumped from the floor and absorbed with speedy dry. The spill was closed as meeting standards in August 1994.

- Spill number 9407386 was reported in August 1996 due to the release of eight gallons of hydraulic fluid from a truck. The spill was cleaned up with absorbents and drummed. The spill was closed as meeting standards in September 1994.

2.3.3 Prior Assessment / RI Activities

The following provides a brief summary of the available project records to document assessment and investigation activities conducted to date for the Site.

- *Phase I Environmental Site Assessment (ESA), Property at Linko Technology Center, Inc., 16 Emma Street, Binghamton, New York 13901*, prepared by Jennings Environmental Management, 2015.

- *Limited Site Characterization, Former ANSCO Camera Factory, Emma Street, Binghamton, Broome County, New York*, prepared by C&S Engineers, November 2017.

- *Limited Asbestos Sampling / Testing Survey, Former ANSCO Camera Factory, 16 Emma Street, Binghamton, New York*, prepared by Jennings Environmental Management, December 2017.

- *Remedial Investigation Memo, Former ANSCO Camera Factory,* prepared by C&S Engineers, August 2018.

2.4 Remedial Action Objectives

The RI has not been completed for the Site. The Remedial Action Objectives (RAO) for the Site may be as follows:

2.4.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.4.2 Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

2.4.3 Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

2.5 Existing Contamination

The RI is planned to characterize the nature and extent of contamination. A summary of remaining contamination will be included in the final SMP. Existing contamination identified to date is shown in **Figures 4 through 6**.

3 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

Institutional Controls (ICs) and Engineering Controls (ECs) are have not been determined for the Site. The ICs / ECs will be determined at the time of the selected remedy and included in the final SMP.

Please note that intrusive site work conducted under this ISMP will follow the Community Air Monitoring Plan (CAMP) and Health and Safety Plan (HASP) that are included in the previously prepared and approved Remedial Investigation Work Plan (RIWP). The Excavation Work Plan provided in **Appendix B** will also be followed.

4 MONITORING AND SAMPLING PLAN

Required monitoring associated with evaluating the overall performance and effectiveness of the remedy will be determined following remedy selection and implementation. If warranted, a Monitoring and Sampling Plan will be included in the final SMP. A Quality Assurance Project Plan (QAPP) is provided as **Appendix C**.

5 OPERATION AND MAINTENANCE PLAN

If operation and maintenance of any ECs are required following the final site wide remedy decision, an Operation and Maintenance Plan will be included in the final SMP.

6 PERIODIC ASSESSMENT / EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the site during periodic assessments, and briefly summarizes the vulnerability of the site and/or engineering controls to severe storms/weather events and associated flooding. Flood plains, site drainage, erosion, high winds, electricity, and spill / containment will be discussed in the final SMP as applicable.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. The final SMP will provide a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

6.3 Remedial System Optimization

Remedial Site Optimization (RSO) will be addressed in the final SMP.

7 REPORTING REQUIREMENTS

7.1 Site Management Reports

Any relevant inspections will be reported in the Monthly Progress Reports (MPRs). Any monitoring required and associated forms will be included in the final SMP.

7.2 Periodic Review Report

The frequency and requirements for Periodic Review Reports (PRR) will be included in the final SMP.

7.2.1 Certification of Institutional and Engineering Controls

The RI has not been completed, and as such, a remedy has not been selected for the Site. Any ICs/ECs selected as the remedy will include the required certification language and will be included in the final SMP.

7.3 Remedial Site Optimization Report

In the event that an RSO is to be performed (see Section 6.3, upon completion of an RSO, an RSO report must be submitted to the Department for approval. A general outline for the RSO report is will be provided in the final SMP.

8 REFERENCES

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Phase I Environmental Site Assessment (ESA), Property at Linko Technology Center, Inc., 16 Emma Street, Binghamton, New York 13901, prepared by Jennings Environmental Management, 2015.

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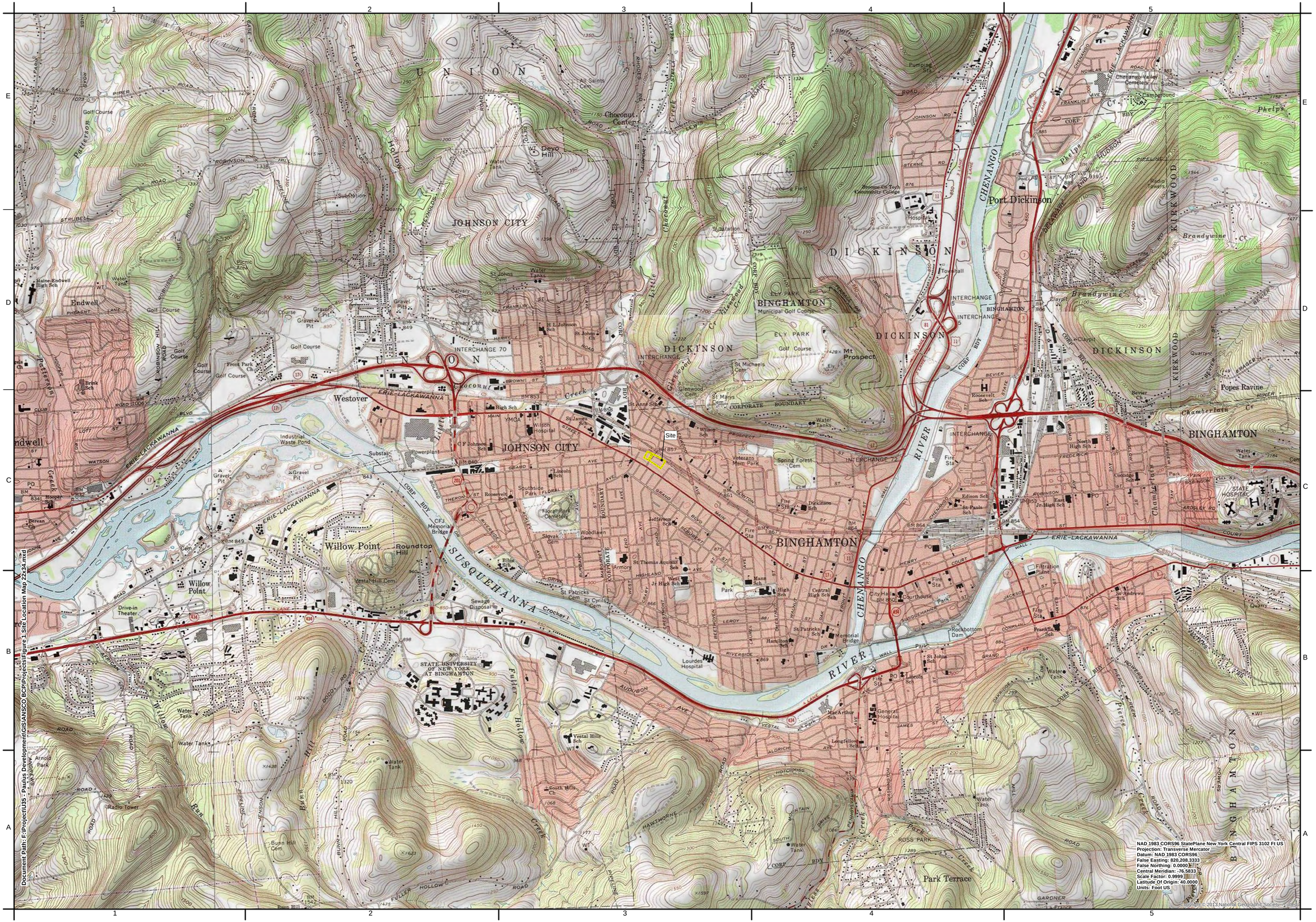
Figures



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Fax: 315-455-9667
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N

0 750 1,500 3,000 Feet

1 inch = 1,500 feet

Former ANSCO Camera Factory
9 & 16 Emma Street
Binghamton, Broome County, New York

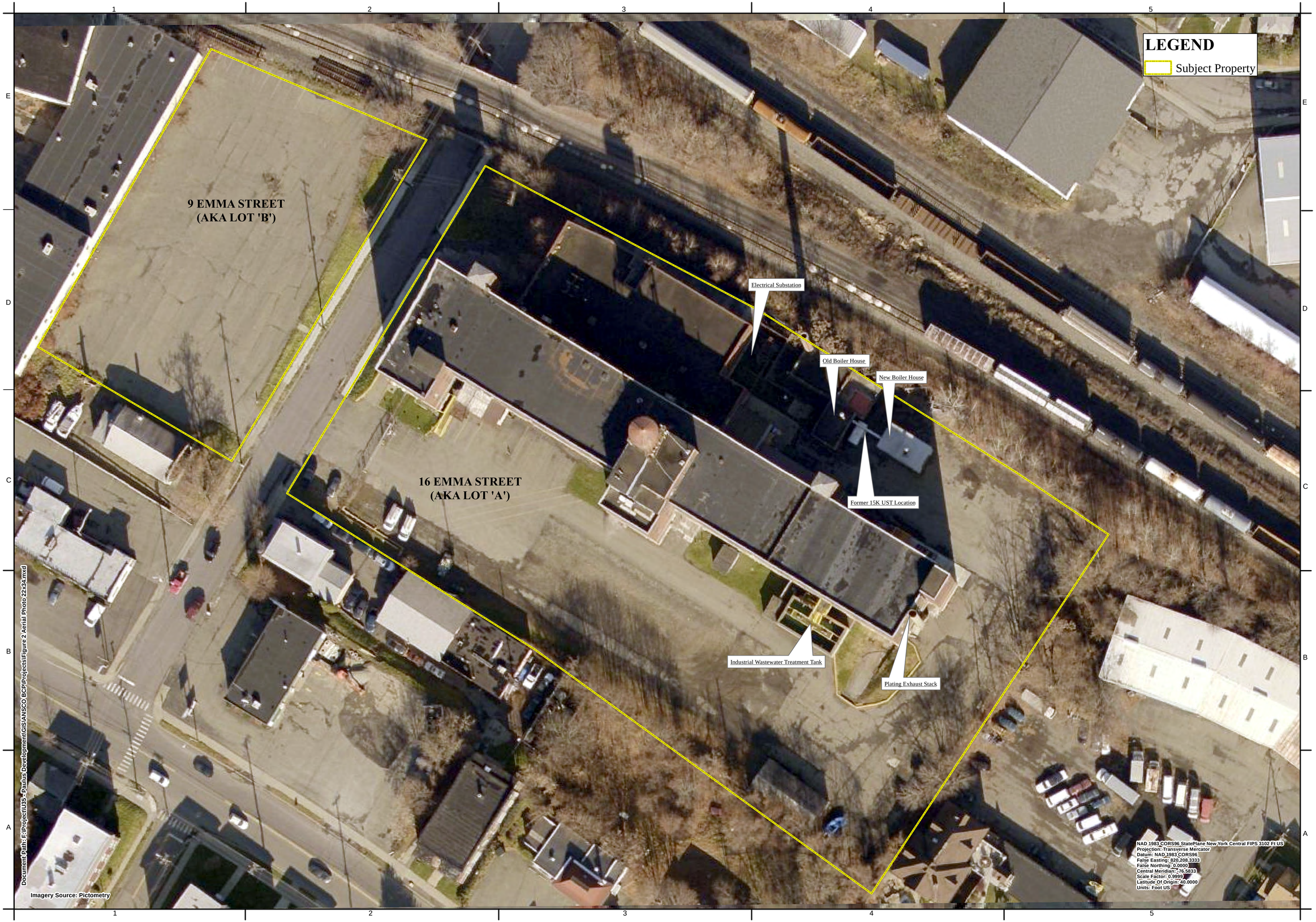
Brownfield Cleanup Program
Remedial Investigation

PROJECT NO:	U35.003.001
DATE:	August 2018
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	WNR
CHECKED BY:	MLW

Modified: 8/2/2018 @ 9:04:54 AM

SITE LOCATION

Figure 1



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N

0 15 30 60 Feet
1 inch = 30 feet

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CHECKED BY:	MLW

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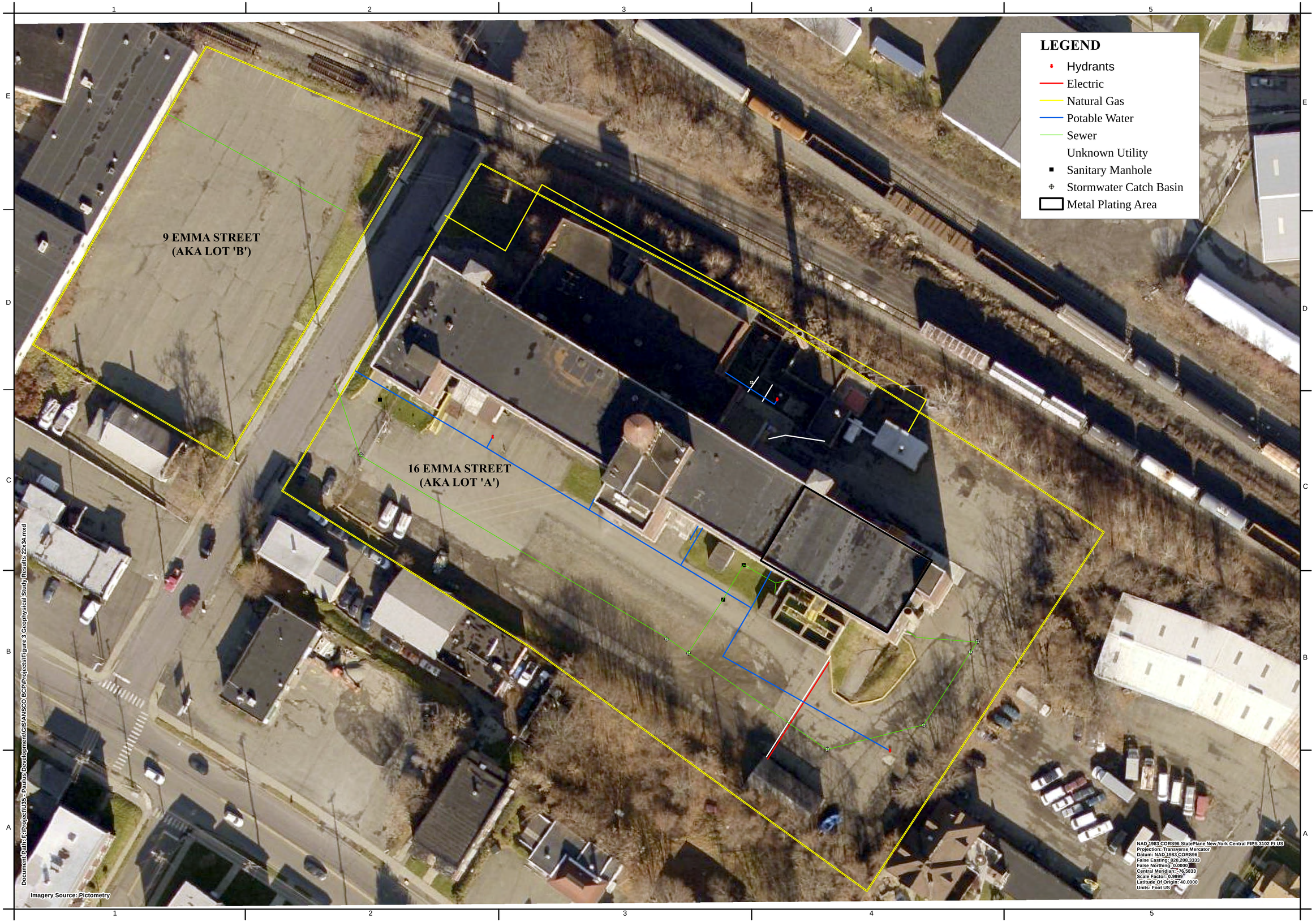
AERIAL PHOTO

Figure 2



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PROJECT NO:	U35.003.001
DATE:	October 2018
SCALE:	AS SHOWN
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DESIGNED BY:	WNR
CHECKED BY:	MLW

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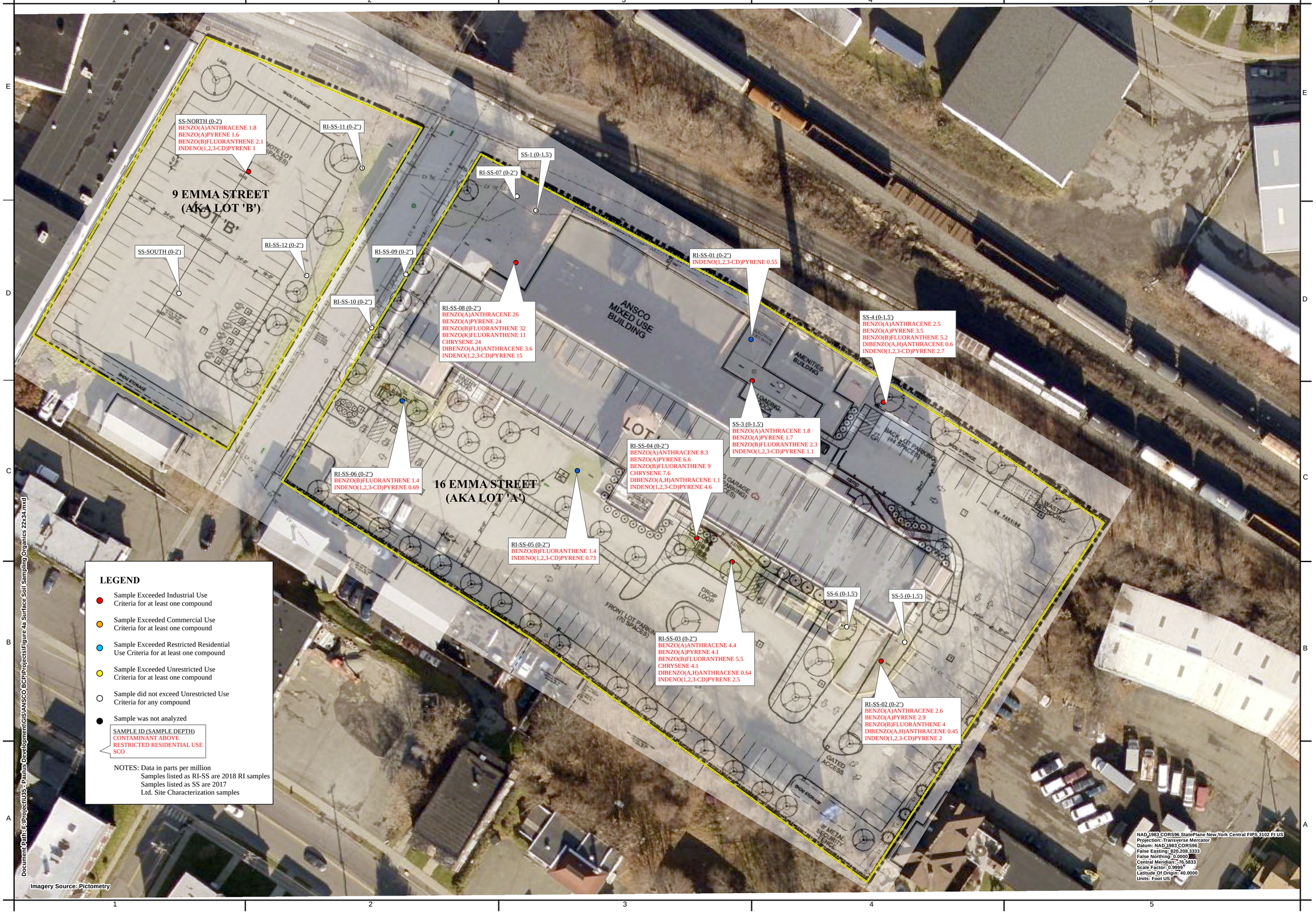
GEOPHYSICAL STUDY

Figure 3



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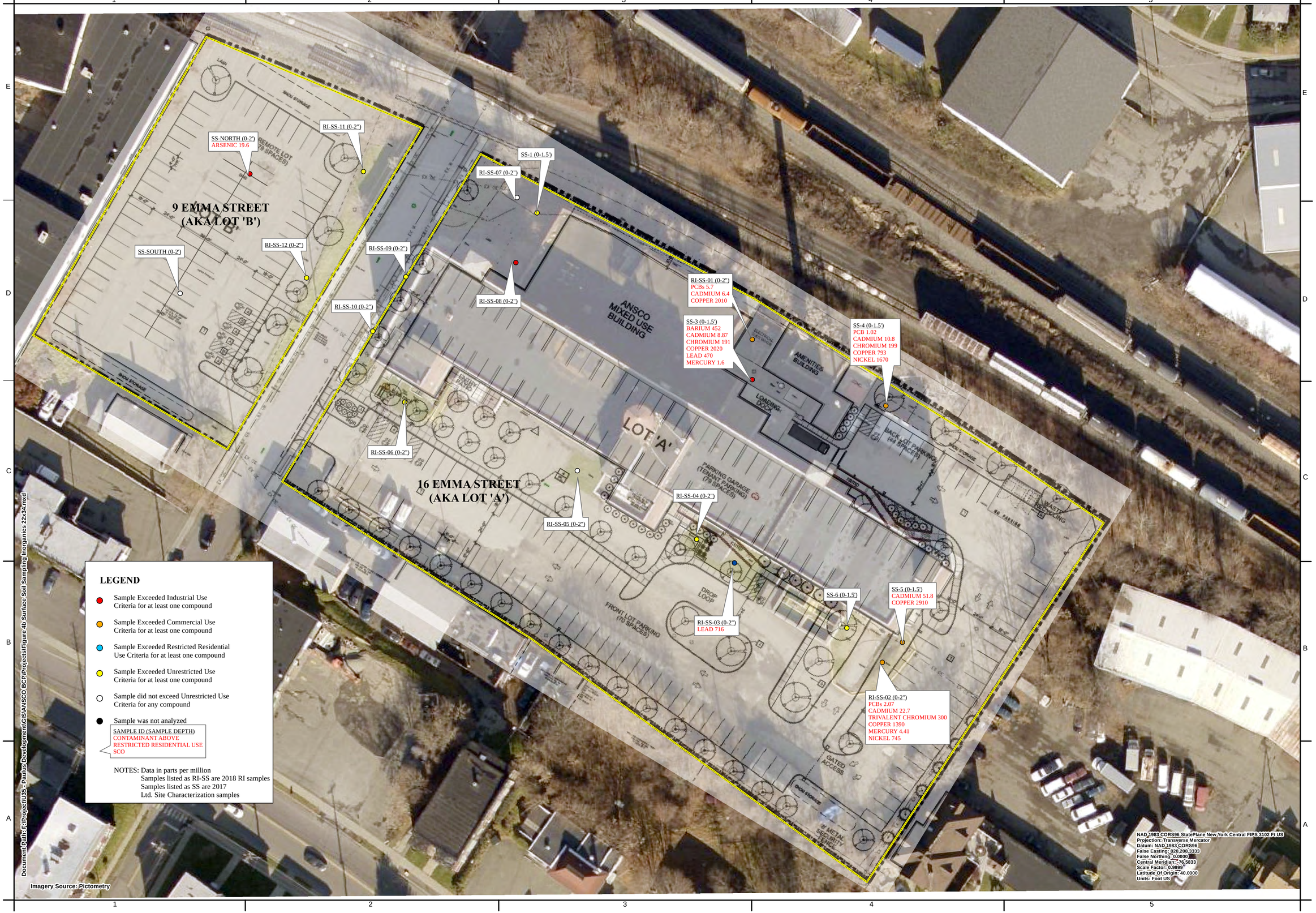
Modified: 8/23/18 @ 9:19:34 AM

SURFACE SOIL SAMPLING (ORGANICS)

Figure 4a



LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use Criteria for at least one compound
- Sample did not exceed Unrestricted Use Criteria for any compound
- Sample was not analyzed

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE RESTRICTED RESIDENTIAL USE SCO

NOTES: Data in parts per million
Samples listed as RI-SS are 2018 RI samples
Samples listed as SS are 2017 Ltd. Site Characterization samples

Imagery Source: Pictometry

NAD_1983_CORS96_StatePlane_New_York_Central_FIPS_3102_Ft_US
Projection: Transverse Mercator
Datum: NAD_1983_CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude_Of_Origin: 40.0000
Units: Foot US

Document Path: F:\Project\U35 - Pavlus Development\GIS\ANSCO BCP\Projects\Figure 4b Surface Soil Sampling Inorganics 22x34.mxd

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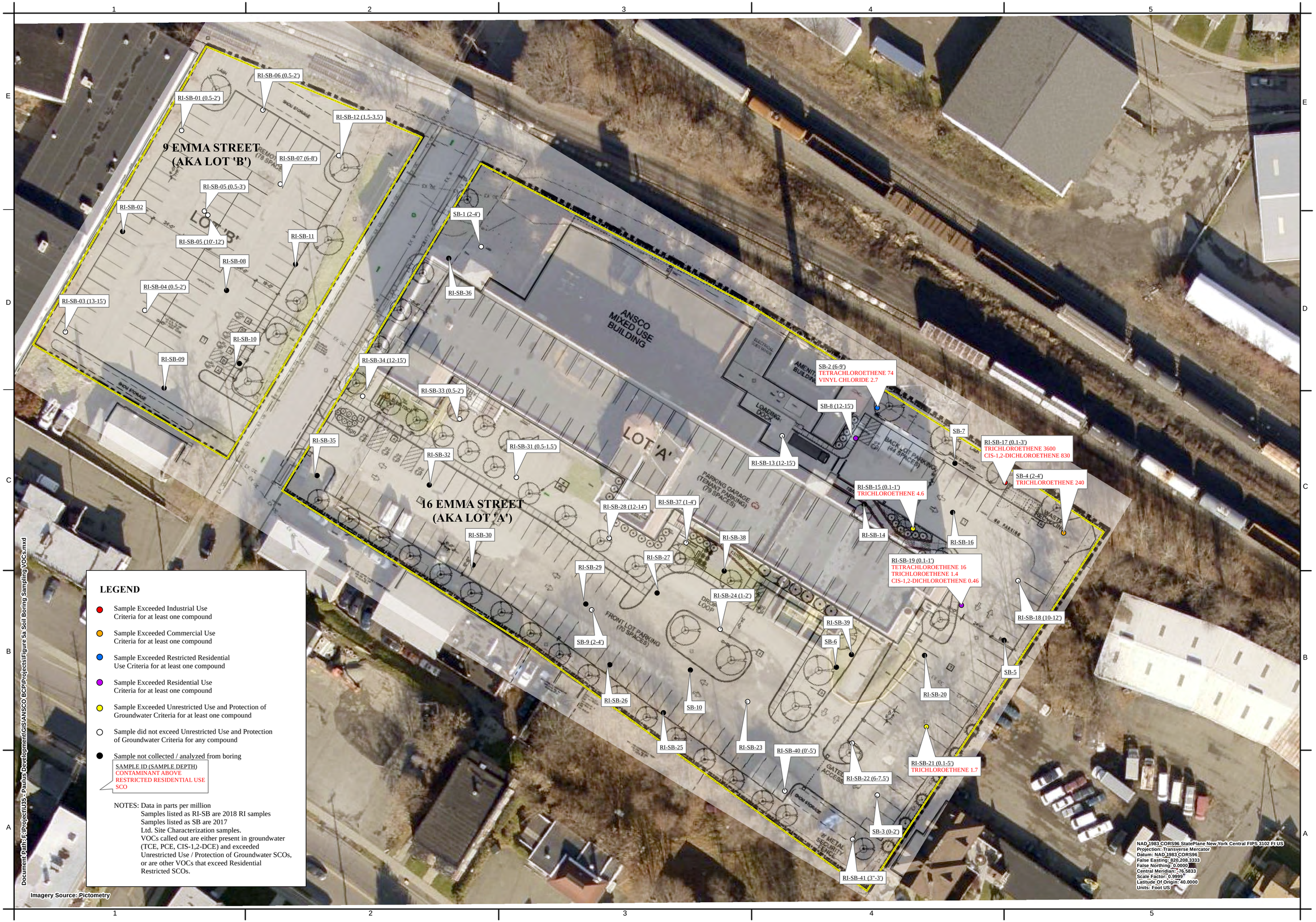
CHECKED BY:	MLW

Modified: 9/2/2018 @ 8:58:30 AM

SURFACE SOIL SAMPLING (INORGANICS)

Figure 4b



LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use and Protection of Groundwater Criteria for at least one compound
- Sample did not exceed Unrestricted Use and Protection of Groundwater Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE RESTRICTED RESIDENTIAL USE SCO

NOTES: Data in parts per million
Samples listed as RI-SB are 2018 RI samples
Samples listed as SB are 2017 Ltd. Site Characterization samples.
VOCs called out are either present in groundwater (TCE, PCE, CIS-1,2-DCE) and exceeded Unrestricted Use / Protection of Groundwater SCOs, or are other VOCs that exceed Residential Restricted SCOs.

Imagery Source: Pictometry

Document Path: F:\Project\U35 - Parlus Development\GIS\ANSCO BCP\Projects\Figure 5a Soil Boring Sampling VOCs.mxd

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N

0 15 30 60 Feet
1 inch = 30 feet

Former ANSCO Camera Factory
9 & 16 Emma Street
Binghamton, Broome County, New York

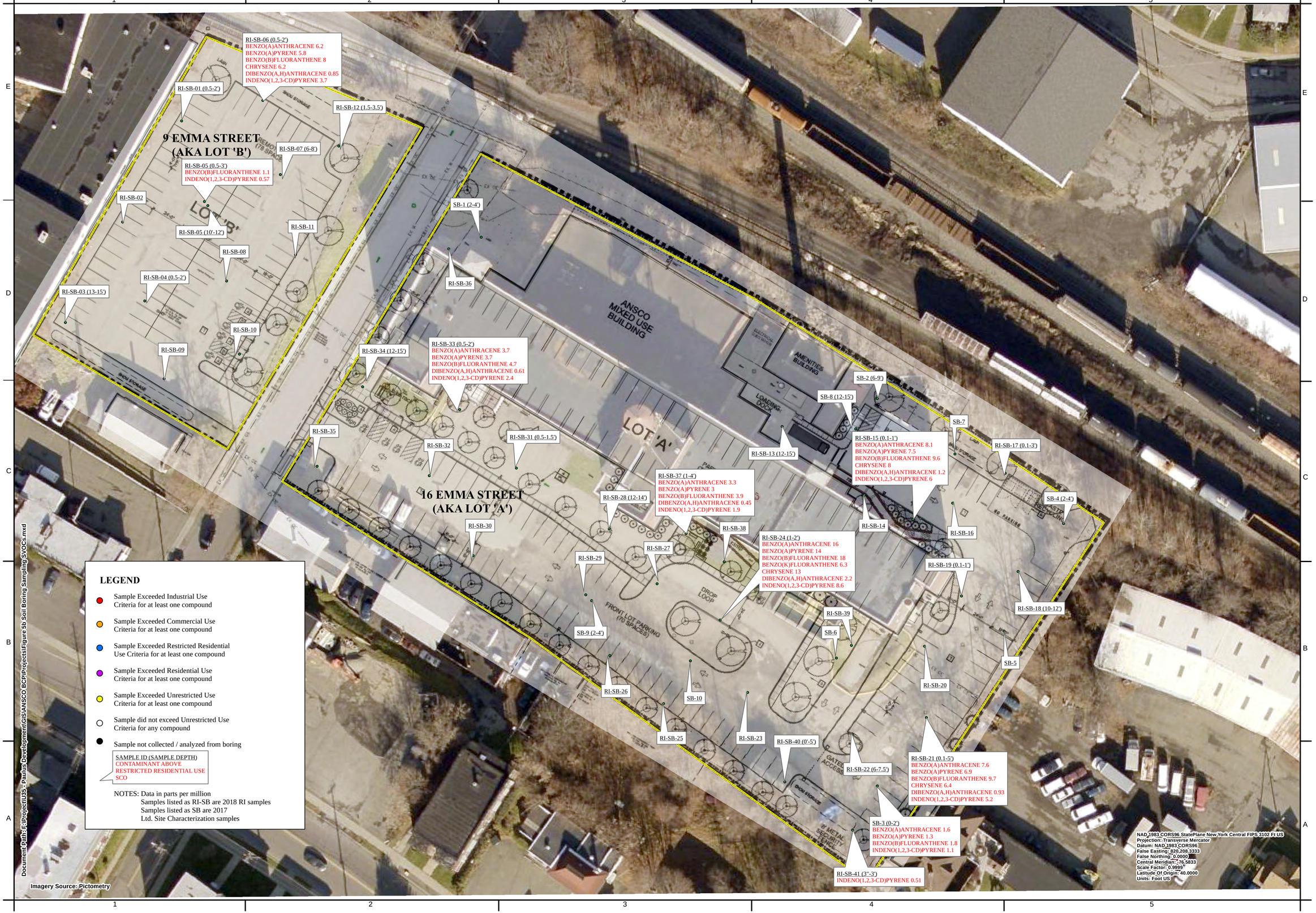
Brownfield Cleanup Program
Remedial Investigation

PROJECT NO:	U35.003.001
DATE:	October 2018
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	WNR
CHECKED BY:	MLW

Modified: 10/23/2018 @ 12:19 PM

SOIL BORING SAMPLING (VOCs)

Figure 5a



Document Path: F:\Project\U35 - Paulus Development\GIS\ANSCO BCP\Projects\Figure 5b Soil Boring Sampling SVOCs.mxd

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DRAWN BY:	JTB
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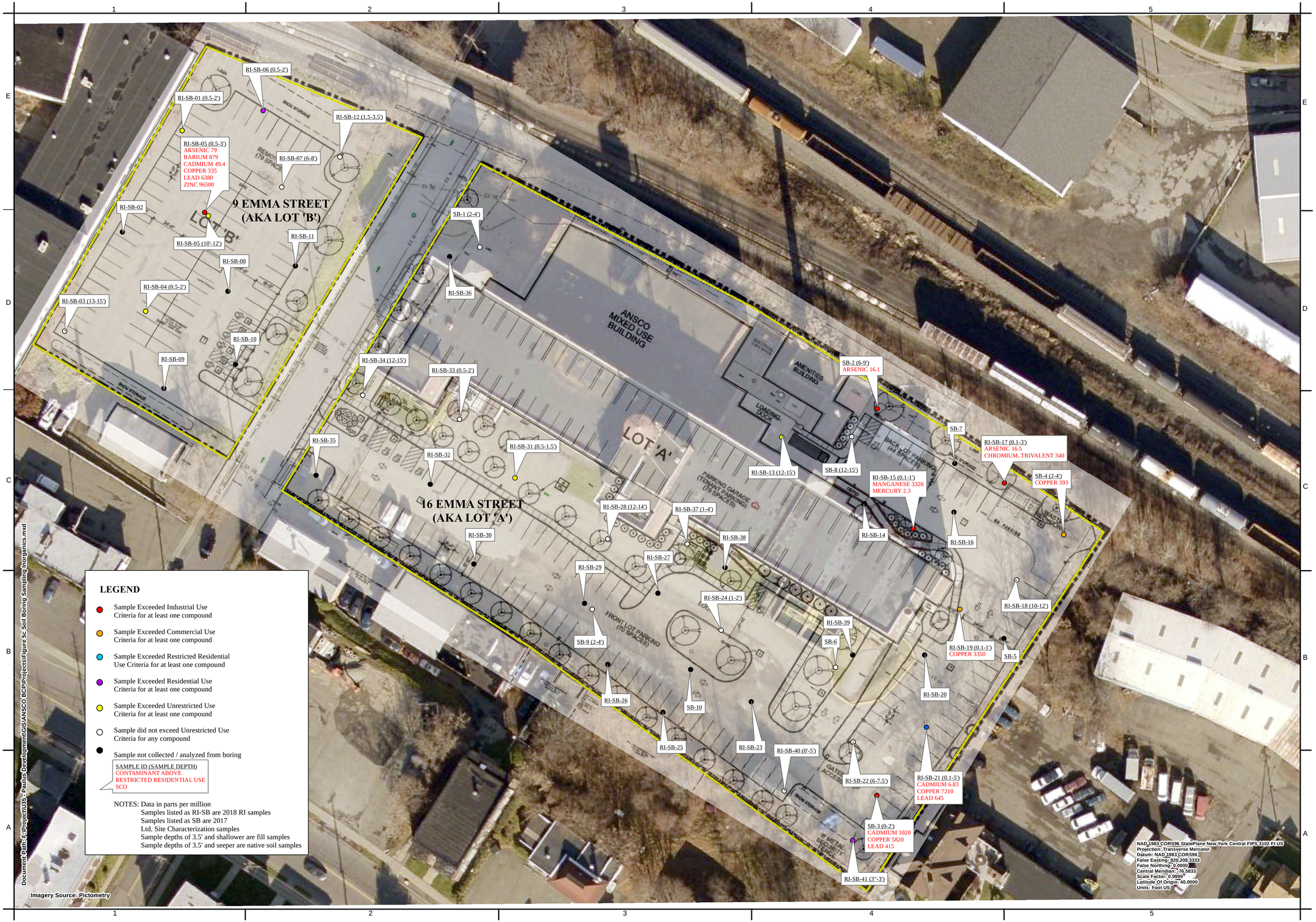
SOIL BORING SAMPLING (SVOCs)

Figure 5b



LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use Criteria for at least one compound
- Sample did not exceed Unrestricted Use Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE
RESTRICTED RESIDENTIAL USE
SCO

NOTES: Data in parts per million
Samples listed as RI-SB are 2018 RI samples
Samples listed as SB are 2017
Ltd. Site Characterization samples
Sample depths of 3.5' and shallower are fill samples
Sample depths of 3.5' and seeper are native soil samples

Imagery Source: Pictometry

Document Path: P:\Projects\105 - Paulus Development\GIS\ANSCO BCP\Projects\Figure 5c Soil Boring Sampling Inorganics.mxd

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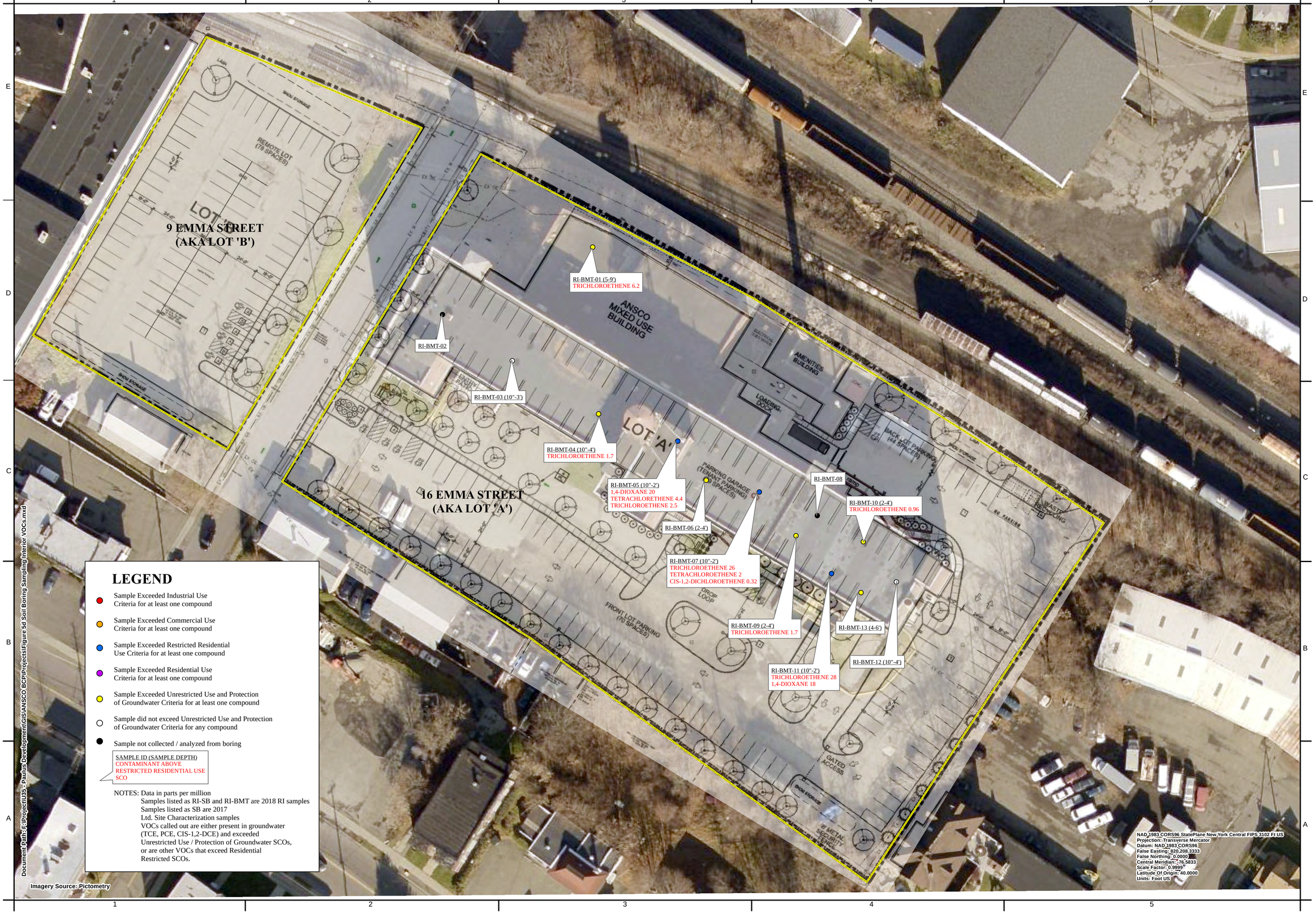
Modified: 10/19/2018 @ 12:54:08 PM

SOIL BORING SAMPLING (INORGANICS)

Figure 5c



LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use and Protection of Groundwater Criteria for at least one compound
- Sample did not exceed Unrestricted Use and Protection of Groundwater Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE
RESTRICTED RESIDENTIAL USE
SCO

NOTES: Data in parts per million
Samples listed as RI-SB and RI-BMT are 2018 RI samples
Samples listed as SB are 2017
Ltd. Site Characterization samples
VOCs called out are either present in groundwater (TCE, PCE, CIS-1,2-DCE) and exceeded Unrestricted Use / Protection of Groundwater SCOs, or are other VOCs that exceed Residential Restricted SCOs.

Imagery Source: Pictometry

NAD_1983_CORS96_StatePlane_New_York_Central_FIPS_3102_Ft_US
Projection: Transverse Mercator
Datum: NAD_1983_CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude_Of_Origin: 40.0000
Units: Foot US

Document Path: F:\Project\U35 - Pavlus Development\GIS\ANSCO BCP\Projects\Figure 5d Soil Boring Sampling Interior VOCs.mxd

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DRAWN BY:	JTB
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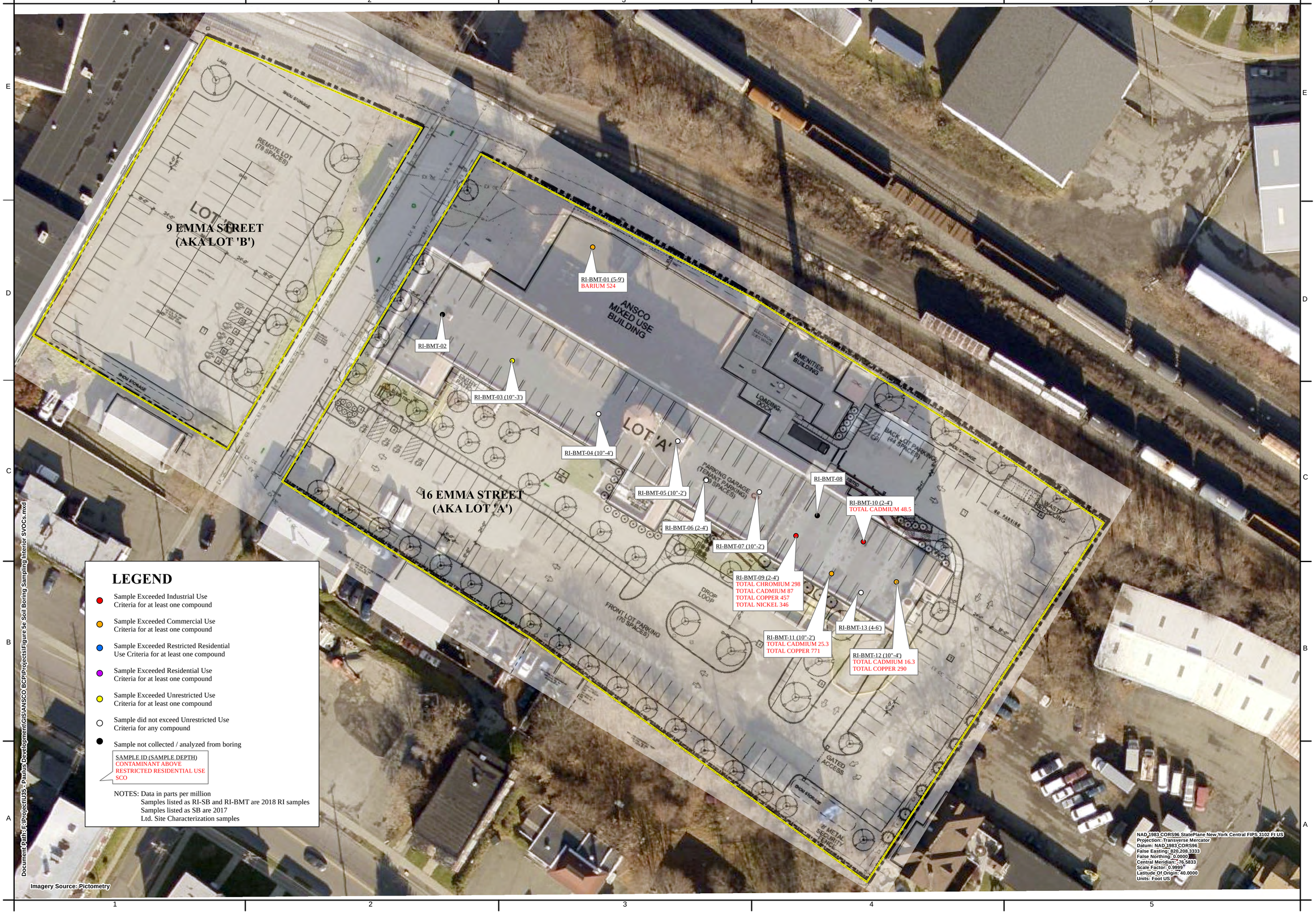
Modified: 10/23/2018 @ 12:19:59 PM

INTERIOR SOIL BORING SAMPLING (VOCs)

Figure 5d



LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use Criteria for at least one compound
- Sample did not exceed Unrestricted Use Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE
RESTRICTED RESIDENTIAL USE
SCO

NOTES: Data in parts per million
Samples listed as RI-SB and RI-BMT are 2018 RI samples
Samples listed as SB are 2017
Ltd. Site Characterization samples

Imagery Source: Pictometry

Document Path: F:\Project\U35 - Parlins Development\GIS\ANSCO BCP\Projects\Figure 5s Soil Boring Sampling Interior SVOCs.mxd

NAD_1983_CORS96_StatePlane_New_York_Central_FIPS_3102_Ft_US
Projection: Transverse_Mercator
Datum: NAD_1983_CORS96
False_Easting: 820,208.3333
False_Northing: 0.0000
Central_Meridian: -76.5833
Scale_Factor: 0.9999
Latitude_Of_Origin: 40.0000
Units: Foot_US

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1 inch = 30 feet

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INTERIOR SOIL BORING SAMPLING INORGANICS

Figure 5e

SB-2 (6-9')
TETRACHLOROETHENE 74
VINYL CHLORIDE 2.7
TRICHLOROETHENE 6
CIS-1,2-DICHLOROETHENE 58
Physical impacts from 4.75' to 14.5'
PID = 250 PPM (3.5'-5')
PID = 2250 PPM (6'-9')

RI-UST-05 (25-28')
TETRACHLOROETHENE 4
TRICHLOROETHENE 5.1
CIS-1,2-DICHLOROETHENE 0.28
Physical impacts present from 12'-28'
PID = 65 PPM (12'-15')
PID = 65 PPM (15'-20')
PID = 10 PPM (23'-25')
PID = 10 PPM (25'-28')

SB-8 (12-15')
Physical Impacts from 10'-15'
PID = 59 PPM (12'-15')

RI-UST-01 (13-14')
TRICHLOROETHENE 0.69
Physical impacts present from 1'-5' / 13'-15'
PID = 15 PPM (13'-14')

RI-UST-07 (17-19')
Physical impacts from 10'-20'
PID = 5 PPM (13'-15')
PID = 15 PPM (17'-19')

RI-SB-13 (12-15')

RI-UST-04

RI-UST-03

RI-UST-02

RI-UST-05 (15-20')

RI-UST-08 (12-15')
Physical impacts from 0-5' / 12'-15'
PID = 58 PPM (0-5')
PID = 85 PPM (12'-15')

RI-UST-06 (18-20')
Physical impacts present from 13'-23'
PID = 5 PPM (13'-15')
PID = 15 PPM (18'-20')

RI-UST-09

RI-UST-10

RI-SB-14
Physical impacts at 14'
PID = 4.2 PPM (14')

LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use and Protection of Groundwater Criteria for at least one compound
- Sample did not exceed Unrestricted Use and Protection of Groundwater Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE RESIDENTIAL RESTRICTED USE SCO

NOTES: Data in parts per million
Samples listed as RI-SB and RI-UST are 2018 RI samples
Samples listed as SB are 2017 Ltd. Site Characterization samples
Each sample with detectable PID readings showed evidence of staining and odors.
Figure only lists the VOCs that are also present in groundwater above standards.

Former UST Location

Imagery Source: Pictometry

NAD_1983_CORS96_StatePlane_New_York_Central_FIPS_3102_Ft_US
Projection: Transverse_Mercator
Datum: NAD_1983_CORS96
False_Easting: 820,208.3333
False_Northing: 0.0000
Central_Meridian: -76.5833
Scale_Factor: 0.9999
Latitude_Of_Origin: 40.0000
Units: Foot_US

Document Path: F:\Project\U35 - Paulus Development\GIS\ANSCO DCP\Projects\Figure 5f Soil Boring Sampling Former UST Area VOCs (1).mxd

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N

0 5 10 20 Feet
1 inch = 10 feet

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FORMER UST SOIL BORING SAMPLING (VOCs)

Figure 5f

RI-UST-05 (15-20')
BENZO(B)FLUORANTHENE 1.1
DIBENZO(A,H)ANTHRACENE 1.1
INDENO(1,2,3-CD)PYRENE 1.4
Physical impacts present from 12'-28'
PID = 65 PPM (12'-15')
PID = 65 PPM (15'-20')
PID = 10 PPM (23'-25')
PID = 10 PPM (25'-28')

SB-2 (6-9')
Physical impacts from 4.75'-14.5'
PID = 250 PPM (3.5'-5')
PID = 2250 PPM (6'-9')

RI-UST-01 (13-14')
BENZO(A)ANTHRACENE 1.8
BENZO(A)PYRENE 1.1
CHRYSENE 4.1
Physical impacts present from 1'-5' / 13'-14'
PID = 15 PPM (13'-14')

RI-UST-07 (17-19')
INDENO(1,2,3-CD)PYRENE 1.4
Physical impacts present from 10'-20'
PID = 5 PPM (13'-15')
PID = 15 PPM (17'-19')

SB-8 (12-15')
Physical impacts from 10'-15'
PID = 59 PPM (12'-15')

RI-SB-13 (12-15')

RI-UST-04

RI-UST-03

RI-UST-02

RI-UST-05 (25-28')
DIBENZO(A,H)ANTHRACENE 1.1

RI-UST-08 (12-15')
BENZO(A)ANTHRACENE 2.2
BENZO(A)PYRENE 1.1
CHRYSENE 4.4
INDENO(1,2,3-CD)PYRENE 1.4
Physical impacts from 0-5' / 12'-15'
PID = 58 PPM (0-5')
PID = 85 PPM (12'-15')

RI-UST-09

RI-UST-06 (18-20')
BENZO(A)ANTHRACENE 1.1
BENZO(A)PYRENE 1
INDENO(1,2,3-CD)PYRENE 1.4
Physical impacts present from 13'-23'
PID = 5 PPM (13'-15')
PID = 15 PPM (18'-20')

RI-UST-10

RI-SB-14
Physical impacts at 14'
PID = 4.2 PPM (14')

LEGEND

- Sample Exceeded Industrial Use Criteria for at least one compound
- Sample Exceeded Commercial Use Criteria for at least one compound
- Sample Exceeded Restricted Residential Use Criteria for at least one compound
- Sample Exceeded Residential Use Criteria for at least one compound
- Sample Exceeded Unrestricted Use Criteria for at least one compound
- Sample did not exceed Unrestricted Use Criteria for any compound
- Sample not collected / analyzed from boring

SAMPLE ID (SAMPLE DEPTH)
CONTAMINANT ABOVE RESIDENTIAL RESTRICTED USE SCO

NOTES: Data in parts per million
Samples listed as RI-SB and RI-UST are 2018 RI samples
Samples listed as SB are 2017
Ltd. Site Characterization samples
Each sample with detectable PID readings showed evidenceof staining and odors.

Former UST Location

Imagery Source: Pictometry

NAD 1983 CORS96 StatePlane New York Central FIPS 3102 Ft US
Projection: Transverse Mercator
Datum: NAD_1983_CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude Of Origin: 40.0000
Units: Foot US

Document Path: F:\Project\U35 - Paulus Development\GIS\ANSCO BCP\Project\Figure 5g Soil Boring Sampling Former UST Area SVOCs.mxd

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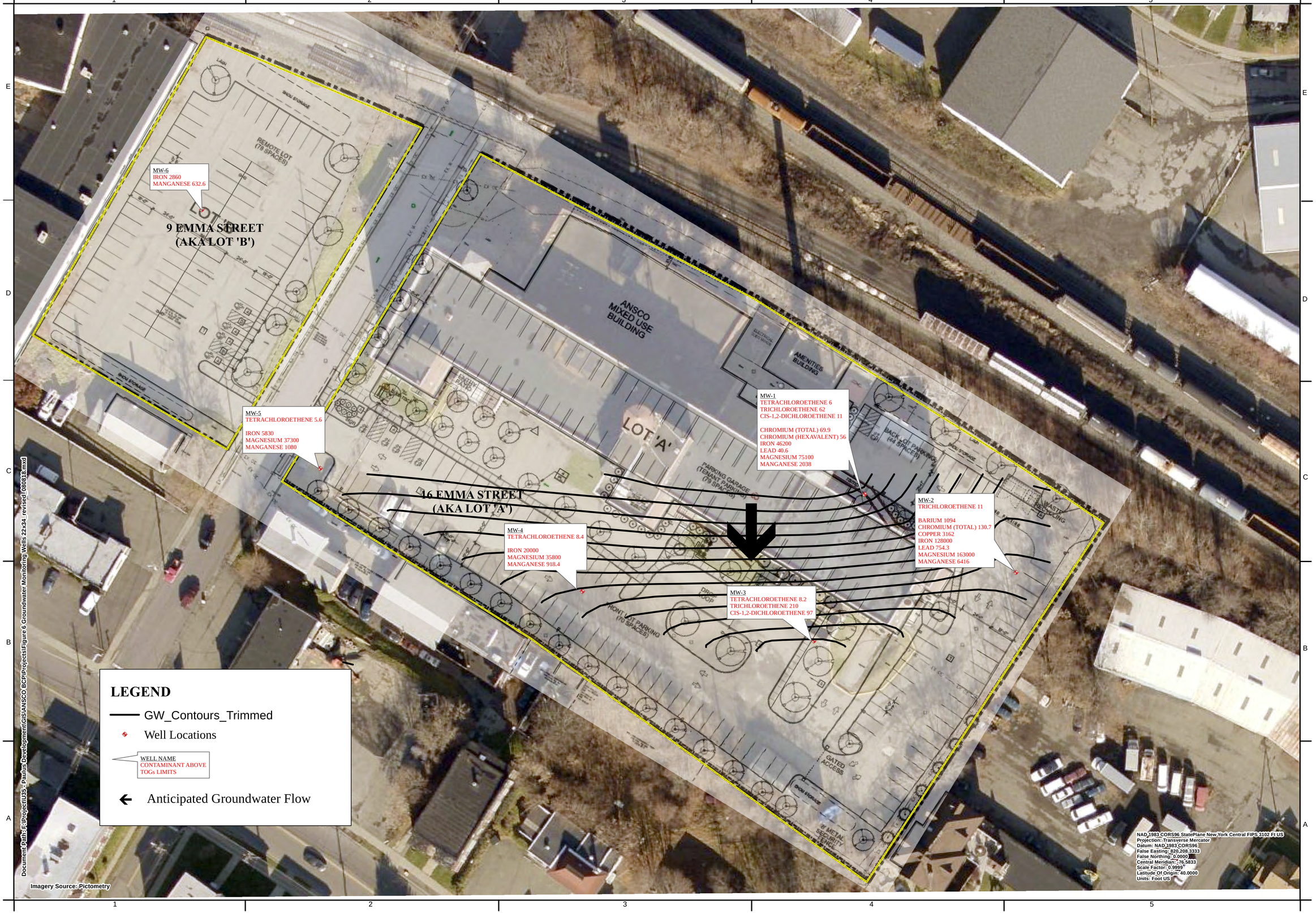
FORMER UST SOIL BORING SAMPLING (SVOCs)

Figure 5g



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0 15 30 60 Feet

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GROUNDWATER MONITORING WELLS

Figure 6

Appendix A
List of Site Contacts

Name	Organization	Affiliation	Phone Number	Email Address
Matthew Paulus	Freewheelin ANSCO, LLC	Site Owner	(315) 416-9566	matthew@paulusdevco.com
Matthew Paulus	Freewheelin ANSCO, LLC	Remedial Party	(315) 416-9566	matthew@paulusdevco.com
Matthew L. Walker	C&S Engineers	Project Manager	(315) 455-2000	mawalker@cscos.com
Daniel E. Riker, P.G.	C&S Engineers	QEP	(315) 455-2000	driker@cscos.com
Gary Priscott, P.G.	NYSDEC Region 7	Project Manager	(607) 775-2545	Gary.priscott@dec.ny.gov
Harry Warner, P.E.	NYSDEC Region 7	Regional HW Engineer	(315) 426-7551	Harry.warner@dec.ny.gov
Kelly A. Lewandowski, P.E.	NYSDEC	Site Control	(518) 402-9547	Kelly.lewandowski@dec.ny.gov

Appendix B
Excavation Work Plan

1. NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Appendix A** of the ISMP.

Table 1: Notifications*

Name	Contact Information
NYSDEC Project Manager Gary Priscott	(607) 775-2545 Gary.priscott@dec.ny.gov
NYSDEC Regional HW Engineer Harry Warner	(315) 426-7551 Harry.warner@dec.ny.gov
NYSDEC Site Control Kelly Lewandowski	(518) 402-9547 Kelly.lewandowski@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in the Remedial Investigation Work Plan (RIWP) for the site;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2. SOIL SCREENING

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Sections 6 and 7 of this Appendix.

3. SOIL STAGING

Potentially contaminated soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

4. MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this ISMP is posed by utilities or easements on the site.

As necessary, loaded vehicles leaving the site will be appropriately lined, tarped, and / or securely covered. Shipments will be manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles enter or exit the site shall be inspected daily for evidence of offsite soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

5. MATERIALS TRANSPORT OFF-SITE

Transport of regulated materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be properly secured and covered with loose-fitting canvas-type or tight-fitting covers, as appropriate. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are as follows: trucks are anticipated to exit the Site from Emma Street onto Main Street and head west to Lester Avenue. Once on Lester Avenue a right will be made onto CFJ Boulevard. CFJ Boulevard will be followed to the intersection of Airport Road, which will then be taken to the disposal destination (to be determined). All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Offsite queuing will be prohibited.

6. MATERIALS DISPOSAL OFF-SITE

Unless provide otherwise by analytical testing, material excavated and removed from the site will be treated as contaminated. Regulated material and will be transported and disposed in accordance with local, state, and federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility, if appropriate, (e.g. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc.). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report or Monthly Monitoring Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill, contaminated soils, and clean construction and demolition debris taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

7. MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reused in this ISMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

8. FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, state, and federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

9. BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this ISMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be appropriately covered. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

10. STORMWATER POLLUTION PREVENTION

The local municipality will require that earthwork activities for the project be completed in accordance with a Construction Stormwater Pollution Prevention Plan (SWPPP). The SWPPP and results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

11. EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report, Monthly Monitoring Report, and/or Remedial Investigation Report.

12. COMMUNITY AIR MONITORING PLAN

Air sampling locations are to be determined. A figure showing the location of air sampling stations based on generally prevailing wind conditions will be provided in the final SMP and on the 15-day notification. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and downwind monitoring stations. Exceedances of action levels listed in the CAMP will be reported to NYSDEC.

13. ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis is not anticipated to be necessary. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's remediation contractor, and any measures that are implemented will be discussed in the final SMP.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include:

a) Limiting the area of open excavations and size of soil stockpiles;
b) Shrouding open excavations with tarps and other covers; and
c) Using foams to cover exposed odorous soils.

If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include:

d) Direct load-out of soils to trucks for off-site disposal;
e) Use of chemical odorants in spray or misting systems; and,
f) Use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting / filtering systems.

14. DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

15. OTHER NUISANCES

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Appendix C
Quality Assurance Project Plan

Quality Assurance Project Plan

for

Former ANSCO Camera Factory

9 & 16 Emma Street

Binghamton, Broome County, New York

Site No. C704059

Prepared by:

C&S ENGINEERS, INC.

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1 Introduction

C&S' Quality Control (QC) Program is a vital part of its approach to remedial investigations. Through our thorough QC program, our firm is able to provide accurate and dependable data. QC also provides safe working conditions for field staff.

The QC program contains procedures, which provide for collected data to be properly evaluated, and which document that quality control procedures have been followed in the collection of samples. The QC program represents the methodology and measurement procedures used in collecting quality field data. This methodology includes the proper use of equipment, documentation of sample collection, and sample handling practices.

Procedures used in the firm's QC program are consistent with federal, state, and local regulations, as well as, appropriate professional and technical standards.

This QC program has been organized into the following areas:

- QC Objectives
- Field Sampling Techniques
    - Procedures
    - Preparation
    - Measurement
    - Decontamination
- Sample Management

2 Quality Control Objectives

2.1 Data Quality Objectives

Data Quality Objectives (DQOs) are statements which describe the desired quality of data necessary to meet the objectives of the sampling program. The DQOs for the site sampling program were formulated during the scoping effort and developed as part of this Plan. The general steps followed in preparation of the DQOs were as follows:

- *Identification of the media to be sampled* - Identifies the media being investigated (e.g., ground water, surface soil).

- *Identification of the data uses* - Identifies the intended use of the data according to the following:
  - Site Characterization - Data are used to determine the composition, nature, and extent of contamination.
  - Risk Assessment - Data are used to evaluate the actual or potential risks posed by contaminants determined to be present on-site. Particular attention is given to sampling at locations where human exposure is possible.
  - Health and Safety Plan (HASP) - Data are used to establish the level of protection needed for on-site workers during site characterization activities.
  - Monitoring - Data are used during the monitoring of the remedial action to access the effectiveness of such action.
  - PRP Enforcement - Data are used to help establish potentially responsible parties (PRP's).
  - Evaluation of Alternatives - Data are used to evaluate various proposed remedial technologies and assist in proper design of alternatives.

- *Identification of the data types* - Identifies what types of analyses are to be performed.

- *Sample Collected* - Describes the sample types to be collected.
  - Environmental - Refers to a specific media sampled such as water, soil, air, or biological.
  - Source - Refers to sampling an actual contamination source.
  - Grab - A discrete sample representative of a specific location.
  - Composite - A sample that represents a mixture of a number of grab samples that represents the average properties over the extent of areas sampled.
  - Biased -Sampling that focuses on a specific area of expected contamination or uncontaminated area (background).

- *Identification of the data quality needs* - Identifies the analytical options available to support data collection activities and are identified as follows:
  - Level I: *Field Screening* - portable type instruments which provide real-time data.
  - Level II: *Field Analysis* - portable analytical instruments in an on-site lab or transported to the site.

- Level III: *Standard Analytical Protocols* - standard analytical protocols or without the NYSDEC Analytical Services Protocol (ASP) (2000) deliverables/reportables documentation.
- Level IV: *NYSDEC ASP Reportables/Deliverables* - rigorous QA/QC protocols and reportables/deliverables documentation; NYSDEC ASP (2000) Category B deliverables.
- Level V: *Non-Standard* - methods which have been modified to meet specific site study or remediation needs or by use of some other specialized analytical methods that cannot be obtained through standard or typical avenues of analytical support.

► *Identification of Data Quality Factors* - Describes factors which influence the quality or quantity of data to be collected. Primary contaminants and associated levels of concern are identified concerning ARARs or potential risks. The required detection limit are also given or referenced.

► *Identification of QA/QC Samples* - Specifies additional samples to be collected to support Quality Assurance/Quality Control (QA/QC) procedures. Additional samples to be collected could include:

- *Matrix Spike/Matrix Spike Duplicates* - Matrix spike and matrix spike duplicate samples are collected as a duplicate sample to which the analytical laboratory will add known amounts of target analytes. These QA/QC samples are intended to assess the extraction procedure used by the laboratory.
- *Field Blanks* - Field (equipment) blanks are samples which are obtained by running analyte-free water through the sample collection equipment in a way that is identical to the sample collection procedures. Field blanks may be used during QA/QC procedures to evaluate if sampling equipment has contributed contaminants to the samples.
- *Trip Blanks* - Trip blanks are samples which are prepared prior to the sampling event in the same type of sample container and are kept with the collected samples throughout the sampling event unit analysis. Trip blank vials are not opened in the field and are analyzed for volatile organics only.

2.2 Sampling Procedures

All sampling objectives, locations, and procedures have been included as the Remedial Investigation Work Plan (RIWP) and are further described in Section 3. Items including Field Measurement Techniques, General Field Decontamination, and Sample Management have also been included in Sections 3 and 4.

2.3 Laboratory Certification and Coordination

Contract Laboratory Protocol (CLP) certification is a tier of accreditation issued by the New York State Department of Health (NYSDOH) within the Solid and Hazardous Waste category. Such laboratories have demonstrated that they meet the requirements of the NYSDEC Analytical Services Protocol. All chemical analyses for samples from the site will

be completed by a CLP laboratory capable of performing project specific analyses as indicated in this QA/QC plan. The project Quality Assurance / Quality Control (QA/QC) Officer will also be responsible for all project related laboratory coordination.

2.4 Analytical Methodologies

Sampling and analysis will be performed for the Target Compound List (TCL) parameters including volatiles. The specific analyses will be conducted according to the following NYSDEC ASP 2000 methodologies:

Parameter Group	Analysis Method
Volatiles	8260C
Semivolatiles	8270D
PCBs	8082A
Pesticides	8081B
Herbicides	8151A
Metals / Inorganics	6010D, 7471B, 9010C/9012B, 7196A
PFOA/PFOS	122,537M

Trip blanks accompany each shipment of aqueous samples for VOC analysis. Trip blanks are not necessary for soil samples. If several samples are collected for VOC analysis on any one day, all VOC samples will be packed in the same cooler with the trip blank. All data will be presented in Category B reportables / deliverables format.

2.5 Analytical Quality Control

Analytical quality control for this Project will be consistent with the methodology and quality assurance/quality control requirements in the NYSDEC ASP 2000.

The following tables detail sample volumes, containers, preservation, and holding time for typical analytes.

Table 2.5a
Water Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Holding Time Until Extraction/ Analysis
VOCs	40-ml glass vial with Teflon-backed septum	Two (2); fill completely, no headspace	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	14 days
Semi-volatile Organic Compounds (SVOCs)	1,000 or 200-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Polychlorinated biphenyls (PCBs)	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Metals	250-ml HDPE	One (1); fill completely	Cool to 4° C (ice in cooler) Nitric acid to pH <2	180 days (28 for mercury)
Cyanide	1,000-mL HDPE		Cool to 4° C (ice in cooler) Nitric acid to pH <2	14 days

Note:
All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as bottleware may vary by laboratory.
Holding time begins at the time of sample collection.

Table 2.5b
Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Holding Time Until Extraction/ Analysis
VOCs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14 days
VOCs via EPA 5035	40 mL vials with sodium bisulfate, methanol, and/or DI water	Three (3), 5 grams each	Cool to 4° C (ice in cooler)	2 days
SVOCs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7/40 days
PCBs	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14/40 days
Metals	4-oz. glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	180 days (28 for mercury)
Cyanide	4-oz, glass jar with Teflon-lined cap	One (1), fill as completely as possible	Cool to 4° C (ice in cooler)	14 days

Note:
All sample bottles will be prepared in accordance with USEPA bottle washing procedures.
Consult with laboratory as bottleware may vary by laboratory.
Holding time begins at the time of sample collection.

3 Field Sampling Plan

3.1 Sampling Procedures

The following sections provide procedures for collecting a variety of samples, not all of which will be needed at this site.

3.1.1 Preparation for Sampling

The sample collection technique is of prime importance to assure the integrity of the collected sample. The following techniques include provisions so that:

- A representative sample is obtained;
- Contamination of the sample is minimized;
- The sample is properly preserved; and
- An acceptable Chain-of-Custody record is maintained.

The QA/QC Sampling Component of the Plan includes:

- Incorporation of accepted sampling techniques referenced in the sampling plan;
- Procedures for documenting any field actions contrary to the QA/QC Plan;
- Documentation of all preliminary activities such as equipment check-out, calibrations, and container storage and preparation;
- Documentation of field measurement quality control data (quality control procedures for such measurements shall be equivalent to corresponding QC procedures);
- Documentation of field activities;
- Documentation of post-field activities including sample shipment and receipt, field team debriefing, and equipment check-in;
- Generation of quality control samples including duplicate samples, field blanks, equipment blanks, and trip blanks; and
- The use of these samples in the context of data evaluation with details of the methods employed (including statistical methods) and of the criteria upon which the information generated will be judged.

The personnel responsible for collection of groundwater, soil, miscellaneous media, and petroleum spill remediation/verification samples will be familiar with standard sampling procedures and follow the appropriate protocol. Field records will be maintained in bound notebooks with numbered pages to document daily instrument calibration, locations sampled, field observations, and weather conditions. Each page will be dated and signed by the sampler. Each notebook will be numbered and a log of notebooks will be maintained by the project manager.

Prior to sampling, all equipment must be procured and accommodations for sample container delivery, and sample shipment must be made. The following is a list of general equipment that would be on hand for sampling events. Special equipment for each

sampling event is presented in the section describing that specific sampling event.

General Field Sampling Equipment

- Field Data Sheets
- Chain-of-Custody forms
- Engineers tape and folding ruler with 0.01 foot intervals
- Field Record Sheets
- Latex gloves
- Face-safety shield
- Tyvek coveralls
- Respirators
- Photoionization detector
- Bio-degradable phosphate free detergent
- Coolers and ice
- 55 gallon drums
- Sample bottles
- Aluminum foil
- Duct and filament tape
- Tap water
- Distilled water
- Laboratory grade methanol and hexane
- 5 gallon wash buckets
- Decontamination cloths
- Large disposal containers
- Large plastic sheets

3.1.2 Drilling Equipment and Techniques – Direct Push

Soil borings will be advanced with a Geoprobe direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe utilizes a four to five-foot macrocore sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four or five-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The macrocore sampler will be decontaminated between boring locations using an alconox and water solution.

Prior to initiating drilling activities, the Macrocores, drive rods, and pertinent equipment, will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.

Test borings will be advanced with 2-inch (or larger) inside diameter (ID) direct push Macrocore through overburden soils. Drilling fluids, other than potable water will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

During the drilling, a properly calibrated photoionization detector (PID) will be used to screen soil cores retrieved from the Macrocores.

3.1.3 Drilling Equipment and Techniques – Hollow Stem Auger

The drilling and installation of monitoring wells will be performed using a rotary drill rig which will have sufficient capacity to perform 4 1/4-inch inside diameter (ID) hollow-stem

auger drilling in the overburden, retrieve Macrocore or split-spoon samples. Equipment sizes and diameters may vary based on project-specific criteria. Any investigative derived waste generated during the advancement of soil borings and monitoring well installations will be containerized and characterized for proper disposal.

Prior to initiating drilling activities, the augers, rods, Macrocore, split spoons, and other pertinent equipment will be steam cleaned or washed with an alconox and water solution. This cleaning procedure will also be used between each boring. Steam cleaning activities will be performed in a designated on-site decontamination area. During and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used.

Test borings will be advanced with 4 1/4-inch (ID) hollow stem augers through overburden, driven by truck-, track-, or trailer-mounted drilling equipment. Alternative methods of drilling or equipment may be allowed or requested for project specific criteria, but must be approved by the NYSDEC. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

During the drilling, a (PID) will be used to screen soils retrieved from the split spoons or Macrocores.

Hollow stem auger advanced groundwater-monitoring wells typically utilize minimum 2-inch threaded flush joint PVC pipe with 0.010-in. slotted screen or pre-packed well screens. PVC piping used for risers and screens will conform to the requirements of ASTM-D 1785 Schedule 40 pipe. All materials used to construct the wells will be NSF/ASTM approved. Solvent PVC glue shall not be used at any time in the construction of the wells. The bottom of the screen shall be sealed with a treated cap or plug. No lead shot or lead wool is to be employed in sealing the bottom of the well or for sealant at any point in the well.

3.1.4 Groundwater Monitoring Well Construction / Completion

Artificial Sand Pack

When utilized, granular backfill will be chemically and texturally clean, inert, siliceous, and of appropriate grain size for the screen slot size and the host environment The sand pack will be installed using a tremie pipe, when possible (i.e., a tremie pipe may not fit into smaller, 2-in. diameter boreholes). When utilized, the well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending at least 2-ft. A pre-packed well screen may be used if pre-approved by the NYSDEC.

Bentonite Seal

A minimum 2-ft. thick seal will be placed directly on top of the sand pack, and care will be taken to avoid bridging. In the event that Site geology does not allow for a 2-ft. seal (e.g., only 1-ft. of space remains between the top of the sand pack and ground surface), the

remaining space in the annulus will be filled with bentonite.

Grout Mixture
Upon completion of the bentonite seal, the well may be grouted with a non-shrinking cement grout (e.g., Volclay R) mix to be placed from the top of the bentonite seal to the ground surface. The cement grout shall consist of a mixture of Portland cement (ASTM C 150) and water, in the proportion of not more than 7 gallons of clean water per bag of cement (1 cubic foot or 94 pounds). Additionally, 3% by weight of bentonite powder may be added.

Surface Protection
At all times during the progress of the work, precautions shall be used to prevent tampering with or the entrance of foreign material into the well. Upon completion of the well, a suitable cap shall be installed to prevent material from entering the well. Where permanent wells are to be installed, the well riser shall be protected by a flush mounted road box set into a concrete pad or locking well cap for stick-up wells. A concrete pad, sloped away from the well, shall be constructed around the flush mount road box or stick-up casing at ground level.

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap.

Surveying
Coordinates and elevations will be established for each monitoring well and sampling location. Elevations to the closest 0.01 foot shall be used for the survey. These elevations shall be referenced to a regional, local, or project-specific datum. The location, identification, coordinates, and elevations of the wells will be plotted on maps with a scale large enough to show their location with reference to other structures at each site.

Well Development
After completion of the well, but not sooner than 24 hours after grouting is completed, development will be accomplished using pumping, bailing, or surge blocking. No dispersing agents, acids, disinfectants, or other additives will be used during development or introduced into the well at any other time. During development, water will be removed throughout the entire water column by periodically lowering and raising the pump intake (or bailer stopping point).

Development water will be either properly contained and treated as waste until the results of chemical analysis of samples are obtained or discharged on Site as determined by the Site-specific work plans and/or consultation with the NYSDEC representatives on Site.

The development process will continue until removal of a minimum of 110% of the water lost during drilling, three well volumes; whichever is greater, or as specified in the RIWP. In the event that limited recharge does not allow for the recovery of all drilling water lost in the well or three well volumes, the well will be allowed to stabilize to conditions deemed representative of groundwater conditions. Stabilization periods will vary by project but

will be confirmed with the NYSDEC prior to sampling.

3.1.5 Groundwater Sample Collection

Groundwater samples will be collected using dedicated, disposable low flow pump. All other related sampling equipment will be properly decontaminated in the field. The following equipment will be available for sampling of monitoring wells in addition to the general sampling equipment list:

- Well Data Sheets
- Pump
- Electronic water level indicator
- Water Quality Meter
- Acid resistant gloves

The following activities will be completed before going into the field every day before the start of sampling:

1. Fill out appropriate section on Well Data Sheet for the wells to be sampled;
2. Obtain the sampling schedule for each well to be sampled;
3. Calibrate the Photoionization Detector (PID) with the calibration gas;
4. Determine the amount of sampling to be done for the day and prepare the necessary number of coolers;
5. Each well to be sampled will have designated coolers containing the pre-labeled, certified clean, sample bottles. The groundwater samples will be placed in the cooler labeled for the well from which they were taken. The bottle shall be labeled with large distinguishable letters, so that the groundwater samples will be placed in the proper cooler; and
6. Select the appropriate sample bottles for the day's sampling. The bottles shall be pre-marked with a sample parameter and preservatives. Reusable glass bottles will have been cleaned and prepared at the laboratory. The bottles for the various parameters to be analyzed from each well location will then be placed in a cooler.

The following steps describe the sample collection of groundwater:

1. Unlock and remove the well cap;
2. Test the air at the wellhead with the calibrated PID. If the gases from the well have caused the air in the breathing zone to read greater than 5 ppm, stop work and refer to the HASP. Record the reading on the Well Data Sheet;
3. In order to obtain a representative sample of the formation water, the well must be purged of the static water within the well. Prior to purging, the static water level within the well must be measured and the measurement recorded on the Well Data Sheet. To determine the amount of water necessary to purge, find the liquid column height in the well to determine the total volume (three liquid column borehole volumes) of liquid to be purged;
4. Purge the well; lower pump slowly into the well until it is below the water surface. In accordance with NYSDEC Guidance, purge waters will be disposed within the

vicinity of the respective well.

5. Record the amount of water purged in the field logbook and on the Well Data Sheet.
6. If the well goes dry during pumping, allow for full recovery (measure the water level) and then sample. If recovery takes more than twenty minutes, proceed to next well but return to sample within 24 hours.
7. Fill the appropriate sample bottles according to the sampling schedule for each well. While filling the sample bottles, record the well number, type, volume of container, and the preservatives used on the Ground Water Sampling Analyses form.
8. The preservatives for the various sampling parameters were previously added to the clean sample bottles by the laboratory. Some parameters may require additional special handling.
9. Volatile organics analyses samples must be free of air bubbles. When a bubble-free sample has been obtained, it must be immediately chilled.
10. Collect the matrix spike duplicates and trip blanks. Take samples according to sampling schedule presented in the Work Plan. Duplicate samples will include the field splitting of at least one groundwater sample for each sampling visit. This may require the extraction of twice the amount of water needed for duplication purposes. The creation of trip/field blanks and duplicates shall be performed at least once with each field batch with a minimum of once every twenty samples.
11. Record all pertinent information in field logbook and on the Well Data Sheet (include color, odor, sediment content of sample, etc.). Any situations at the site that have the potential to interfere with the analytical results should also be recorded here.
12. Lock well, inspect well site, and note any maintenance required.
13. Dispose of potentially contaminated materials in designated container for contaminated solids.

3.2 Field Measurement Techniques

Water Level Measurement - Water elevations will be taken on all wells prior to purging and sampling. All measurements will be taken within a 24-hour period to obtain consistent elevations and recorded on well data sheets. The procedure for measuring water levels in the monitoring wells is:

- Unlock and remove well cap;
- Test the atmosphere of the well with the calibrated PID. If the gases from the well have caused the air in the breathing zone to read greater than 5 ppm, stop work and refer to the HASP
- Measure water level to nearest 0.01 foot with a water level indicator (electronic).
- Water level indicators will be decontaminated before moving to next well. The tape and cable are decontaminated by washing in a bucket of distilled water-biodegradable phosphate free-detergent solution, followed by a rinse with distilled water.

Specific Conductance Measurement - A specific conductance meter will be field calibrated daily, using a 1M KCl reference solution, to 1413 µmhos/cm at 25 degrees centigrade.

Sample aliquots for specific conductance and temperature will be obtained directly from the sampling point in 100 ml disposable beakers.

Photoionization Detector (PID) - The PID will be calibrated daily (and more often as required by the manufacturer's data) prior to use in the field, using calibration test gases.

3.3 General Decontamination

The following procedures will be performed for the decontamination of exploration equipment, sampling equipment, and personnel after each drilling/sampling event:

Drill rig, backhoe, and excavator - The drill rig, direct-push rig, backhoe, and/or excavator will be cleaned prior to their entrance and exit of the site. Greases and oils will not be used on any down hole equipment during drilling or exploration activities.

Exploration equipment - To avoid cross contamination, use of a PID meter and cleaning between each sampling site will be employed on backhoe arms, buckets, hollow stem augers, casing drill rods, down-hole tools, and appurtenant equipment.

Split spoon sampler - The split spoon sampler will be scrubbed, cleaned, and put through a series of rinses between each sampling event. A number of split spoon samplers will be used so that one can be utilized for sampling while the others are being cleaned.

Reusable equipment - The following steps will be employed to decontaminate reusable equipment:

- Rinse equipment of soil or foreign material with potable water;
- Immerse and scrub equipment with bio-degradable phosphate-free detergent and potable water;
- Immerse and scrub in a potable water rinse without detergent;
- Immerse and scrub in deionized/distilled water;
- Saturate by spraying or immersion in laboratory-grade hexane;
- Air dry and wrap cleaned equipment in foil to carry to next monitoring site to prevent contamination of equipment during transfer; and
- The decontamination wash and rinse water will not be considered hazardous unless visual inspection or monitoring by the PID and other equipment indicate that contaminants may be present. The rinse waters can be discharged on-site if they are not contaminated. If contaminants are expected to be present, the rinsate waters should be placed in 55 gallon drums and stored on-site.

Disposable equipment - The following steps will be employed to decontaminate disposable equipment:

- Rinse with potable water;
- Remove all standing liquid from the piece of equipment;
- Dispose of the equipment in a dedicated container for contaminated solids; and

- Dispose of rinse water in 55 gallon drums if contaminants are found to be present.

Sample containers - upon filling and capping sample bottles, the outside of the bottle will be wiped off with a clean paper towel. These towels will be disposed of in a dedicated container for contaminated solids.

Personnel decontamination - The following procedures will be used to decontaminate sampling personnel.

- After each sampling event chemical resistant gloves will be disposed of in a dedicated container for contaminated solids;
- At the end of each sampling day, Tyvek™ coveralls will be disposed of in a dedicated container for contaminated solids;
- Boots will be rinsed off with water to remove mud, clay, or any other contaminants; and
- Personnel will be required to follow procedures outlined in the HASP.

4 Sample Management Plan

4.1 Sample Management

This Sample Management Plan provides procedures to document and track samples and results obtained during this work effort. A series of pre-printed forms with the appropriate information serves as a vehicle for documentation and tracking.

In order to accomplish this task, the documentation materials will include sample labels, sample characterization and Chain-of-Custody sheets, daily field reports, and a sample log.

Sample Label - A sample label will be completed for each sample obtained and will be affixed to the sample container. The label is configured in a way to address various types of mediums. Information on the label includes, at a minimum, client name, location, sample description, sample number, date, time, grab sample, composite sample, notes, and sampler's name.

Sample Characterization & Chain-of-Custody Sheet - All pertinent field information will be entered onto the sample characterization and chain-of-custody sheets including client name, sample ID, sample description, location of sample, sampling method, number of containers, container type, analysis required, and preservation. The monitoring well form has space allotted for entering information regarding the well including depth to water, well volume, sample pH, temperature, color, etc. The Chain-of-Custody section of the form will document the sample's pathway of sample shipment which will include names of persons delivering/receiving, dates, and times. The reverse side of this form will be used by the laboratory to document analysis performed on the sample. Copies of the completed forms will be retained by the Engineer and the analytical laboratory. The original sample characterization and Chain-of-Custody sheets will be submitted in the Remedial Investigation report along with the laboratory results.

Daily Field Reports - Daily activities will be recorded on the Inspection Report form. The purpose of this form will be to summarize the work performed on the site each day. The completed forms will be submitted to the Project Manager on a daily basis for short term site activity and on a weekly basis for site activities of a longer duration.

Sample Log - The sample log will be utilized to track each individual sample obtained at the site. The upper portion, "Field Identification" will be completed the day the sample is taken. The form will accompany the sample characterization and Chain-of-Custody form to the laboratory. Personnel at the laboratory will complete the middle section of this form and return it to the Engineer, who will use the document to track incoming results. The bottom of the sheet has space allocated to enter "Recommended Actions" based on laboratory results.

4.2 Sample Handling

Each collected sample will be dispensed into the appropriate sample containers for the

type of analysis to be performed. Appropriate sample preservatives will be added to the sample containers by the contracted analytical laboratory prior to the delivery into the field, except in cases where the sample preservative must be added after sample collection. All samples that require cool storage will be immediately placed in coolers with appropriate packaging materials so as to protect the breakage of sample containers during shipment. The sample coolers will be filled with cubed ice (no "Blue Ice") prior to leaving the sample collection location. In the instance that a local analytical laboratory is contracted, the samples will be hand delivered to the laboratory each sampling day. The chain-of-custody forms will be signed by the laboratory personnel picking up the samples and placed within the coolers. In the instance that an analytical laboratory is contracted which is not based locally and a common carrier is used for sample shipment, the chain-of-custody forms will be signed by the sampler and the carrier personnel and placed inside of the coolers. Careful packaging techniques will be used to prevent sample containers from breakage during shipment. Materials such as cardboard, foam wrap, or Styrofoam may be used as packaging materials. All samples will be delivered to the contracted analytical laboratory on the day they were collected and will be received by the laboratory within 24 hours of sample collection. The samples will be collected with sufficient time allowed at the end of the day for the analytical laboratory to properly process the sample chain-of-custody form.

Appendix D
Responsibilities of Owner and Remedial Party

Responsibilities

The responsibilities for implementing the Interim Site Management Plan ("ISMP") for the Former ANSCO Camera Factory Site (the "site"), number C704058 is the Remedial Party (RP), as defined below. The RP is:

Freewheelin ANSCO, LLC
215 Wilkinson Street
Syracuse, New York 13204

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf.

Nothing on this page shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the site.

Site Owner's Responsibilities:

1. The owner shall follow the provisions of the ISMP as they relate to future demolition, construction and excavation at the site.
2. The owner shall grant access to the site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the ISMP and assuring compliance with the ISMP.
3. The owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the owner shall notify the site's RP and the NYSDEC in accordance with the timeframes indicated in Section 1.3-Notifications.
4. In the event some action or inaction by the owner adversely impacts the site, the owner must notify the site's RP and the NYSDEC in accordance with the time frame indicated in Section 1.3- Notifications and (ii) coordinate the performance of necessary corrective actions with the RP.
5. The owner or RP must notify the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the site properties. 6 NYCRR Part 375 contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 2.4 of the ISMP. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html

Remedial Party Responsibilities

1. The RP must follow the ISMP provisions regarding any construction and/or excavation it undertakes at the site.
2. The RP shall report to the NYSDEC all activities required for remediation, operation, maintenance, monitoring, and reporting. Such reporting includes, but is not limited to, periodic review reports and certifications, electronic data deliverables, corrective action work plans and reports, and updated ISMPs.
3. Before accessing the site property to undertake a specific activity, the RP shall provide the owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the ISMP, a copy of any data generated during the site visit and/or any final report produced.
4. If the NYSDEC determines that an update of the ISMP is necessary, the RP shall update the ISMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the RP shall submit a copy of the approved ISMP to the owner(s).
5. The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the operation, maintenance, and monitoring of and reporting with respect to any remedial system (Engineering Controls). The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.html
6. The RP shall notify the NYSDEC of any damage to or modification of the systems as required under Section 1.3- Notifications of the ISMP.
7. Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the ISMP, the RP shall submit to the NYSDEC for approval an amended ISMP.
8. Any change in use, change in ownership, change in site classification (e.g., delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the ISMP and/or updated legal documents. The RP shall contact the Department to discuss the need to update such documents.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future site owners and RPs and their successors and assigns are required to carry out the activities set forth above.

Qualified Environmental Professional (QEP)

The following QEP is assigned to the site:

Daniel E. Riker
C&S Engineers
141 Elm Street
Buffalo, New York 14203
(716) 847-1630
driker@cscos.com

The Project Manager working under the QEP is:

Matthew L. Walker
C&S Engineers
499 Colonel Eileen Collins Blvd.
Syracuse, New York 13212
(315) 455-2000
mawalker@cscos.com

Environmental work may be completed by other qualified C&S Engineers staff under direction of the designated QEP.

The NYSDEC will be informed if changes are made to this list.

Appendix E
Metes and Bounds Description

U.S. Internal Revenue Stamps Affixed

M 280—Warranty Deed, Individual or Corporate

2.11

This Indenture made July 27 1995

Between ARC MACHINING & PLATING, INC., 100 Chesnut Street, Newark, New Jersey

party of the first part, and

LINKO TECHNOLOGY CENTER, INC., 6 Emma Street, Binghamton, New York

party of the second part.

Witnesseth *that the party of the first part, in consideration of* ---------- *Dollars ($ 1.00----------)* ----------ONE---------- *lawful money of the United States,* and other good and valuable consideration *paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.* All

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Binghamton, County of Broome and State of New York, comprised of the following (2) parcels, bounded and described as follows:

PARCEL I

ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, situate, lying and being on the southeasterly side of Emma Street in the City of Binghamton, County of Broome and State of New York, bounded and described as follows.

BEGINNING at a 5/8 inch rebar with cap on the existing southeasterly boundary of Emma Street at its intersection with the division line between the property now or formerly owned by Broome County Industrial Development Agency on the southwest, and the property now or formerly owned by Consolidated Rail Corporation on the northeast; running thence along said division line the following two (2) courses and distances: (1) on a curve to the right having a radius of 2,834.93 feet, an arc distance of 429. 63 feet to a 5/8 inch rebar with cap, said curve being subtended by a chord having a bearing of South 60 degrees 17 minutes 24 seconds East and a length of 429.21 feet, (2) thence South 55 degrees 54 minutes 36 seconds East, a distance of 78.35 feet to a 5/8 inch rebar with cap at its intersection with the division line between the property owned by said Broome County Industrial Development Agency on the northwest and the property now or formerly owned by General Millwork Supply, Inc. on the southeast, thence South 33 degrees 32 minutes 24 seconds West along the last mentioned division line and along the division line between the property owned by said Broome County Industrial Development Agency on the Northwest and the property now or formerly owned by Cutler Ice Company on the southeast, a distance of 303.10 feet to a 5/8 inch rebar with cap at its intersection with the division line between the property owned by said Broome County Industrial Development Agency on the northeast and the property now or formerly owned by Donald E. Cole on the southwest; thence North 54 degrees 04 minutes 03 seconds West along the last mentioned division line, along the division line between the property owned by said Broome County Industrial Development Agency on the northeast, and the property now or formerly owned by Russell H. Phelps on the southwest and along the division line between the property owned by said Broome County Industrial Development Agency on the northeast, and the property now or formerly owned by Gordon J. Gardner and Rosie Gardner on the southwest, a distance of 290.95 feet to a 5/8 inch rebar with cap, at its intersection with the division between the property owned by said Broome County Industrial Development Agency on the northeast and the property now or formerly owned by Stuart Sullivan, Victor Casiuk and Robert Wilson on the southwest; thence North 57 degrees 47 minutes 35 seconds West, along the last mentioned division line, a distance of 205.01 feet to a 5/8 inch rebar with cap at its intersection with said existing southeasterly boundary of Emma Street; thence North 31 degrees 11 minutes 51 seconds East along the last

mentioned boundary, a distance of 268.03 feet to the point or place of beginning. Containing 144,778 square feet or 3.3237 acres, more or less.

SUBJECT TO conditions contained in a sidetrack agreement between The Delaware, Lackawanna and Western Railroad Company and General Aniline and Film Corporation, Agfa-Ansco Division, dated January 7, 1943.

SUBJECT TO conditions contained in a sidetrack agreement between The Delaware, Lackawanna and Western Railroad Company and General Aniline and Film Corporation, Ansco Division, dated May 1, 1947.

SUBJECT TO conditions contained in a Lease Agreement between The Delaware, Lackawanna and Western Railroad Company and General Aniline & Film Corporation, Agfa-Ansco Division, dated January 8, 1943.

SUBJECT TO a permanent easement to the State of New York for the Emma Street grade crossing elimination recorded in the Broome County Clerk's Office on August 15, 1936 in Book of Deeds 467 at page 51.

PARCEL II

ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, situate, lying and being on the northwesterly side of Emma Street in the City of Binghamton, County of Broome and State of New York, bounded and described as follows:

BEGINNING at a 5/8 inch rebar with cap on the existing northwesterly boundary of Emma Street at its intersection with the division line between the property now or formerly owned by Broome County Industrial Development Agency on the northeast and the property now or formerly owned by Gary J. Patrick on the southwest, said rebar being North 31 degrees 11 minutes 51 seconds East, a distance of 175.00 feet measured along said boundary from a railroad monument at its intersection with the existing northeasterly boundary of Main Street; running thence North 59 degrees 31 minutes 09 seconds West along said division line a distance of 157.60 feet to 5/8 inch rebar with cap at its intersection with the division line between the property owned by said Broome County Industrial Development Agency on the southeast and the property now or formerly owned by J. K. L. Realty on the northwest; thence North 30 degrees 10 minutes 40 seconds East along the last mentioned division line, a distance of 241.64 feet to a 5/8 inch rebar with cap at its intersection with the division line between the property owned by said Broome County Industrial Development Agency on the southwest and the property now or formerly owned by Consolidated Rail Corporation on the northeast; thence southeasterly along the last mentioned division line, on a curve the right having a radius of 2,834.93 feet, an arc distance of 163.66 feet to a masonary nail in concrete sidewalk at its intersection with said existing northwesterly boundary of Emma Street, said curve being subtended by a chord having a bear ing of South 67 degrees 11 minutes 24 seconds East and a length of 163.64 feet; thence South 31 degrees 11 minutes 51 seconds West along the last mentioned boundary, a distance of 263.50 feet to the point or place of beginning. Containing 40,499 square feet or 0.9297 acre, more or less.

SUBJECT TO a permanent easement to the State of New York for the Emma Street gradecrossing elimination dated January 10, 1935 and recorded in the Broome County Clerk's Office in Liber 447 of Deeds at page 255 on April 10, 1935.

Being the same premises conveyed to ARC Machining & Plating, Inc. by Referee's Deed dated June , 1995 and recorded in the Broome County Clerk's Office on in Liber of Deeds at page

The property described herein does not constitute all or substantially all of the assets of the Grantor Corporation.