B&B Engineers & Geologists of new york, p.c.

an affiliate of Geosyntec Consultants

FINAL (100%)
INTERIM REMEDIAL MEASURE #4
WORK PLAN

FORMER SPERRY REMINGTON SITE – NORTH PORTION
777 SOUTH MAIN STREET
CITY OF ELMIRA, CHEMUNG COUNTY, NY
NYSDEC PROJECT C808022

Prepared for
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
Avon, New York 14414-9519

Prepared by
Geosyntec Consultants, Inc. and Its Affiliate
B&B Engineers & Geologists of New York, P.C.
10211 Wincopin Circle, 4th Floor
Columbia, Maryland 21044

Project Number MN0832I
Document Number MD20059

30 April 2020; Revised 19 May 2020

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS

Acronym	Definition
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
BCA	Brownfield Cleanup Agreement
BCP	Brownfields Cleanup Program
bgs	below ground surface
CAMP	Community Air Monitoring Plan
COPC	Contaminant of Potential Concern
CPP	Community Participation Plan
CQA	Construction Quality Assurance
Cu YD	Cubic Yard
E&S	Erosion and Sedimentation
EC(s)	Engineering Controls
ECSD	Elmira City School District
EHS	Elmira High School
ERC	Environmental Recovery Corporation
EWB	Elmira Water Board
FFC	Football Field Complex
ft	Feet
HASP	Health & Safety Plan
IC (s)	Institutional Controls
IRM	Interim Remedial Measure
LOD	Limit of Disturbance
mg/kg	milligrams per kilogram
mph	miles per hour
MSA	Material Staging Area
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health

Acronym	Definition
NYSDOT	New York State Department of Transportation
OSHA	Occupational safety and Health Administration
PCB	Polychlorinated Biphenyl
PDI	Pre-design Investigation
PFAS	Perfluoroalkyl Substances
PID	Photo Ionization Detector
PM-10	Particulate Matter that are less than ten (10) micrometers in size
PUF	Poly-Urethane Foam
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RECON	Remedial Construction Services, L.P
RI	Remedial Investigation
RI	Remedial Investigation
SC	Soil Characterization
SCFM	Standard Cubic Feet per Minute
SCO	Soil Cleanup Objective
SDCMP	Soil/Dust Control and Monitoring Plan
SMP	Site Management Plan
SOE	Support of Excavation
SOP(s)	Site Operations Plans
STCC	Southern Tier Commerce Center
SVOC(s)	Semi-volatile organic compounds
SWPPP	Storm-Water Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TSCA	Toxic Substances Control Act
USEPA	United States Environmental Protection Agency
VOC(s)	Volatile organic compounds

Certification

I Aron Krasnopoler certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Final (100%) Interim Remedial Measures #4 Work Plan for the Former Sperry Remington Site – North Portion dated 19 May 2020 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).

Aron Krasnopoler, P.E.

5/19/2020

1. INTRODUCTION

1.1 Background

On behalf of Unisys Corporation (Unisys), Geosyntec Consultants, Inc. and its New York affiliate B&B Engineers & Geologists of New York, P.C. (collectively Geosyntec) are submitting this Interim Remedial Measure #4 (IRM #4) Work Plan for the Former Sperry Remington Site – North Portion (Site #c808022) (Site) in Elmira, New York. On 26 April 2016, Unisys applied to enter the Site into the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program (BCP) with the consent of Elmira City School District (ECSD). NYSDEC gave an initial determination that the BCP application was complete on 10 June 2016 and received public comments until 22 July 2016. The Brownfields Cleanup Agreement (BCA) for the Site was executed on 23 March 2017. Unisys is proposing an IRM at the Site in accordance with the BCA.

Prior to the BCA, an Order on Consent and Administrative Settlement (Order) with the NYSDEC for the Site approved by NYSDEC on 7 July 2014. Unisys conducted Site Characterization (SC) activities at the Site in accordance with the Order, the Site Characterization Work Plan (SC Work Plan) dated 29 July 2014 (revised 27 October 2014) and subsequent addenda dated 22 May 2016, 8 January 2016, 9 August 2016, 3 February 2017, and 16 March 2017.

The Site is located at the Elmira High School (EHS) property (formerly known as Southside High School), 777 South Main Street in Elmira, Chemung County, New York (see **Figure 1**). The EHS property is approximately thirty-four (34) acres and as shown on **Figure 2** is bounded by South Main Street to the west, the Southern Tier Commerce Center (STCC) to the south, the Consolidated Rail Corp. property to the east and vacant land to the north. Miller Pond is located approximately one thousand (1,000) feet to the east. EHS property has been the subject of multiple environmental investigations between 1998 and 2019. In 2003, New York State Department of Health (NYSDOH) completed a Health Consultation for Southside High School (now EHS) that recommended that ECSD develop a written soil management plan to "minimize potential public exposures to contaminated subsurface materials…"

In June 2009, ECSD prepared an Environmental Management Plan (EMP) in response to a request from the State Education Department (SED) to formalize environmental management operations and practices at EHS. NYSDEC and NYSDOH provided technical assistance to SED in development and review of the EMP. The intent of the EMP is to advise construction personnel and the general community regarding the potential for exposure to Compounds of Potential Concern (COPC) that may be present in soil, groundwater and soil vapor on EHS property. In April 2019, Unisys submitted a draft interim Site Management Plan (SMP) for agency review to address institutional controls and engineering controls that have been implemented as interim measures until a Site remedy has been selected. NYSDEC approved the interim SMP on 20 December 2019. The interim SMP incorporates and replaces the EHS EMP.

1.2 Previous Site Characterization and Remedial Activities

In June 2013, NYSDEC identified potential areas of concern (PAOCs) at the EHS property based on information related to historical use of the EHS property and previous environmental investigations results. The SC Work Plan dated July 2014 and revised October 2014 was submitted to NYSDEC to collect data to document environmental conditions at the Site as it relates to PAOCs, and historical information. Implementation of the SC Work Plan was expedited in order to complete most field activities and obtain preliminary results prior to start of classes at EHS on 3 September 2014. Verification of previous analytical results in surface (zero to two [0-2] inches below ground surface [bgs][1]) and shallow sub-surface (0.17 to two [2] feet bgs) soils were conducted in July 2014 in order to confirm that COPCs did not pose an unacceptable level of risk to human health and the environment prior to the start of classes. NYSDEC and NYSDOH provided oversight and review during field activities. Preliminary, un-validated analytical results for polychlorinated biphenyls (PCBs) and semi-volatile organic compounds (SVOCs) in surface soils were submitted to NYSDEC and NYSDOH on 31 July 2014. Additional surface, shallow subsurface and subsurface (greater than 2 feet bgs) soil investigations, groundwater investigation and former combined storm sewer inspections for Site Characterization were conducted at the Site between August and October 2014. The SC Data Report was submitted to NYSDEC on 6 February 2015 following data validation completion on 10 November 2014.

The SC Data Report identified PCBs, polycyclic aromatic hydrocarbons (PAHs), and metals as COPCs at the Site based on comparison to Restricted Residential Soil Cleanup Objectives[2] (SCOs). A meeting to discuss analytical results for PCBs in soils was held on 17 March 2015 among ECSD, NYSDOH, NYSDEC and Unisys. NYSDOH and NYSDEC presented results of an evaluation that included PCB analytical data from samples collected from zero to two (0-2) feet bgs between 2000 and 2014 and vegetative cover conditions with respect to preventing potential exposures to shallow soils. According to NYSDOH, 2014 surface soil data were consistent with surface soil data previously collected by NYSDEC/NYSDOH and do not alter conclusions or recommendations presented in the 2003 Health Consultation prepared by NYSDOH. The 2003 Health Consultation also stated that well-established and maintained grass cover minimizes human exposures to soil by limiting direct contact with the soil. As a precaution, a temporary short-term response action (STRA) was undertaken by Unisys to evaluate cover systems in areas where PCBs exceed one (1) milligram per kilogram (mg/kg) in surface or shallow subsurface soils at the EHS and additional protective measures were implemented to prevent potential exposure to shallow soils in unpaved areas. A report on STRA activities was submitted to NYSDEC on 15 May 2015.

The SC Data report included recommendations for additional delineation of PCBs in soils from select areas of the Site. SC Work Plan Addendum #1 was submitted to NYSDEC on 22 May 2015 with responses to NYSDEC comments on 2 July 2015. Field activities for SC Work Plan Addendum #1 were conducted between 13 July and 7 August 2015. Subsurface soil borings were

[1] Below ground surface is interpreted as below vegetative cover.
[2] 6 NYCRR Subpart 375

installed to delineate the horizontal and vertical extent of PCBs in subsurface soils. A summary of field activities and analytical results for SC Work Plan Addendum #1 were presented in SC Work Plan Addendum #2 dated 8 January 2016 along with plans for additional delineation of PCBs in soils and evaluation of potential PCB migration in groundwater. Field activities for SC Work Plan Addendum #2 were conducted between 29 February and 24 March 2016. A summary of field activities and analytical results for SC Work Plan Addendum #2 were provided in SC Work Plan #3 dated 9 August 2016 along with plans for additional delineation of COPCs in soils and evaluation of potential PCB migration in groundwater. Other SC activities addressed 2 June 2015 comments from NYSDEC on the SC Data Report requesting evaluation of intermediate groundwater east of the gymnasium, characterization of volatile organic compounds (VOCs) in groundwater in the vicinity of the F-Wing and catch basin inspection and sampling. Field activities for SC Work Plan Addendum #3 were conducted between 22 August and 28 September 2016. A summary of field activities and analytical results for SC Work Plan Addendum #3 were in SC Work Plan #4 dated 3 February 2017 along with plans for additional delineation of PCBs in soils. Field activities for SC Work Plan Addendum #4 were conducted between 6 and 16 February 2017. Review of data received indicated the need for additional data collection to complete a design of the IRM#1 that was conducted at the Site in summer 2017. Plans for additional delineation of PCBs in soils were submitted as SC Work Plan Addendum #5 on 16 March 2017. Field activities for SC Work Plan Addendum #5 were conducted between 20 and 24 March 2017 and with modifications between 10 and 13 April 2017 and 15 and 23 May 2017. A SC Report was submitted to NYSDEC on 17 May 2017 that described SC and remedial activities conducted to date. NYSDEC provided comments on the SC Report in August 2018 and a revised SC Report was submitted to NYSDEC on 28 March 2019.

IRM #1 was conducted between 19 June and 8 September 2017 for removal of PCB-impacted soils in the vicinity of the EHS Tennis Courts (North Excavation) and Main Parking Lot (South Excavation) in accordance with the IRM (#1) Work Plan dated 11 July 2017 and approved by NYSDEC on 10 August 2017. IRM construction in the South Excavation was limited to excavation to four (4) feet below ground surface (ft bgs) in the main parking lot and to two (2) ft bgs in areas to the east due to the schedule for ECSD capital improvements in 2017. A soil cover system consisting of two (2) feet of imported fill approved by NYSDEC for restricted residential use was installed (**Figure 3**). Excavated soils approved by NYSDEC for reuse were used for backfill below the soil cover system. Amendment #1 to IRM #1 Work Plan dated 11 August 2017 presented plans for surface soil removal in the southwest portion of the football field and high jump pit area for the purpose of minimizing potential exposure to PCBs in those areas. Activities associated with the football field and high jump pit area were completed in September 2017. IRM #1 activities are documented in a Construction Completion Report (CCR) submitted to NYSDEC on 30 April 2018, and revised on 28 February 2019.

IRM #2 was conducted between 22 June and 25 October 2018 for removal of PCB-impacted soils in the vicinity of the EHS Rear Parking Lot in accordance with the Revised Final IRM #2 Work Plan dated 13 July 2018 and approved by NYSDEC on 25 July 2018 and incorporated Amendment

#1 dated 3 July 2018, Amendment #2 dated 17 July 2018, and Amendment #3 dated 18 January 2019. IRM #2 activities are documented in a CCR submitted to NYSDEC on 15 March 2019.

IRM #3 was conducted between 28 June and 14 October 2019 to continue soil removal in the IRM #1 South Excavation in accordance with the Revised Final 2019 IRM Work Plan dated 18 June 2019 and incorporated Amendment #1 dated 9 July 2019 and Amendment #2 dated 16 August 2019. NYSDEC gave conditional approval of the 2019 IRM Work Plan on 13 June 2019 and for construction drawings and plans on 17 June 2019. IRM #3 activities are documented in a CCR submitted to NYSDEC on 14 February 2020.

1.3 Purpose

The purpose of IRM #4 is to conduct soil removal in the IRM #1 South Excavation adjacent to the EHS building in anticipation of remedial activities and capital improvement in the EHS Football Field Complex (FFC) anticipated in the beginning of Fall 2020 and Spring 2021, respectively. Unisys has identified Site soils with concentrations of total PCBs and metals that may be considered hazardous waste. A non-emergency IRM for soil removal is applicable to mitigate environmental or human exposures prior to capital improvement construction. Soil removal will be conducted with following cleanup goals:

- COPC concentrations in soils greater than or equal to Restricted Residential SCOs at depths less than two (2) feet bgs;
- Total PCB concentrations greater than or equal to ten (10) mg/kg at depths between two (2) feet bgs and fourteen (14) ft bgs
- Total PCB concentrations greater than or equal to 3.2 mg/kg within the vadose zone and below the water table.[3], where PCB have been detected above groundwater standards i.e. below fourteen (14) ft bgs;
- Metal[4] concentrations greater than twenty (20) times the equivalent toxicity characteristic of hazardous waste with exception of lead; and
- Lead concentrations greater than 200 times the equivalent lead toxicity characteristic, i.e. 1,000 mg/kg[5].

This IRM Work Plan presents a scope of work that includes excavation, soil management, backfilling, off-Site transport and disposal and site restoration. The IRM Work Plan also addresses

[3] Depth to water was measured at 16.1 ft bgs at monitoring well MW-15S in September 2016 with a groundwater elevation of 839.62 feet above mean sea level (ft msl).
[4] Resource Recovery and Conservation Act (RCRA) list of eight (8) metals (RCRA 8 metals) for which toxicity characteristics are based on toxicity characteristic leach procedure (TCLP) results: arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.
[5] Based on NYSDEC experience, lead concentrations of 1,000 mg/kg or greater are more indicative of soils having toxicity characteristics of hazardous waste.

temporary construction facilities, controls, health and safety, and confirmation sampling in accordance with NYSDEC *Technical Guidance for Site Investigation and Remediation* (DER-10).

1.4 Pre-Design Investigation

The purpose of completing Pre-Design Investigation (PDI) activities is to provide sufficient data to complete design of IRM #4. PDI data supplemented previously collected data associated with IRM #1 and Remedial Investigation (RI) of the Site as a whole. The IRM #1 South Excavation was characterized during SC activities between July 2014 and May 2017. Additional investigations for the FFC were conducted between July 2018 and May 2019. Unisys conducted RI and PDI activities at the FFC area of the Site in July 2018 (RI), August 2018 (PDI) October/November 2018 (PDI Amendment #2) and April/May 2019 (PDI Amendment #3) in accordance with the BCA. These activities were conducted in accordance with the FFC RI / PDI Activities Work Plan dated 17 July 2018, FFC PDI Activities Work Plan Amendment dated 23 August 2018, FFC PDI Activities Work Plan Amendment #2 dated 12 October 2018, FFC PDI Activities Work Plan Amendment #3 dated 17 May 2019 and FFC PDI Activities Work Plan Amendment #4 dated 8 October 2019.

Results for PCB analyses of shallow subsurface soil samples from are summarized on **Table 1** and compared to the Restricted Residential SCO of one (1) mg/kg. Results for PCB analyses of subsurface soil samples from between two (2) and fourteen (14) feet bgs are summarized on **Table 2** and compared to a screening value of ten (10) mg/kg for delineation. Total PCB concentrations are also compared to the limit of fifty (50) mg/kg for PCB remediation wastes as defined in 40 CFR §761.3 Toxic Substances Control Act (TSCA). TSCA limits are considered in PCB delineation for identification of those soils that may be classified as hazardous waste containing PCBs as defined in 6 NYCRR Part 371.4 (e). Soils from zero (0) to two (2) feet bgs were removed during IRM #1 and replaced with imported fill as a soil cover system (**Figure 3**). During IRM #3, PCBs were detected in post-excavation sidewall samples in shallow subsurface soils between two (2) inches and two (2) feet bgs outside of the soil cover system. **Figures 4** to **9** present the extent of total PCBs in subsurface soils at two-foot (2 ft) intervals to a total depth of fourteen (14) feet bgs.

PCBs were detected in monitoring well MW-15S in September 2016 above the groundwater quality standard of 0.09 micrograms per liter (µg/L) with total and dissolved total PCB concentrations of 0.48 and 0.59 µg/L, respectively. Analytical results from subsurface soil samples from between fourteen (14) feet bgs and the water table depth of approximately sixteen (16) ft bgs[6] are summarized on **Table 3.** Total PCB concentrations in soil are compared to the Protection of Groundwater SCO for total PCBs of 3.2 mg/kg for delineation and to the TSCA limit of fifty (50) mg/kg. **Figure 10** presents the extent of total PCBs in subsurface soils between fourteen (14) and sixteen (16) ft bgs.

[6] Depth to water as measured at monitoring well MW-15S in September 2016

PDI activities included soil characterization for other COPCs including metals, SVOCs and VOCs. Analytical results for metals, SVOCs, and VOCs in surface and shallow subsurface soils including are presented on **Table 4** and compared to Restricted Residential SCOs. Analytical results for metals from subsurface soil samples from below two (2) bgs are summarized on **Table 5** and are compared to a screening values for potentially hazardous waste. **Figures 11** to **18** present the extent of metals in subsurface soils at two-foot (2 ft) intervals to a total depth of sixteen (16) feet bgs. Lead was detected above the proposed cleanup goal of 1,000 mg/kg within the IRM #4 area. Detections of other RCRA 8 metals were also above the proposed cleanup goals.

Analytical results for SVOCs and VOCs from subsurface samples from below two (2) feet bgs are summarized in **Table 6**. The concentrations of total PAHs do not exceed 100 mg/kg in any sample within the IRM #4 area.

1.5 Report Organization

The remainder of this report is organized into the following sections:

- Section 2 – Scope of Work;
- Section 3 – Permits and Temporary Controls;
- Section 4 – Health and Safety;
- Section 5 – Institutional Controls; and
- Section 6 – Schedule and Deliverables.

2. SCOPE OF WORK

The IRM scope of work is presented in the Construction Drawings (**Appendix A**) and Construction Specifications (**Appendix B**). The following sections summarize key elements of the work.

2.1 Pre-Construction Meeting

Prior to invasive construction activities, a pre-construction meeting will be held with NYSDEC and ECSD to review the scope of work. Existing conditions will be documented during a site inspection in order to establish conditions for site restoration.

2.2 Site Preparation

Upon mobilization, the IRM contractor will establish temporary facilities and controls including temporary fencing and erosion and sedimentation (E&S) controls. A Material Staging Area (MSA) to stockpile soils for potential reuse or off-Site transport and non-hazardous disposal and a TSCA Accumulation Area to accumulate hazardous waste for off-Site transport and disposal will be constructed in the North Athletic Field (NAF) as shown on Sheet 3 of the Construction Drawings (**Appendix A**). Temporary haul roads will be constructed between the excavation and the stockpile areas. Portions of the temporary haul road will be constructed on the adjacent Norfolk Southern Railway Company (NSRC) property pending amendment of the current Environmental Right of Entry (EROE)[7]. Concrete pavement within the limit of excavation as shown on the Construction Drawings (**Appendix A**) will be demolished prior to excavation and staged in the MSA for off-Site disposal with non-hazardous soils pending facility approval.

2.3 Demolition

The EHS Grandstands including the restrooms located beneath the bleachers and the press box located on top of the bleachers will be demolished in order to provide access to complete the FFC PDI in that area. The IRM contractor will conduct a hazardous materials survey and prepare a demolition plan. The demolition plan will include 1) disconnection of utilities, 2) site access and temporary controls; 3) demolition; 4) salvage; 5) disposal; and 6) cleanup. The hazardous material survey will be used to identify hazardous materials (e.g., asbestos, PCBs) that may be present in construction debris for appropriate segregation prior to disposal. A pre-demolition meeting will be held with ECSD and NYSDEC to review demolition procedures.

After the completion of demolition, the EHS Grandstand area will be investigated as part of the FFC PDI to determine the nature and extent of COPCs. COPCs present at concentrations above screening criteria will be addressed in a future IRM.

[7] NSRC granted Unisys EROE for BCP RI activities on 5 February 2019. Unisys will seek to amend the existing EROE to include IRM activities.

2.4 Excavation and Soil Management

Soils will be excavated to meet cleanup goals presented in Section 1.3. Site Characterization and PDI data have been used to determine the limits of excavation to achieve those cleanup goals and the limits of PCB remediation waste within the excavation in two-foot intervals as shown on **Figures 3** to **10**. An overall excavation grading plan is presented in **Figure 19**. Excavation depths of four (4) feet or greater will be achieved using excavation side slopes of two (2) horizontal to one (1) vertical (2H:1V) where feasible. The total excavation volume is approximately 6,500 cubic yards. Temporary support of excavation (SOE) consisting of soldier piles and lagging, or Engineer-approved alternative, will be installed to support existing infrastructure including the EHS building foundation and storm sewer lines as shown on the Construction Drawings in **Appendix A**. SOE design analysis is provided in **Appendix C**. Additional SOE will be provided by struts to be installed between the solider pile walls to be installed between the north side of the EHS A-Wing and the storm sewer and tiebacks to be installed with the soldier pile wall to be installed on the west side of the EHS A-Wing.

Subsurface utilities within the excavation including electric, water, data communication and storm sewer will be removed and replaced in-kind during backfill. No active utilities will be permanently abandoned. Water, electric and data communication services to the EHS building will be maintained during IRM construction in coordination with ECSD. This will include providing a temporary water service connection between the existing water line on the east side of the EHS building and the water meter located in the EHS A-Wing as shown on the Construction Drawings (**Appendix A**). Submersible pumps will be installed in upstream catch basins to collect storm water and discharge it to downstream catch basins as shown on the Construction Drawings in order to maintain stormwater management during construction. Pumping requirements are based on modeling of stormwater drainage (**Appendix D**). Horizontal and vertical extents of waste excavations and the location, type, and dimensions of existing underground utilities prior to demolition will be surveyed by a NYS licensed surveyor to document as-built conditions.

Excavation will require the removal of soil cover consisting of NYSDEC-approved imported soil above a demarcation layer. Previously imported soil from above the demarcation will removed and stockpiled for reuse without characterization. Soils outside of and below the soil cover system will be managed in two-foot intervals as shown on **Figure 3** to **10**:

- Layback soils outside of the extent of the soil cover system or areas being excavated to achieve IRM cleanup will be stockpiled in the MSA for chemical testing for potential reuse as backfill between two (2) and fourteen (14) ft bgs. Soils that overlay PCB remediation waste will be staged on poly sheeting within the work area for testing prior to transport to the MSA. PCB analyses will be expedited (i.e. 1-day turnaround time). If total PCBs are less than fifty (50) mg/kg, NYSDEC approval will be requested to transfer those overlay soils to the MSA;

- Soils with total PCB concentrations greater than ten (10) mg/kg and less than fifty (50) mg/kg will be stockpiled in the MSA pending waste profile approval for transport and off-Site disposal as non-hazardous waste.
- Soils from within the limits of PCB remediation waste (greater than or equal to fifty (50) mg/kg) will be temporarily stored in a TSCA Accumulation Area prior to loading in the TSCA Loading Area for off-site disposal as hazardous waste; and
- Soils from at or near the water table with total PCB concentrations greater than 3.2 mg/kg and less than fifty (50) mg/kg will be managed as PCB remediation waste and will be accumulated in a TSCA Accumulation Area prior to loading in the TSCA Loading Area for off-site disposal.

Soils identified for disposal have been sampled for waste characterization with analyses for pH, cyanide, sulfide, flash point, toxicity characteristic leaching procedure (TCLP) VOCs, SVOCs, herbicides and pesticides, and metals. Waste characterization sample locations are shown on **Figures 11** to **18**. **Tables 7A** and **7B** presents a summary of waste characterization results for TCLP and total analyses respectively. Waste characterization data will be used to develop profiles for those soils that will be submitted to the receiving facility for approval prior to IRM construction.

Temporary transit roads will be constructed over non-TSCA areas for TSCA equipment to move between TSCA excavation areas and the TSCA accumulation area and vice versa.

The native soil horizon will be documented during these excavations. Confirmation sampling of excavation side walls and bottom will be conducted as the excavation proceeds in accordance with Section 5.4 (b) of DER-10 as follows:

- one sample from the bottom of each sidewall for every thirty (30) linear feet of sidewall; and
- one sample from the excavation bottom for every nine hundred (900) square feet of bottom area.

Sidewall samples will be collected at two-foot (2-ft) intervals consistent with soil management as shown on the Construction Drawings. If a depth cannot be reached, then a sidewall sample will be collected for the excavation depth achieved. Confirmation samples will be submitted to the fixed laboratory for expedited (i.e. 1-day turnaround time) analyses for PCBs and target analyte list (TAL) metals in accordance with the Quality Assurance Project Plan (QAPP) included as **Appendix E**. Unvalidated data will be available for NYSDEC review approximately three (3) days after sample collection. Upon receipt of unvalidated data, analytical results will be compared to the IRM cleanup goals. Procedures for excavation step-out and step-down based on unvalidated confirmation sampling results are presented in **Table 8**. Decisions regarding step-out or step-down of the excavation will be made in consultation with NYSDEC and ECSD. It is the intent of IRM #4 to complete soil removal on the western and southern limits of excavation in order to avoid future disturbance of the areas adjacent to the EHS main entrance and the EHS A-Wing. Therefore, step-out of the excavation may

be limited in other areas in order to complete IRM #4 on schedule and return the work area to ECSD for the 2020-21 school year. Documentation samples will be collected from sidewalls adjacent to the EHS building. As shown on **Figures 3** to **10** and **Figures 11** to **18**, IRM #4 does not include areas with detections of PCBs and metals above IRM cleanup goals to the north of the work area. Those areas will be addressed in a future IRM. Areas where confirmation and documentation samples will be collected are shown on **Figure 19**. For areas where the temporary SOE is required, documentation samples will be collected from the exposed excavation sidewall before lagging is placed on the soldier pile wall. Proposed confirmation and documentation samples are identified in blue on the Construction Drawings (**Appendix A**). Confirmation and documentation sample locations will be biased to areas with the highest concentrations of COPCs. NYSDEC will approve final sample locations and may request additional samples.

As shown on **Figures 3** to **10**, pre-delineation data have been used to determine the limit of PCB remediation waste, i.e. TSCA excavations. Confirmation TSCA sidewall and bottom samples will be collected where pre-delineation data do not follow DER-10 Section 5.4(b) requirements. **Table 10** presents the area of TSCA bottom areas shown on **Figures 3** to **10**, the required number of bottom samples to meet DER-10 requirements of one (1) sampler per 900 square feet, the number of pre-delineation samples within the TSCA bottom area with a minimum sample recovery of 50%, and the number of confirmation TSCA bottom samples required. Confirmation TSCA sidewall samples will be collected where the distance between pre-delineation samples used to determine the TSCA sidewall within the excavation is greater than thirty (30) feet. Pre-delineation and proposed TSCA sidewall and bottom samples are identified in orange on the Construction Drawings (**Appendix A**).

It is anticipated that ground water may be encountered at or around sixteen (16) ft bgs. Groundwater entering the excavation will be managed using methods described in Section 3.4. Previous well installations have encountered a glacial outwash layer has been encountered between sixteen (16) and thirty-six (36) ft bgs during previous soil investigations and installation of monitoring well MW-15D and EHS production well. Boring logs are provided in **Appendix F**. Flow tests of the EHS production wells in 2000 provided in **Appendix F** reported production of 570 and 602 gallons per minute (gpm) with 1.96 and 2.63 feet of drawdown, respectively. If bottom sample results at the water table exceed the cleanup goal of 3.2 mg/kg total PCBs, the necessity for stepping down the excavation would be evaluated based on:

- Unvalidated bottom sample results;
- Pre-design soil analytical data from “deep” excavations (near water table);
- Lithology (e.g. gravel, cobbles vs. sand, silt); and
- Infiltration rate as an indicator of transmissivity.

If further excavation below the water table is required, ground water will be managed using water management methods described in Section 3.4. Glacial outwash conditions may limit the feasibility of dewatering for further excavation at depth within schedule. Drawdown during dewatering will be observed for four (4) hours to assess its effectiveness. If the observed drawdown is ineffective

to allow deeper excavation to proceed, NYSDEC will be advised that the technical practicality of dewatering is considered low and that deeper excavation should be halted.

Additional confirmation samples may be collected based on visual or olfactory observations or field screening during excavation. A qualified environmental professional (QEP) will request analyses of those samples for COPCs (not limited to PCBs) in accordance with the QAPP (**Appendix E**) and in consultation with NYSDEC. All confirmation data will be submitted to NYSDEC's EquIS database in accordance with NYSDEC requirements. Confirmation sample location and elevation will be surveyed by a NYS licensed surveyor to document as-built conditions.

Boring refusal was encountered at various locations during SC and PDI activities as shown on **Figure 20.** This refusal may be due to rubble or historic subsurface structures shown on **Figure 20**. NYSDEC will be notified immediately of any previously unidentified subsurface structures encountered within the excavation. Unidentified structures encountered will be characterized to determine active function, contents and integrity for removal. Structure type, location and elevation will be surveyed by a NYS licensed surveyor. Structures will be demolished and removed if feasible and debris will be stockpiled and characterized for off-Site disposal based the surrounding soils in which they are encountered. Structures encountered in hazardous or PCB remediation waste will be cleaned and sampled for disposal as non-hazardous waste, if appropriate. If removal is not feasible during IRM #4 construction, such structures shall be left in place and documentation samples will be collected from around the structure. Documentation samples will be analyzed for PCBs, TAL metals, SVOCs and VOCs and sample locations will be surveyed by a NYS licensed surveyor to document as-built conditions.

2.5 Stockpile Methods

Upon excavation, excavated soils will be stockpiled in the following categories based on potential for reuse or waste category including:

- Imported fill approved by NYSDEC for use as soil cover above a demarcation layer (approximately 3,200 CY);
- Soils previously approved by NYSDEC for reuse as backfill below a demarcation layer (approximately 3,700 CY);
- Uncharacterized soils with the potential for reuse as backfill below two (2) ft bgs in accordance with Section 5.4 of DER-10;
- Soils with total PCB concentrations greater than ten (10) mg/kg and less than fifty (50) mg/kg that will be transported off-Site for disposal as non-hazardous waste (approximately 1,550 CY); and
- Soils with total PCB concentrations greater than or equal to fifty (50) mg/kg that will be transported off-Site for disposal as hazardous waste (approximately 900 CY); and

- Soils from near the water table with total PCB concentrations greater than or equal 3.2 mg/kg and less than fifty (50) mg/kg that will be transported off-Site for disposal as PCB remediation waste (approximately 350 CY).

NYSDEC approved the use of imported fill as soil cover above a demarcation layer and reuse of excavated soil as below a demarcation layer in accordance with the IRM (#1) Work Plan in 2017 and the Revised Final 2019 (IRM #3) Work Plan in 2019. The horizontal and vertical extent of those soils is documented in the IRM #1 and IRM #3 CCRs. NYSDEC-approved imported fill and reuse backfill encountered during excavation will be stockpiled separately within the MSA to be constructed in the NAF as shown on the Construction Drawings (**Appendix A**) for reuse without testing.

Soil from the excavation including layback that will be potentially reused as backfill below two (2) ft bgs. Soil will be stockpiled in the MSA in windrows and characterized for approval for reuse at a maximum frequency of approximately one hundred (100) cubic yards in volume. The MSA will be accessed by a temporary haul road to be constructed on NSRC property so haul trucks will not need to access South Main Street except for off-Site transport and disposal. Existing conditions at the stockpile area and along the temporary haul road will be documented by photographs prior to and after completion of construction.

Each newly placed soil stockpile to be used for backfilling below two (2) ft bgs as part of the IRM will be inspected by the QEP for visual or olfactory impacts, solid waste, bricks or debris and screened with a photoionization detector (PID) for elevated VOC vapor levels. Soils will be sampled for analyses for PCBs, metals, SVOCs, and VOCs at the frequency presented in Table 5.4 (e) 10 of DER-10 in accordance with the QAPP. Soils that exhibit visual or olfactory impacts or that exhibited elevated PID readings will be segregated for additional testing at the direction of the QEP prior to re-use as backfill. Stockpiles with observed solid waste or debris will be segregated for potential off-Site disposal. Stockpiles with observed bricks, concrete, or other inert materials will be evaluated for use in structural backfill. Unvalidated analytical results will be submitted to NYSDEC with a request to reuse as backfill below the soil cover system and at least two (2) feet above the water table. Upon approval by NYSDEC for reuse, windrows may be consolidated with other soils approved by NYSDEC for reuse.

Soils with total PCB concentrations greater than ten (10) mg/kg and less than fifty (50) mg/kg will be managed as non-hazardous waste to be transported off-Site for disposal at an appropriate treatment storage and/or disposal facility. Non-hazardous soils accepted for disposal will stockpiled in the MSA and then loaded for transport from there to the receiving facility. If further characterization of soils is required by the receiving facility for waste profile approval, those soils will be segregated within the MSA for waste characterization sampling and staged for off-Site transport and disposal.

Soils identified for disposal as hazardous waste or PCB remediation waste will be accumulated in a TSCA Accumulation Area prior to loading in the TSCA Loading Area for off-site disposal. The TSCA Accumulation Area as shown on Sheet 3 of the Construction Drawings (**Appendix A**) will be located in a secure portion of the NAF. The TSCA accumulation area will be defined by

concrete blocks, as shown on Sheet 19 of the Construction Drawings (**Appendix A**). This will allow for TSCA material to be stockpiled within the area and create a separation between the TSCA accumulation stockpile and the TSCA loading area that will mitigate dust migration outside the area.

All soil stockpiles (i.e. TSCA, non-hazardous and potential re-use) will be covered with poly sheeting and secured at the end of each workday and during heavy rain events.

2.6 Off-Site Disposal

2.6.1 Hazardous Waste

Soils with total PCB concentrations greater than or equal to fifty (50) mg/kg will be classified as PCB remediation waste under TSCA and as hazardous waste containing PCBs as defined in 6 NYCRR Part 371.4 (e). Soils classified as hazardous waste will be accumulated in the TSCA Accumulation Area prior to loading in the TSCA Loading Area for off-site disposal. Trucks will be loaded in the TSCA Loading Area for transport of hazardous waste for off-Site disposal at an appropriate treatment storage and/or disposal facility. Each shipment will have the required manifest, labeling and placarding in accordance with Federal and state laws and regulations. It is estimated that approximately 900 CY (1,100 tons) of soil will be removed as hazardous waste.

2.6.2 Non-hazardous waste

Soils identified for disposal as non-hazardous waste will be stockpiled in non-hazardous soil stockpile area for off-Site transport and disposal Stockpiles will be maintained and secured so that soils do not migrate from staging and stockpile locations. In the event, that soils have not been pre-characterized for disposal, composite samples will be collected for analyses for waste characteristics at a frequency consistent with the requirements of the receiving facility. Trucks will be loaded in the non-hazardous soil stockpile area for transport for off-Site disposal at an appropriate treatment storage and/or disposal facility. Each shipment will have the required manifest, labeling and placarding in accordance with Federal and state laws and regulations. It is estimated that approximately 900 CY (1,720 tons) of soil will be removed as non-hazardous waste.

2.6.3 PCB Remediation Waste

Soils with total PCB concentrations greater than or equal to 3.2 mg/kg from at or near the water table will be classified as PCB remediation waste under TSCA. Soils classified as PCB remediation waste will be accumulated in the TSCA Accumulation Area prior to loading in the TSCA Loading Area for off-site disposal. Trucks will be loaded in the TSCA Loading Area for transport of hazardous waste for off-Site disposal at an appropriate treatment storage and/or disposal facility. Each shipment will have the required manifest, labeling and placarding in accordance with Federal and state laws and regulations. It is estimated that approximately 350 CY (665 tons) of PCB remediation waste will be disposed (hazardous and non-hazardous

2.6.4 Estimated Truck Traffic

Based on proposed soil volumes to be transported between the Site and the MSA, necessary on-Site truck traffic has been estimated as follows:

- Transport of non-hazardous soil to the MSA via the temporary haul road for stockpiling for potential reuse or non-hazardous disposal: 450 cubic yards per day (20 to 22 loads per day);
- Transport of soils approved for reuse from the MSA for use as excavation backfill via the temporary haul road: 450 cubic yards per day (20 to 22 loads per day); and
- It is unlikely that excavation and backfilling operations will be concurrent, so truck traffic to and from the MSA will not exceed 22 loads per day.

Necessary truck traffic on public roads for off-Site disposal has been estimated as follows:

- Transport of hazardous waste/PCB remediation waste on public roads for off-Site disposal: 200 to 250 tons per day (10 to 12 loads per day);
- Transport of non-hazardous soil on public roads for off-Site disposal: 400 to 440 tons per day (18 to 20 loads per day); and
- Transport on public roads for off-Site disposal (hazardous waste/PCB remediation waste and non-hazardous soil) will not exceed 35 loads per day without prior notification of NYSDEC.

Each vehicle will be inspected prior to shipment. Each vehicle will be lined and covered, and the tailgate secured. The wheels, sides and underbody will be decontaminated prior to departure from the Site as described in the Construction Specifications (**Appendix B**).

The planned on-Site journey management plan for the material which will be handled during the IRM will be discussed with the City of Elmira Traffic Engineering Department. All trucks hauling impacted soils on the public roadway will have a valid NYS Part 364 Waste Transporter Permit. Proposed haul routes are presented on **Figure 21**. Routes have been selected to avoid planned road construction in Elmira during the IRM, difficult traffic areas as well as to utilize routes with the most marked pedestrian crossings to ensure maximum safety. It is anticipated that off-Site transport for disposal will occur when school is not in session, therefore truck traffic will not take place during student arrival/departure times.

Over the road haul trucks which will transport hazardous waste, PCB remediation waste and non-hazardous waste will enter and exit the MSA via the temporary haul road to South Main Street. Off-road haul trucks which will transport soils between the Site and the MSA will use the temporary haul road to enter and exit the excavation as presented on **Figure 21**.

All trucks leaving the Site for off-Site disposal will travel north on South Main Street, cross the Chemung River and travel east on East Water Street to the interchange with Interstate 86.

2.7 Backfilling

Excavations will be backfilled to final grades as shown on the Construction Drawings (**Appendix A**). Prior to backfilling, the extent of the excavation will be surveyed and a demarcation layer, consisting of orange snow fencing material, white geotextile or equivalent material, will be placed in the excavation to provide a visual reference of the limit of fill material for future excavations. Backfilling will begin after achievement of cleanup goals has been demonstrated by unvalidated confirmation sampling results or after documentation samples have been collected in areas where COPCs will left in place. NYSDEC approval will be obtained prior to backfilling any portion of the excavation. During backfilling, demolished utilities will be replaced in-kind as necessary with respect to planned capital improvements in the FFC. Previously unidentified subsurface structures encountered within the excavation shall be left in place if removal will impact the schedule for completion of the IRM and return of control of the project area to ECSD prior to the beginning of the 2020-21 school year. Some SOE elements will remain in place with the acceptance of ECSD. Lagging and tiebacks installed during excavation adjacent to the west side of the EHS A-Wing will be removed but the solider piles will remain in place. Soldier piles installed adjacent to the storm sewer and the north side of the EHS A-Wing as well as the struts installed between them and lagging installed adjacent to the storm sewer will remain in place for use as SOE during a future IRM in the FFC. Final grades, the location, type, and dimension of restored underground utilities, the location and dimension of soldier piles, struts, lagging, and the location of demarcation layers will be surveyed by a NYS licensed surveyor to document as-built conditions.

Backfill material will include soils previously approved by NYSDEC for use as soil cover, imported fill, soils previously approved by NYSDEC for reuse below soil cover and excavated soils stockpiled for potential reuse. Soils stockpiled for reuse will meet the requirements of Section 5.4 of DER-10 for use below a soil cover system over a demarcation layer. Reuse soils will not be used for backfilling within one (1) foot of the seasonal high-water table or above two (2) ft bgs. Imported fill to be used above two (2) ft bgs will be certified to meet the requirements of Section 5.4 of DER-10 for unrestricted use as fill for soil cover system including emerging contaminants. An additional demarcation layer will be place between stockpile soiled reused for backfill and imported fill used for the soil cover system.

2.8 Site Restoration

After completion of backfilling, the work area will be restored to original conditions including replacement of concrete sidewalks and fences. Unpaved areas will be restored with a minimum of four (4) inches of topsoil and reseeded or sod installed based on original conditions. Typical sections are presented in the Construction Drawings (**Appendix A**).

Areas within the construction limits (e.g. staging areas, haul roads) or other areas potentially impacted by dust from the IRM excavation will cleaned and decontaminated following construction. Post-use conditions will be documented by verification sampling. Restored conditions within the construction limits will be documented by photographs. Unisys will

coordinate with ECSD to determine the final requirements for Site restoration. The MSA and the temporary haul roads to be constructed on NSRC property will be maintained after completion of IRM #4 for use during future remedial construction.

3. PERMITS AND TEMPORARY CONTROLS

3.1 Permits and Notifications

A storm water construction permit is required as the area of disturbance from construction activities for the IRM is expected to be greater than one acre. To meet the requirements of the General Permit, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted to NYSDEC for review and approval.

Unisys will notify the United States Environmental Protection Agency (EPA) of PCB waste activities by filing EPA Form 7710–53 in accordance with 40 CFR §761.205.

3.2 Temporary Facilities

During IRM construction, temporary facilities on the EHS property will be constructed for accumulation and loading of hazardous waste and PCB remediation waste. Other on-Site temporary facilities will include construction trailers and frac tanks. Temporary haul roads on the adjacent NSRC property to the east will be constructed for transport of soils between the Site and the MSA. Temporary facilities on the EHS and NSRC properties are shown on the construction drawings presented in **Appendix A**.

A temporary water line will be installed to maintain the connection between the existing water line and the EHS building. The service connection located at the EHS service entrance will be maintained during IRM construction while the service connection located at the entrance to the EHS main parking lot will be closed. Water service including the fire loop will be restored during backfilling and Site restoration in coordination with ECSD and the Elmira Water Board.

3.3 Soil and Sediment Erosion Control

A SWPPP will document selection, design, installation, implementation and maintenance of control measures and practices that will be used to minimize the discharge of pollutants in storm water and prevent a violation of water quality standards. Soil and sediment erosion controls will be established within the limit of disturbance as shown on the construction drawings presented in **Appendix A** to control runoff during construction and prevent sediment from entering the existing storm sewer system. Erosion and sediment controls will be in accordance with the "New York State Standards and Specification for Erosion and Sediment Control" (NYSDEC, 2016) and will be inspected weekly during active construction with additional inspections following rain events.

3.4 Water Management

Storm water contacting potential PCB impacted soils (contact water) will be segregated from storm water entering areas cleaned of PCB impacted soils (non-contact water). Contact and non-contact water shall remain separated at all times. Contact water generated within the excavation will be minimized and managed to the extent practical. Grading shall be performed as necessary to divert

surface water runoff from entering excavation areas and all stockpiles will be tightly covered. Diversion control berms and temporary drainage channels shall be constructed as needed and maintained.

Standing water remaining after storm events will be removed from the excavation in a timely manner using vacuum trucks and/or dewatering sumps. Any contact water generated will be conveyed overland via hose to frac tanks staged on-Site. Liquids will be pumped through a filter skid prior to entering the storage tanks as PCBs are typically not readily water soluble and therefore running these liquids through filter bags prior to storage will help to reduce the potential TSCA waste from the project site. Once a tank nears capacity, waste characterization samples will be collected for waste profiling and off-Site disposal.

As excavation proceeds to the final depth near the water table, ground water may be encountered. Excavation below the water table may be required by the Engineer and NYSDEC to achieve cleanup goals. Moist or wet soils will be placed on poly sheeting on the slope and any excess water will decant back into the bottom of the excavation. After those soils have sufficiently drained, they will be transported to the TSCA Accumulation Area for stockpiling and loadout. Any residual moisture will be contained within the TSCA Accumulation Area, collected in the sump for that area and transferred to a frac tank for off-Site treatment and disposal. In the case of moderate ground water infiltration, sumps will be constructed at the base of the excavation. Pumps with sufficient lift and a pumping capacity of up to fifteen (15) gpm will transfer water collected in the sumps to an adjacent frac tank for off-Site disposal. Approximately 20,000 gallons of capacity is reserved for excavation dewatering activities. A contingency plan for additional capacity will be provided within one day based on actual conditions encountered if this capacity will be exceeded. Drawdown during initial dewatering will be observed for four (4) hours to assess its effectiveness. If the observed drawdown is ineffective to allow deeper excavation to proceed, NYSDEC will be advised that the technical practicality of dewatering is considered low and that dewatering operations should be halted.

3.5 Dust Control and Monitoring

Dust control and monitoring shall be conducted throughout the Site during all phases of work in accordance with the Soil/Dust Control and Monitoring Plan (SDCMP, **Appendix G**). The SDCMP has been developed to be consistent with NYSDOH's Generic Community Air Monitoring Plan (CAMP, **Appendix G**). The QEP will be responsible for the implementation of the dust monitoring, control and mitigation measures.

Dust control shall be conducted to prevent the presence of visible dust as determined by visual observation and continuous dust monitoring. Visible dust shall not leave the exclusion zone. Dust control measures shall be applied periodically throughout each workday. Dust control may be conducted by sprinkling with water until the surface is wet; restricting vehicle speeds, covering excavation areas and stockpile areas; and reducing the excavation size and/or number of excavations. Additional dust control measures will be considered during intrusive activities within

twenty (20) feet of potentially exposed populations or occupied structures including dust barriers and special ventilation devices.

Continuous air monitoring for PCBs will be conducted in accordance with the SDCMP (**Appendix G**). The air monitoring program will include two different types of ambient air quality measurements (1) real-time dust monitoring using direct reading instruments, and (2) time-integrated air sampling and fixed laboratory PCB analyses. Continuous real-time particulate monitoring will be conducted at the upwind and downwind perimeter of the exclusion zone(s) using portable monitors. A minimum of one (1) upwind and four (4) downwind locations shall be monitored. The four (4) downwind locations shall be equally distributed along the perimeter of the work area(s). Work areas are areas where ground intrusive activities and/or soil handling is occurring. During work activities within twenty (20) feet of potentially exposed populations or occupied structures, continuous monitoring locations will be selected based on the nearest potentially exposed individual and the location of ventilation system intakes for nearby structures. Proposed air monitoring locations are presented on **Figure 22**. Air monitoring locations will be adjusted, as necessary, based on changes in wind direction.

Air monitoring shall be conducted during excavation, grading, placement of clean fill, or other activities which may generate fugitive dust. Action levels for dust and PCBs in ambient air are presented in the SDCMP. If an action level for dust is reached, Site operations will be stopped and dust control measures in the working area will be implemented. Mitigation measures for dust may include increasing the level of personal protection for on-Site personnel, increasing water spraying, or stopping work. If dust suppression techniques being utilized at the Site do not lower particulates to an acceptable level, work will be suspended until appropriate corrective measures are approved by the QEP to remedy the situation.

Time-integrated sampling will be used to provide chemical-specific data for the assessment of potential impacts. One (1) upwind and two (2) downwind real-time monitoring locations will be used for time-integrated sampling for PCBs during excavation of PCB-impacted soils. Time-integrated samples for PCB analyses will be completed under expedited three-day (3-day) laboratory turnaround times. These time-integrated samples will be used for assessing the potential for off-Site exposures. Time integrated samples will be collected during work hours (excluding lunch and break time) from each sampling location using high-volume air samplers for each day of the first week of PCB-impacted soil excavation activities. After one week of PCB-impacted soil excavation, the need for daily time-integrated sampling for PCBs will be re-evaluated. If results from the first week of sampling indicate that PCB concentrations are consistent with background or are below comparison criteria, the PCB sampling frequency reduced to one day per week. The schedule for time-average PCB sampling may be adjusted due to weather conditions during the first week of sampling. Additional samples may be collected during excavations in areas with the highest total PCB concentrations (i.e. total PCB concentrations greater than 50 mg/kg). If any PCB concentration exceeds the PCB action level, NYSDEC and NYSDOH will be notified immediately and work practices will be re-evaluated, and changes will be implemented, as appropriate.

Daily Construction Inspection Reports (Daily Reports) will be sent the NYSDEC and the NYSDOH the following day. Daily Reports summarizing work completed Friday through Sunday will be submitted no later than the following Monday. CAMP data will be attached the Daily Report.

3.6 Vibration Monitoring and Building Survey

Vibration monitoring will be required during excavation. A building condition survey will be performed to assess the pre- and post-construction conditions of the EHS building. The building condition survey and vibration monitoring shall be performed in accordance with the requirements of the Construction Specifications (**Appendix B**). Written approval for building condition surveys and vibration monitoring will be obtained from ECSD and provided to NYSDEC prior to construction.

3.7 Temporary Use Restrictions

There will be temporary use restrictions of the EHS property during IRM construction to ensure safe access during construction work. ECSD will have limited operations at EHS during the summer. No student activities will be occurring, and only a limited number of the full-year staff will be working on-Site. All individuals accessing the building will do so through the main parking lot and entrance, thereby avoiding all remedial work being performed. Public access, such as new enrollments, will be accommodated through the main entrance. No staff or visitor will have access to the work areas. The doors on the north and west side of the EHS A Wing will be locked to prevent access to the work area. Access to those areas of the A-Wing will be limited so this temporary restriction will not impact emergency evacuation procedures.

Access to the FFC and the NAF will be restricted by temporary fencing. A temporary rally point will be constructed in parking lot adjacent to the basketball courts. In the event of an evacuation or evacuation drill, all IRM activities will be halted until ECSD gives permission for them to resume. The temporary evacuation route from the EHS building to the temporary rally point is shown on **Figure 23**.

ECSD concurrence with these temporary use restrictions of the EHS property will be provided under separate cover. ECSD has provided comments on this IRM #4 Work Plan and the construction documents. Those comments and a schedule for responses are provided in **Appendix H.**

4. HEALTH AND SAFETY

All Site activities will be performed in such a manner as to ensure the safety and health of all personnel and the surrounding community. All Site activities shall be conducted in accordance with all pertinent general industry (29 CFR 1910) and construction (29 CFR 1926) Occupational Health and Safety Administration (OSHA) standards, as well as any other applicable New York State and municipal codes or ordinances. All Site activities will comply with those requirements set forth in OSHA's final rule entitled Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120, Subpart H.

To ensure that all Site activities are in compliance, each contractor will prepare a Health and Safety Plan (HASP) in accordance with the aforementioned regulations. Each HASP shall conform to the requirements of 29 CFR 1910.120 and all applicable state, federal, local, and other health and safety requirements and safe construction practices not specifically identified in these requirements. A Site-specific HASP has been prepared for IRM tasks (**Appendix I**). A contingency for chemical specific PCB monitoring would be developed in the event the State determines that it is necessary.

The IRM Contractor will provide a "competent person" per 29 CFR 1926 Subpart P – Excavations on-Site during excavations. The qualifications of the designated "competent person" will be provided to NYSDEC prior to IRM construction.

The IRM contractor will be the "controlling contractor" for IRM activities and will be responsible for implementing a COVID-19 Action Plan. A COVID-19 Action Plan was submitted to NYSDEC and NYSDOH on 14 April 2020 and will be updated as necessary, and for IRM 4 construction.

5. INSTITUTIONAL CONTROLS

Institutional controls (ICs) will be implemented at the Site in accordance with the interim SMP approved by NYSDEC on 20 December 2019. The interim SMP will be updated following IRM completion to include details of cover systems which are part of the IRM to ensure that ongoing site management at the Site remains protective. The interim SMP includes quarterly inspections of permanent cover systems (e.g., pavements, vegetated areas, and building floor slabs) and temporary cover systems (e.g., mulch beds). Photographic documentation and recommendations for corrective action will be provided in quarterly Site Inspection Reports and the annual Periodic Review Report. Unisys and ECSD will coordinate cover maintenance and corrective action in accordance with the interim SMP. ECSD has agreed to accept an Environmental Easement on the property since the IRM will include a cover system (**Appendix H**). The necessity for an Environmental Easement requiring compliance with the SMP will be evaluated when a final remedy for the Site has been completed and a final SMP has been prepared.

6. SCHEDULE AND DELIVERABLES

6.1 Schedule

The proposed schedule for the IRM is presented in **Table 10**. The following are milestone dates applicable to this IRM:

- 14 February 2020 – Pre-Final (95%) IRM #4 Work Plan Submittal;
- 30 April 2020 – Final (100%) IRM #4 Work Plan Submittal
- 30 April 2020 – IRM Contractor Work Plan Submittal
- 19 May 2020 – Revised Final (100%) IRM #4 Work Plan Submittal
- 21 May 2020 – Revised IRM Contractor Work Plan Submittal
- 1 June 2020 – Mobilization of IRM contractor to the Site, weather permitting;
- 1 June 2020 – Survey of existing conditions
- 10 June 2020 – MSA and temporary haul road construction;
- 30 June 2020 – Soldier pile installation;
- 30 June 2020 –Excavation Start;
- 11 August 2020 – Excavation Completion;
- 20 August 2020 –Backfill Completion;
- 28 August 2020 – Site restoration at EHS Completion;
- 3 September 2020 – Completion of transport of soil stockpiles for off-Site disposal; and
- 4 September 2020 – Demobilization.

The proposed schedule is based on excavation of up to 600 cubic yards per day. Based on construction of previous IRMs at the Site, the schedule includes contingency for delays of up to three (3) days due to weather. Anticipated working hours are Monday through Friday during daylight hours. Work on weekends may be required to meet schedule milestones.

6.2 Deliverables

A construction completion report (CCR) will be prepared in accordance with Section 5.8 of DER-10 to document the implementation of the IRM. The CCR will include a description of IRM construction activities, as-built drawings, daily field reports, analytical data reports, and disposal manifests. The CCR will be delivered to NYSDEC within ninety (90) days of completing transport of soil stockpiles for off-Site disposal, site restoration, and demobilization.

7. CONTINGENCY PLANNING

The proposed schedule for IRM #4 presented in Section 6 has been prepared with the assumption that school will not be in session at EHS during IRM #4 construction. Temporary fencing, dust control, community air monitoring, vibration monitoring and noise monitoring will be implemented as described above to protect the health, safety and security of the EHS community during IRM #4. In the event that school will be in session during Summer 2020, enhanced safety and security measures will be implemented at EHS and enhanced communications will be provided to ECSD and the EHS community as follows:

- Enhanced Site Safety and Security
  - Site contractor personnel will have personnel ID badges.
  - Traffic patterns will be coordinated with ECSD to avoid high traffic periods for staff and students arriving and leaving EHS.
- Enhanced Communication
  - Weekly activity reports to ECSD with a summary of work completed and projected activities for the following week
  - Reporting of CAMP results to publicly available website.
    - Daily reporting of real-time dust monitoring results
    - Reporting of PCB analytical results for time-averaged air samples as they become available from the fixed laboratory.
  - Update Frequently Asked Questions (FAQs) handout available on NYSDEC web page: http://www.dec.ny.gov/chemical/102390.html

Implementation of contingency planning measures, if necessary, will be detailed at least two (2) weeks in advance of Summer 2020 open session in the Community Liaison Plan linked to the NYSDEC website.

TABLES

TABLE 1
Summary of PCB Results for Subsurface Soils (0-2 ft bgs)
IRM4
Former Sperry Remington Site - North Potion
Elmira, New York

					Polychlorinated Biphenyls									
					Total PCBs	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.0036	0.0044	0.0041	0.0024	0.004	0.0051	0.0048	0.0022	0.0054
Restricted Residential					1									
NYS Hazardous Waste					50									
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**										
SSHS-B267	SSHS-B267-SUB-0-2	0-2	7/30/2015	180-46426-1	0.0701	<0.0036U	<0.0044U	<0.0061U	<0.0044U	0.029J	0.032J	0.0091J	<0.0035U	<0.0065U
SSHS-B334	SSHS-B334-SUB-0-2	0-2	3/3/2016	180-52706-1	0.784	<0.008U	<0.013U	<0.0044U	<0.0065U	0.54J	0.2J	0.044J	<0.0033U	<0.0054U
SSHS-B651	SSHS-651-SUB-0-2	0-2	2/14/2017	180-63507-1	2.14	<0.0096U	<0.0094U	<0.0072U	<0.014U	1.5J	0.54J	0.1J	<0.0055U	<0.013U
SSHS-B702	SSHS-B702-SUB-0-2	0-2	3/21/2017	180-64494-1	0.6011	<0.0098U	<0.0095U	<0.0073U	<0.015U	0.41	0.12	0.041	<0.0056U	<0.013U
SSHS-B703	SSHS-B703-SUB-0-2	0-2	3/23/2017	180-64584-1	0.2574	<0.011U	<0.011U	<0.0083U	<0.017U	0.15	0.058	0.015J	<0.0064U	<0.015U
SSHS-IRM3-B100-BOT2	SSHS-IRM3-B100 BOT BOT	1.4-1.4	8/1/2019	180-93547-2	<0.0458	<0.0062U	<0.0068U	<0.0047U	<0.0028U	<0.0046U	<0.0058U	<0.0055U	<0.0026U	<0.0068U
SSHS-IRM3-S001	SSHS-IRM3-S001-07-10-19	0.1-0.1	7/10/2019	180-92467-1	<0.0405	<0.0055U	<0.006U	<0.0042U	<0.0025U	<0.0041U	<0.0051U	<0.0048U	<0.0023U	<0.006U
SSHS-IRM3-S002	SSHS-IRM3-S002-07-09-19	0.3-0.3	7/9/2019	180-92395-1	<0.0402	<0.0055U	<0.006U	<0.0041U	<0.0025U	<0.004U	<0.0051U	<0.0048U	<0.0023U	<0.0059U
SSHS-IRM3-S003	SSHS-IRM3-S003-07-09-19	0.2-0.2	7/9/2019	180-92395-1	<0.0422	<0.0058U	<0.0063U	<0.0043U	<0.0026U	<0.0043U	<0.0053U	<0.005U	<0.0024U	<0.0062U
SSHS-IRM3-S020	SSHS-IRM3-S020-07-10-19	0-0	7/10/2019	180-92462-1	0.922	<0.0058U	<0.0064U	<0.0044U	<0.0026U	0.54J	0.28J	0.088J	<0.0024U	<0.0063U
SSHS-IRM3-S020A	SSHS-IRM3-S020A-C	1.7-1.7	7/29/2019	180-93352-1	0.2711	<0.0063U	<0.0069U	<0.0047U	<0.0028U	0.12J	0.098J	0.038J	<0.0026U	<0.0068U
SSHS-IRM3-S021A	SSHS-IRM3-S021A-C	1.8-1.8	7/29/2019	180-93352-1	0.0504	<0.0063U	<0.0069U	<0.0047U	<0.0028U	<0.0047U	0.022J	0.011J	<0.0026U	<0.0068U
SSHS-IRM3-S022A	SSHS-IRM3-S022A-C	1.9-1.9	7/29/2019	180-93352-1	0.0904	<0.0069U	<0.0075U	<0.0051U	<0.0031U	0.045J	0.026J	<0.006U	<0.0028U	<0.0074U
SSHS-IRM3-S023AA	SSHS-IRM3-S023AA-C	0.8-0.8	8/1/2019	180-93547-2	0.09375	<0.0062U	<0.0067U	<0.0046U	<0.0028U	0.043J	0.024J	0.012J	<0.0025U	<0.0067U
SSHS-IRM3-S023AB	SSHS-IRM3-S023AB-C	1.3-1.3	8/1/2019	180-93547-2	0.7138	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.44J	0.19J	0.07J	<0.0024U	<0.0062U
SSHS-IRM3-S023A-BOT	SSHS-IRM3-S023A BOT-C	1.5-1.5	8/1/2019	180-93547-2	0.388	<0.0054U	<0.0059U	<0.0041U	<0.0024U	0.24J	0.1J	0.035J	<0.0022U	<0.0059U
SSHS-IRM3-S023AC	SSHS-IRM3-S023AC-C	0.8-0.8	8/1/2019	180-93547-2	0.4697	<0.0061U	<0.0067U	<0.0046U	<0.0028U	0.29J	0.12J	0.045J	<0.0025U	<0.0066U
SSHS-IRM3-S023AD	SSHS-IRM3-S023AD-C	0.6-0.6	8/1/2019	180-93547-2	2.494	<0.0059U	<0.0064U	<0.0044U	<0.0027U	1.8J	0.53J	0.15J	<0.0024U	<0.0064U
SSHS-IRM3-S024A	SSHS-IRM3-S024A-C	1.4-1.4	7/29/2019	180-93352-1	<0.0415	<0.0057U	<0.0062U	<0.0042U	<0.0026U	<0.0042U	<0.0052U	<0.005U	<0.0023U	<0.0061U
SSHS-IRM3-S025	SSHS-IRM3-S025-07-09-19	0.6-0.6	7/9/2019	180-92395-1	<0.0404	<0.0055U	<0.006U	<0.0041U	<0.0025U	<0.0041U	<0.0051U	<0.0048U	<0.0023U	<0.006U
SSHS-IRM3-S026	SSHS-IRM3-S026-07-09-19	0.2-0.2	7/9/2019	180-92395-1	<0.0404	<0.0055U	<0.006U	<0.0041U	<0.0025U	<0.0041U	<0.0051U	<0.0048U	<0.0023U	<0.006U
SSHS-IRM3-S027	SSHS-IRM3-S027-07-10-19	0.4-0.4	7/10/2019	180-92467-1	<0.0428	<0.0059U	<0.0064U	<0.0044U	<0.0026U	<0.0043U	<0.0054U	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-S028	SSHS-IRM3-S028-07-10-19	0.1-0.1	7/10/2019	180-92467-1	<0.0419	<0.0057U	<0.0062U	<0.0043U	<0.0026U	<0.0042U	<0.0053U	<0.005U	<0.0024U	<0.0062U
SSHS-IRM3-S028d	SSHS-IRM3-S028-D	0.4-0.4	8/5/2019	180-93684-3	2.544	<0.0057U	<0.0062U	<0.0043U	<0.0026U	1.7	0.66	0.17	<0.0024U	<0.0062U
SSHS-IRM3-S029	SSHS-IRM3-S029-D	0.6-0.6	8/5/2019	180-93684-3	14.14	<0.056U	<0.061U	<0.042U	<0.025U	9.5	3.7	0.81	<0.023U	<0.06U
SSHS-IRM3-S044	SSHS-IRM3-S044-C	1.5-1.5	7/12/2019	180-92615-1	2.024	<0.006U	<0.0065U	<0.0045U	<0.0027U	1.3J	0.54J	0.17J	<0.0025U	<0.0065U
SSHS-IRM3-S048	SSHS-IRM3-S048-D	0.1-0.1	7/12/2019	180-92616-1	2.333	<0.0056U	<0.0061U	<0.0042U	<0.0025U	1.6	0.6	0.12	<0.0023U	<0.0061U
SSHS-IRM3-S052	SSHS-IRM3-S052-D	1.6-1.6	7/15/2019	180-92661-1	33.33	<0.056U	<0.061U	<0.042U	<0.025U	20	9.5	3.7	<0.023U	<0.06U
SSHS-SE SIDEWALL 1	SE SIDEWALL 1	0-2	7/24/2017	180-68518-1	0.04975	<0.0098U	<0.0096U	<0.0073U	<0.015U	<0.0089U	0.0091J	<0.012U	<0.0057U	<0.013U

Notes:
J - estimated value
U - non-detect
mg/kg - milligram per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
PCBs - polychlorinated biphenyls
SCO - Soil Cleanup Objective
PCB or Metals concentrations detected above Restricted-Residential Soil Cleanup Objectives (6 NYCRR Part 375) are presented in light gray.
PCB concentrations detected above New York State hazardous waste threshold (6 NYCRR Part 371.4 (e)) are presented in dark grey

TABLE 2
Summary of PCB Results for Subsurface Soils (2-14 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, New York

					PCBs										
					Total PCBs	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.0037	0.0046	0.0041	0.0024	0.0041	0.0045	0.004	0.0022	0.0054
Subsurface Soil Criteria					10									
NYS Hazardous Material					50									
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**										
SSHS-B2238	SSHS-B2238-SUB-10-12	10-12	7/23/2018	180-80091-1	1578	<3U	<6U	<5.5U	<5.6U	1100	440	22	<4.5U	<6.5U
SSHS-B2238	SSHS-B2238-SUB-12-14	12-14	7/23/2018	180-80091-1	1410	<3U	<5.9U	<5.4U	<5.4U	1000	370	25	<4.4U	<6.4U
SSHS-B2239	SSHS-B2239-SUB-4-6	4-6	7/23/2018	180-80091-3	0.9931	<0.0061U	<0.012U	<0.011U	<0.011U	0.66	0.25	0.052	<0.0091U	<0.013U
SSHS-B2239	SSHS-B2239-SUB-6-8	6-8	7/23/2018	180-80091-3	4.141	<0.006U,F1	<0.012U	<0.011U	<0.011U	2.8	1.1	0.21	<0.009U	<0.013U
SSHS-B2240	SSHS-B2240-SUB-12-14	12-14	7/23/2018	180-80091-2	0.0898	<0.0061U	<0.012U	<0.011U	<0.011U	0.042	0.014J	<0.0054U	<0.0091U	<0.013U
SSHS-B2240	SSHS-B2240-SUB-8-10	8-14	7/23/2018	180-80091-2	0.589	<0.006U	<0.012U	<0.011U	<0.011U	0.4	0.14	0.018J,p	<0.009U	<0.013U
SSHS-B262	SSHS-B262-SUB-6-8	6-8	7/29/2015	180-46367-1	0.0237	<0.0037U	<0.0046U	<0.0063U	<0.0046U	0.016J	0.0077J	<0.004U	<0.0037U	<0.0067U
SSHS-B2629	SSHS-B2629-SUB-10-12	10-12	4/25/2019	180-89522-1	13.73	<0.029U	<0.032U	<0.022U	<0.013U	9.4J	3.3J	0.96J	<0.012U	<0.031U
SSHS-B2629	SSHS-B2629-SUB-2-4	2-4	4/25/2019	180-89522-1	1.082	<0.006U	<0.0065U	<0.0045U	<0.0027U	0.76J	0.24J	0.068J	<0.0025U	<0.0065U
SSHS-B2629	SSHS-B2629-SUB-4-6	4-6	4/25/2019	180-89522-1	4.684	<0.0059U	<0.0064U	<0.0044U	<0.0026U	3.5J	0.89J	0.28J	<0.0024U	<0.0063U
SSHS-B2629	SSHS-B2629-SUB-6-8	6-8	4/25/2019	180-89522-1	7.245	<0.0061U	<0.0066U	<0.0045U	<0.0027U	5.2J	1.5J	0.53J	<0.0025U	<0.0066U
SSHS-B2629	SSHS-B2629-SUB-8-10	8-10	4/25/2019	180-89522-1	2.484	<0.0058U	<0.0064U	<0.0044U	<0.0026U	1.8J	0.51J	0.16J	<0.0024U	<0.0063U
SSHS-B2634	SSHS-B2634-SUB-12-14	12-14	4/24/2019	180-89408-1	6.344	<0.0059U	<0.0064U	<0.0044U	<0.0027U	4.8J	1.3J	0.23J	<0.0024U	<0.0064U
SSHS-B2634	SSHS-B2634-SUB-6-8	6-8	4/24/2019	180-89408-2	20.78	<0.06U	<0.066U	<0.045U	<0.027U	15J	4.7J	0.94J	<0.025U	<0.065U
SSHS-B2637	SSHS-B2637-SUB-12-14	12-14	4/24/2019	180-89408-1	12.63	<0.031U	<0.034U	<0.023U	<0.014U	9J	2.9J	0.66J	<0.013U	<0.034U
SSHS-B2637	SSHS-B2637-SUB-2-4	2-4	4/24/2019	180-89408-1	22.57	<0.059U	<0.065U	<0.045U	<0.027U	16J	5.5J	0.93J	<0.025U	<0.064U
SSHS-B2637	SSHS-B2637-SUB-4-6	4-6	4/24/2019	180-89408-2	121.8	<0.6U	<0.65U	<0.45U	<0.27U	88J	28J	4.4J	<0.25U	<0.65U
SSHS-B2637	SSHS-B2637-SUB-8-10	8-10	4/24/2019	180-89408-2	37.58	<0.12U	<0.13U	<0.086U	<0.052U	27J	8.4J	1.9J	<0.048U	<0.12U
SSHS-B2660	SSHS-B2660-SUB-2-4	2-4	4/25/2019	180-89522-2	0.6586	<0.0057U	<0.0062U	<0.0042U	<0.0026U	0.45J	0.15J	0.045J	<0.0023U	<0.0061U
SSHS-B2660	SSHS-B2660-SUB-4-6	4-6	4/25/2019	180-89522-1	0.2458	<0.0063U	<0.0069U	<0.0047U	<0.0028U	0.17J	0.058J	<0.0055U	<0.0026U	<0.0068U
SSHS-B2661	SSHS-B2661-SUB-10-12	10-12	4/25/2019	180-89522-1	86.83	<0.3U	<0.33U	<0.23U	<0.14U	65J	19J	2.1J	<0.13U	<0.33U
SSHS-B2661	SSHS-B2661-SUB-4-6	4-6	4/25/2019	180-89522-2	15.77	<0.032U	<0.034U	<0.024U	<0.014U	11J	3.9J	0.79J	<0.013U	<0.034U
SSHS-B2674	SSHS-B2674-SUB-6-8	6-8	4/25/2019	180-89522-1	0.3975	<0.0062U	<0.0067U	<0.0046U	<0.0028U	0.28J	0.1J	<0.0054U	<0.0026U	<0.0067U
SSHS-B2679	SSHS-B2679-SUB-10-12	10-12	4/24/2019	180-89408-2	119.9	<0.29U	<0.31U	<0.22U	<0.13U	87J	28J	4.2J	<0.12U	<0.31U
SSHS-B2679	SSHS-B2679-SUB-4-6	4-6	4/24/2019	180-89408-2	489.9	<1.2U	<1.3U	<0.88U	<0.53U	360J	110J	17J	<0.49U	<1.3U
SSHS-B2679	SSHS-B2679-SUB-8-10	8-10	4/24/2019	180-89408-2	110.3	<0.61U	<0.66U	<0.46U	<0.27U	80J	25J	3.8J	<0.25U	<0.66U
SSHS-B268	SSHS-B268-SUB-2-4	2-4	7/29/2015	180-46367-1	11.55	<0.037U	<0.045U	<0.063U	<0.046U	10J	1.1J	0.45J	<0.036U	<0.067U
SSHS-B268	SSHS-B268-SUB-4-6	4-6	7/29/2015	180-46367-1	0.942	<0.004U	<0.0048U	<0.0067U	<0.0049U	0.63J	0.28J	0.032J	<0.0039U	<0.0072U
SSHS-B268	SSHS-B268-SUB-6-8	6-8	7/29/2015	180-46367-1	<0	<0.0039U	<0.0047U	<0.0065U	<0.0048U	<0.0047U	<0.0045U	<0.0041U	<0.0038U	<0.007U
SSHS-B2682	SSHS-B2682-SUB-2-4	2-4	4/25/2019	180-89522-2	3095	<6.1U	<6.7U	<4.6U	<2.8U	2400J	590J	90J	<2.5U	<6.6U
SSHS-B2683	SSHS-B2683-SUB-12-14	12-14	4/27/2019	180-89523-1	<0.0439	<0.006U	<0.0065U	<0.0045U	<0.0027U	<0.0044U	<0.0055U	<0.0053U	<0.0025U	<0.0065U
SSHS-B2684	SSHS-B2684-SUB-12-14	12-12	4/26/2019	180-89521-1	0.4972	<0.0061U	<0.0066U	<0.0046U	<0.0027U	0.34J	0.14J	<0.0053U	<0.0025U	<0.0066U
SSHS-B269	SSHS-B269-SUB-2-3	2-3	7/17/2015	180-46045-1	11.17	<0.019U	<0.023U	<0.031U	<0.023U	7.3J	3.3J	0.57J	<0.018U	<0.033U
SSHS-B2724	SSHS-B2724-SUB-12-14	12-14	4/24/2019	180-89408-2	0.1664	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.11J	0.04J	<0.0051U	<0.0024U	<0.0063U
SSHS-B2724	SSHS-B2724-SUB-2-4	2-4	4/24/2019	180-89408-2	5.904	<0.0058U	<0.0063U	<0.0043U	<0.0026U	3.8J	1.8J	0.29J	<0.0024U	<0.0062U
SSHS-B2724	SSHS-B2724-SUB-4-6	4-6	4/24/2019	180-89408-2	15.33	<0.06U	<0.065U	<0.045U	<0.027U	11J	3.6J	0.59J	<0.025U	<0.065U
SSHS-B2724	SSHS-B2724-SUB-6-8	6-8	4/24/2019	180-89408-2	18.49	<0.06U	<0.065U	<0.045U	<0.027U	13J	4.6J	0.75J	<0.025U	<0.065U
SSHS-B273	SSHS-B273-SUB-4-6	4-6	7/29/2015	180-46367-1	25.7	<0.075U	<0.092U	<0.13U	<0.093U	18J	6.4J	1.3J	<0.074U	<0.14U
SSHS-B273	SSHS-B273-SUB-6-8	6-8	7/29/2015	180-46367-1	0.183	<0.0039U	<0.0048U	<0.0066U	<0.0048U	0.084J	0.099J	<0.019U	<0.0039U	<0.0071U
SSHS-B2758	SSHS-B2758-SUB-12-14	12-14	4/26/2019	180-89521-1	0.0451	<0.0061U	<0.0066U	<0.0045U	<0.0027U	0.014J	0.014J	<0.0053U	<0.0025U	<0.0065U
SSHS-B2763	SSHS-B2763-SUB-4-6	4-6	4/26/2019	180-89521-2	0.1806	<0.0062U	<0.0068U	<0.0047U	<0.0028U	0.16	<0.0058U	<0.0055U	<0.0026U	<0.0068U
SSHS-B2766	SSHS-B2766-SUB-6-8	6-8	4/23/2019	180-89344-2	9.621	<0.03U	<0.033U	<0.022U	<0.013U	7.1J	2.1J	0.35J	<0.012U	<0.032U
SSHS-B2959	SSHS-B2959-SUB-10-12	10-12	11/7/2019	180-98520-1	3.624	<0.0059U	<0.0065U	<0.0045U	<0.0027U	2.7J	0.72J	0.19J	<0.0025U	<0.0064U
SSHS-B2960	SSHS-B2960-SUB-10-12	10-12	11/7/2019	180-98520-1	14,060	<61U	<66U	<45U	<27U	11,000J	2200J	720J	<25U	<65U
SSHS-B2962	SSHS-B2962-SUB-12-14	12-14	11/6/2019	180-98355-3	0.0323	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.0065J	0.0095J	<0.005U	<0.0024U	<0.0062U
SSHS-B2977	SSHS-B2977-SUB-10-12	10-12	11/7/2019	180-98520-1	13.48	<0.061U	<0.066U	<0.046U	<0.027U	10J	2.6J	0.73J	<0.025U	<0.066U
SSHS-B2977	SSHS-B2977-SUB-12-14	12-14	11/7/2019	180-98520-1	2.755	<0.0062U	<0.0068U	<0.0047U	<0.0028U	2J	0.59J	0.15J	<0.0026U	<0.0067U
SSHS-B321	SSHS-B321-SUB-4-6	4-6	3/3/2016	180-52706-1	33,930	<43U	<69U	<24U	<35U	22,000J	5100J	720J	<18U	<29U
SSHS-B327	SSHS-B327-SUB-2-4	2-4	3/3/2016	180-52706-1	1.121	<0.0086U	<0.014U	<0.0047U	<0.007U	0.81J	0.28J	0.031J	<0.0035U	<0.0058U
SSHS-B327	SSHS-B327-SUB-4-6	4-6	3/3/2016	180-52706-1	0.249	<0.0091U	<0.014U	<0.005U	<0.0074U	0.19J	0.059J	<0.0068U	<0.0037U	<0.0062U
SSHS-B328	SSHS-B328-SUB-2-4	2-4	3/3/2016	180-52706-1	159.9	<0.41U	<0.65U	<0.23U	<0.33U	64J	25J	4.2J	<0.17U	<0.28U
SSHS-B328	SSHS-B328-SUB-4-6	4-6	3/3/2016	180-52706-1	1.86	<0.0088U	<0.014U	<0.0048U	<0.0071U	1.2J	0.59J	0.07J	<0.0036U	<0.0059U
SSHS-B337	SSHS-B337-SUB-8-10	8-10	3/9/2016	180-52876-1	0.09	<0.0082U	<0.013U	<0.0045U	<0.0066U	0.064J	0.026J	<0.0061U	<0.0033U	<0.0055U
SSHS-B338	SSHS-B338-SUB-6-8	6-8	3/9/2016	180-52876-1	21.11	<0.087U	<0.14U	<0.048U	<0.07U	15J	5.7J	0.41J	<0.036U	<0.059U
SSHS-B338	SSHS-B338-SUB-8-10	8-10	3/9/2016	180-52876-1	2.76	<0.0083U	<0.013U	<0.0045U	<0.0067U	1.8J	0.86J	0.1J	<0.0034U	<0.0056U
SSHS-B339	SSHS-B339-SUB-2-4	2-4	3/9/2016	180-52876-1	9.17	<0.042U	<0.066U	<0.023U	<0.034U	6.6J	2.4J	0.17J	<0.017U	<0.028U
SSHS-B438	SSHS-B438-SUB-2-4	2-4	8/26/2016	180-58029-3	72.01	<0.16U	<0.26U	<0.09U	<0.13U	53J	17J	1.6J	<0.067U	<0.11U
SSHS-B438	SSHS-B438-SUB-4-6	4-6	8/26/2016	180-58029-3	37.04	<0.082U	<0.13U	<0.045U	<0.066U	26J	9.9J	0.93J	<0.034U	<0.056U
SSHS-B438	SSHS-B438-SUB-6-8	6-8	8/26/2016	180-58029-3	37.01	<0.084U	<0.13U	<0.046U	<0.068U	26J	10J	0.8J	<0.034U	<0.057U
SSHS-B438	SSHS-B438-SUB-8-10	8-10	8/26/2016	180-58029-2	233.6	<0.82U	<1.3U	<0.45U	<0.66U	170J	56J	5.5J	<0.34U	<0.56U
SSHS-B439	SSHS-B439-SUB-2-4	2-4	8/26/2016	180-58029-3	58.11	<0.16U	<0.26U	<0.089U	<0.13U	39J	17J	1.7J	<0.066U	<0.11U
SSHS-B439	SSHS-B439-SUB-6-8	6-8	9/15/2016	180-58722-1	376.2	<0.86U	<1.4U	<0.47U	<0.7U	270J	89J	15J	<0.35U	<0.59U
SSHS-B439	SSHS-B439-SUB-8-10	8-10	9/15/2016	180-58722-2	146.9	<0.85U	<1.3U	<0.46U	<0.68U	110J	31J	3.8J	<0.35U	<0.58U
SSHS-B443	SSHS-B443-SUB-2-4	2-4	9/14/2016	180-58722-1	294.1	<0.83U,F1	<1.3U	<0.45U	<0.67U	210J	72J	10J	<0.34U	<0.56U
SSHS-B443	SSHS-B443-SUB-4-6	4-6	9/14/2016	180-58722-1	2071	<4.1U	<6.5U	<2.3U	<3.3U	1500J	510J	51J	<1.7U	<2.8U
SSHS-B443	SSHS-B443-SUB-6-8	6-8	9/14/2016	180-58722-1	102.6	<0.42U	<0.67U	<0.23U	<0.34U	74J	24J	3.5J	<0.17U	<0.29U
SSHS-B443	SSHS-B443-SUB-8-10	8-10	9/15/2016	180-58722-2	273.7	<0.84U	<1.3U	<0.46U	<0.68U	200J	65J	6.6J	<0.34U	<0.57U
SSHS-B444	SSHS-B444-SUB-2-4	2-4	8/26/2016	180-58029-1	53.61	<0.17UJ	<0.26U	<0.09U	<0.13U	37J	14J	2.2J	<0.067U	<0.11U
SSHS-B444	SSHS-B444-SUB-4-6	4-6	8/26/2016	180-58029-1	8.941	<0.0085U	<0.013U	<0.0046U	<0.0068U	5.5J	2.7J	0.72J	<0.0035U	<0.0057U
SSHS-B444	SSHS-B444-SUB-6-8	6-8	8/26/2016	180-58029-1	23.27	<0.087UJ	<0.14U	<0.047U	<0.07U	<0.044U	23	<0.065U,F1,F2	<0.035U	<0.059U
SSHS-B444	SSHS-B444-SUB-8-10	8-10	8/26/2016	180-58029-2	33.81	<0.085U	<0.13U	<0.046U	<0.068U	24J	8.2J	1.4J	<0.034U	<0.057U
SSHS-B461	SSHS-B461-SUB-2-3	2-3	8/31/2016	180-58236-1	8.733	<0.041U	<0.064U	<0.022U	<0.033U	6.6J	1.7J	0.33J	<0.017U	<0.028U
SSHS-B462	SSHS-B462-SUB-2-3	2-3	8/31/2016	180-58236-1	53.11	<0.085U	<0.13U	<0.047U	<0.069U	38J	13J	1.9J	<0.035U	<0.058U
SSHS-B463	SSHS-B463-SUB-2-3	2-3	8/31/2016	180-58236-1	15.69	<0.042U	<0.066U	<0.023U	<0.034U	11J	3.9J	0.68J	<0.017U	<0.029U
SSHS-B467	SSHS-B467-SUB-2-4	2-4	8/29/2016	180-58133-1	3776	<4.2U	<6.6U	<2.3U	<3.4U	2800J	900J	65J	<1.7U	<2.9U
SSHS-B467	SSHS-B467-SUB-4-6	4-6	8/29/2016	180-58133-2	309.3	<0.41U	<0.64U	<0.22U	<0.33U	220J	83J	5.3J	<0.17U	<0.28U
SSHS-B467	SSHS-B467-SUB-6-8	6-8	8/29/2016	180-58133-2	0.0514	<0.008U	<0.013U	<0.0044U	<0.0064U	0.025	<0.0064U	<0.006U	<0.0032U	<0.0054U
SSHS-B468	SSHS-B468-SUB-2-4	2-4	8/24/2016	180-57932-1	110.7	<0.41U	<0.65U	<0.23U	<0.33U	82J	24J	3.7J	<0.17U	<0.28U
SSHS-B468	SSHS-B468-SUB-4-6	4-6	8/24/2016	180-57932-1	2.689	<0.0086U,F1	<0.014U	<0.0047U	<0.0069U	2J	0.58J	0.087J	<0.0035U	<0.0058U
SSHS-B476	SSHS-B476-SUB-6-8	6-8	8/29/2016	180-58133-1	<0.058	<0.0082U	<0.013U	<0.0045U	<0.0066U	<0.0042U	<0.0066U	<0.0061U	<0.0033U	<0.0055U
SSHS-B477	SSHS-B477-SUB-2-4	2-4	8/29/2016	180-58133-1	3.761	<0.0084U	<0.013U	<0.0046U	<0.0068U	2.5J	1.1J	0.14J	<0.0034U	<0.0057U
SSHS-B477	SSHS-B477-SUB-4-6	4-6	8/29/2016	180-58133-1	95.14	<0.41U	<0.65U	<0.23U	<0.33U	67J	25J	2.1J	<0.17U	<0.28U
SSHS-B477	SSHS-B477-SUB-6-8	6-8	8/29/2016	180-58133-2	136.8	<0.43U	<0.67U	<0.23U	<0.34U	98J	35J	2.7J	<0.17U	<0.29U
SSHS-B479	SSHS-B479-SUB-10-12	10-12	8/29/2016	180-58133-1	<0.0583	<0.0082U	<0.013U	<0.0045U	<0.0066U	<0.0042U	<0.0066U	<0.0062U	<0.0034U	<0.0056U
SSHS-B619	SSHS-B619-SUB-10-12	10-12	2/14/2017	180-63507-1	<0	<0.0098U	<0.0095U	<0.0073U	<0.015U	<0.0088U	<0.0081U	<0.012U	<0.0056U	<0.013U
SSHS-B619	SSHS-B619-SUB-2-4	2-4	2/14/2017	180-63507-1	2.52	<0.0096U	<0.0094U	<0.0072U	<0.014U	1.8J	0.61J	0.11J	<0.0055U	<0.013U
SSHS-B619	SSHS-B619-SUB-4-6	4-6	2/14/2017	180-63507-1	1.026	<0.0097U	<0.0094U	<0.0072U	<0.014U	0.71J	0.27J	0.046J	<0.0055U	<0.013U
SSHS-B619	SSHS-B619-SUB-6-8	6-8	2/14/2017	180-63507-1	0.125	<0.0096U	<0.0094U	<0.0072U	<0.014U	0.082J	0.043J	<0.012U	<0.0055U	<0.013U
SSHS-B619	SSHS-B619-SUB-8-10	8-10	2/14/2017	180-63507-1	0.607	<0.0096U	<0.0094U	<0.0072U	<0.014U	0.42J	0.16J	0.027J	<0.0055U	<0.013U
SSHS-B620	SSHS-B620-SUB-10-12	10-12	2/13/2017	180-63507-1	0.017	<0.0093U	<0.009U	<0.0069U	<0.014U	0.017	<0.0077U	<0.012U	<0.0053U	<0.013U
SSHS-B620	SSHS-B620-SUB-2-4	2-4	2/13/2017	180-63507-1	30.8	<0.097U	<0.095U	<0.073U	<0.15U	21J	8.2J	1.6J	<0.056U	<0.13U
SSHS-B620	SSHS-B620-SUB-4-6	4-6	2/13/2017	180-63507-1	13.2	<0.1U	<0.099U	<0.076U	<0.15U	9.2J	3.4J	0.6J	<0.059U	<0.14U
SSHS-B620	SSHS-B620-SUB-6-8	6-8	2/13/2017	180-63507-1	2.33	<0.01U	<0.0098U	<0.0075U	<0.015U	1.6J	0.58J	0.15J	<0.0058U	<0.014U
SSHS-B620	SSHS-B620-SUB-8-10	8-10	2/13/2017	180-63507-1	4.83	<0.0099U	<0.0096U	<0.0074U	<0.015U	3.4J	1.2J	0.23J	<0.0057U	<0.013U
SSHS-B621	SSHS-B621-SUB-10-12	10-12	2/13/2017	180-63507-1	0.826	<0.0097U	<0.0094U	<0.0072U	<0.014U	0.62J	0.17J	0.036J	<0.0056U	<0.013U
SSHS-B621	SSHS-B621-SUB-12-14	12-14	2/13/2017	180-63507-2	0.3041	<0.0098U	<0.0095U	<0.0073U	<0.015U	0.18	0.088	<0.012U	<0.0056U	<0.013U
SSHS-B621	SSHS-B621-SUB-6-8	6-8	2/13/2017	180-63507-1	0.0354	<0.0097U	<0.0095U	<0.0073U	<0.015U	0.026J	0.0094J	<0.012U	<0.0056U	<0.013U
SSHS-B621	SSHS-B621-SUB-8-10	8-10	2/13/2017	180-63507-1	0.434	<0.0098U	<0.0096U	<0.0073U	<0.015U	0.31J	0.099J	0.025J	<0.0056U	<0.013U
SSHS-B622	SSHS-B622-SUB-10-12	10-12	2/16/2017	180-63593-1	0.0929	<0.0093U	<0.0091U	<0.007U	<0.014U	0.042J	0.016J	<0.012U	<0.0054U	<0.013U
SSHS-B622	SSHS-B622-SUB-4-6	4-6	2/16/2017	180-63593-1	23.08	<0.097U	<0.095U	<0.073U	<0.15U	17J	4.9J	0.88J	<0.056U	<0.13U
SSHS-B622	SSHS-B622-SUB-6-8	6-8	2/16/2017	180-63593-2	2.73	<0.0097U	<0.0095U	<0.0073U	<0.015U	1.7	0.87	0.13	<0.0056U	<0.013U
SSHS-B622	SSHS-B622-SUB-8-10	8-10	2/16/2017	180-63593-2	6.949	<0.0095U	<0.0093U	<0.0071U	<0.014U	4.7	2.1	0.12	<0.0055U	<0.013U
SSHS-B623	SSHS-B623-SUB-10-12	10-12	2/16/2017	180-63593-1	<0.0869	<0.0095U	<0.0093U	<0.0071U	<0.014U	<0.0086U	<0.0079U	<0.012U	<0.0055U	<0.013U
SSHS-B632A	SSHS-B632A-SUB-10-12	10-12	7/11/2017	180-68095-1	<0.0891	<0.0098U	<0.0095U	<0.0073U	<0.015U	<0.0088U	<0.0081U	<0.012U	<0.0056U	<0.013U
SSHS-B632A	SSHS-B632A-SUB-12-14	12-14	7/11/2017	180-68095-1	<0.0889	<0.0097U	<0.0095U	<0.0073U	<0.015U	<0.0088U	<0.008U	<0.012U	<0.0056U	<0.013U
SSHS-B632B	SSHS-B632B-SUB-10-12	10-12	7/13/2017	180-68203-1	0.04865	<0.0093U	<0.0091U	<0.0069U	<0.014U	0.01J	<0.0077U	<0.012U	<0.0053U	<0.013U
SSHS-B645	SSHS-B645-SUB-10-12	10-12	2/13/2017	180-63507-1	9.39	<0.046U	<0.045U	<0.035U	<0.069U	5.8J	2.7J	0.89J	<0.027U	<0.063U
SSHS-B645	SSHS-B645-SUB-12-14	12-14	2/13/2017	180-63507-2	6.299	<0.0094U	<0.0092U	<0.007U	<0.014U	4.2	1.7	0.37	<0.0054U	<0.013U
SSHS-B646	SSHS-B646-SUB-10-12	10-12	2/13/2017	180-63507-1	0.099	<0.0096U	<0.0093U	<0.0071U	<0.014U	0.081J	0.018J	<0.012U	<0.0055U	<0.013U
SSHS-B646	SSHS-B646-SUB-12-14	12-14	2/13/2017	180-63507-2	337.7	<4.8U	<4.7U	<3.6U	<7.1U	220	90	13	<2.7U	<6.4U
SSHS-B650	SSHS-B650-SUB-10-12	10-12	2/14/2017	180-63507-1	0.039	<0.0099U	<0.0097U	<0.0074U	<0.015U	0.023J	0.016J	<0.012U	<0.0057U	<0.013U
SSHS-B650	SSHS-B650-SUB-12-14	12-14	2/14/2017	180-63507-2	1.816	<0.0094U	<0.0092U	<0.007U	<0.014U	1.3	0.4	0.087	<0.0054U	<0.013U
SSHS-B650	SSHS-B650-SUB-2-4	2-4	2/14/2017	180-63507-1	16.67	<0.098U	<0.095U	<0.073U	<0.15U	12J	3.9J	0.77J	<0.056U	<0.13U
SSHS-B650	SSHS-B650-SUB-4-6	4-6	2/14/2017	180-63507-1	2.92	<0.0097U	<0.0095U	<0.0072U	<0.015U	2J	0.78J	0.14J	<0.0056U	<0.013U
SSHS-B650	SSHS-B650-SUB-6-8	6-8	2/14/2017	180-63507-1	20.99	<0.1U	<0.1U	<0.077U	<0.15U	15J	5.1J	0.89J	<0.059U	<0.14U
SSHS-B650	SSHS-B650-SUB-8-10	8-10	2/14/2017	180-63507-1	1.936	<0.0099U	<0.0097U	<0.0074U	<0.015U	1.4J	0.45J	0.086J	<0.0057U	<0.013U
SSHS-B651	SSHS-651-SUB-2-4	2-4	2/14/2017	180-63507-1	0.606	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.39J	0.18J	0.036J	<0.0055U	<0.013U
SSHS-B651	SSHS-B651-SUB-10-12	10-12	2/14/2017	180-63507-1	<0	<0.011U	<0.01U	<0.0079U	<0.016U	<0.0095U	<0.0087U	<0.013U	<0.0061U	<0.014U
SSHS-B651	SSHS-B651-SUB-12-14	12-14	2/14/2017	180-63507-2	0.1038	<0.0093U	<0.0091U	<0.0069U	<0.014U	0.05	0.019	<0.012U	<0.0053U	<0.013U
SSHS-B651	SSHS-B651-SUB-4-6	4-6	2/14/2017	180-63507-1	0.64	<0.0094U	<0.0091U	<0.007U	<0.014U	0.42J	0.19J	0.03J	<0.0054U	<0.013U
SSHS-B651	SSHS-B651-SUB-6-8	6-8	2/14/2017	180-63507-1	<0	<0.011U	<0.011U	<0.0081U	<0.016U	<0.0098U	<0.009U	<0.014U	<0.0063U	<0.015U
SSHS-B651	SSHS-B651-SUB-8-10	8-10	2/14/2017	180-63507-1	0.979	<0.01U	<0.01U	<0.0078U	<0.016U	0.64J	0.29J	0.049J	<0.006U	<0.014U
SSHS-B652	SSHS-B652-SUB-10-12	10-12	2/14/2017	180-63507-1	0.075	<0.0091U	<0.0089U	<0.0068U	<0.014U	0.056J	0.019J	<0.011U	<0.0052U	<0.012U
SSHS-B652	SSHS-B652-SUB-12-14	12-14	2/14/2017	180-63507-2	19.53	<0.094U	<0.092U	<0.07U	<0.14U	15	3.6	0.64	<0.054U	<0.13U
SSHS-B652	SSHS-B652-SUB-2-4	2-4	2/14/2017	180-63507-1	5.83	<0.0096U	<0.0094U	<0.0072U	<0.014U	4.5J	1.1J	0.23J	<0.0055U	<0.013U
SSHS-B652	SSHS-B652-SUB-4-6	4-6	2/14/2017	180-63507-1	195.7	<1U	<0.98U	<0.75U	<1.5U	150J	39J	6.7J	<0.58U	<1.4U
SSHS-B652	SSHS-B652-SUB-6-8	6-8	2/14/2017	180-63507-1	101.6	<0.99U	<0.96U	<0.74U	<1.5U	77J	21J	3.6J	<0.57U	<1.3U
SSHS-B652	SSHS-B652-SUB-8-10	8-10	2/14/2017	180-63507-1	108.7	<0.97U	<0.95U	<0.72U	<1.5U	84J	21J	3.7J	<0.56U	<1.3U
SSHS-B653	SSHS-B653-SUB-10-12	10-12	2/14/2017	180-63507-1	7.4	<0.1U	<0.1U	<0.076U	<0.15U	5.6J	1.5J	0.3J	<0.059U	<0.14U
SSHS-B653	SSHS-B653-SUB-12-14	12-14	2/14/2017	180-63507-2	5.439	<0.0096U	<0.0094U	<0.0072U	<0.014U	4.1	1.1	0.21	<0.0055U	<0.013U
SSHS-B653	SSHS-B653-SUB-4-6	4-6	2/14/2017	180-63507-1	13.22	<0.099U	<0.097U	<0.074U	<0.15U	9.9J	2.8J	0.52J	<0.057U	<0.13U
SSHS-B653	SSHS-B653-SUB-6-8	6-8	2/14/2017	180-63507-1	23.67	<0.1U	<0.099U	<0.076U	<0.15U	17J	5.9J	0.77J	<0.058U	<0.14U
SSHS-B653	SSHS-B653-SUB-8-10	8-10	2/14/2017	180-63507-1	11.91	<0.1U	<0.098U	<0.075U	<0.15U	8.9J	2.5J	0.51J	<0.058U	<0.14U
SSHS-B654	SSHS-B654-SUB-10-12	10-12	2/16/2017	180-63593-1	0.0666	<0.0094U	<0.0092U	<0.007U	<0.014U	0.022J	0.0096J	<0.012U	<0.0054U	<0.013U
SSHS-B654	SSHS-B654-SUB-4-6	4-6	2/16/2017	180-63593-1	0.9814	<0.0099U	<0.0097U	<0.0074U	<0.015U	0.68J	0.23J	0.041J	<0.0057U	<0.013U
SSHS-B654	SSHS-B654-SUB-8-10	8-10	2/16/2017	180-63593-1	0.2439	<0.0099U	<0.0097U	<0.0074U	<0.015U	0.15J	0.057J	<0.013U	<0.0057U	<0.013U
SSHS-B655	SSHS-B655-SUB-4-6	4-6	2/13/2017	180-63507-1	7.26	<0.048U	<0.047U	<0.036U	<0.072U	5J	1.9J	0.36J	<0.028U	<0.065U
SSHS-B655	SSHS-B655-SUB-6-8	6-8	2/13/2017	180-63507-1	0.025	<0.01U	<0.01U	<0.0077U	<0.016U	0.025	<0.0086U	<0.013U	<0.006U	<0.014U
SSHS-B655	SSHS-B655-SUB-8-10	8-10	2/13/2017	180-63507-2	7.1	<0.0099U	<0.0097U	<0.0074U	<0.015U	4.1	2.4	0.57	<0.0057U	<0.013U
SSHS-B656	SSHS-B656-SUB-12-14	12-14	2/14/2017	180-63507-1	0.618	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.45J	0.15J	0.018J	<0.0055U	<0.013U
SSHS-B659	SSHS-B659-SUB-12-14	12-14	2/16/2017	180-63593-1	0.8962	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.58J	0.26J	0.027J	<0.0055U	<0.013U
SSHS-B661	SSHS-B661-SUB-4-6	4-6	2/13/2017	180-63507-1	3.44	<0.011U	<0.01U	<0.0079U	<0.016U	2.4J	0.82J	0.22J	<0.006U	<0.014U
SSHS-B663	SSHS-B663-SUB-2-4	2-4	2/15/2017	180-63517-1	6	<0.0098U	<0.0095U	<0.0073U	<0.015U	4.1J	1.6J	0.27J	<0.0056U	<0.013U

TABLE 2
Summary of PCB Results for Subsurface Soils (2-14 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, New York

					PCBs									
					Total PCBs	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.0037	0.0046	0.0041	0.0024	0.0041	0.0045	0.004	0.0022	0.0054
Subsurface Soil Criteria					10									
NYS Hazardous Material					50									
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**										
SSHS-B666	SSHS-B666-SUB-8-10	8-10	2/13/2017	180-63507-1	1.627	<0.0097U	<0.0094U	<0.0072U	<0.014U	1.2J	0.36J	0.067J	<0.0055U	<0.013U
SSHS-B669	SSHS-B669-SUB-10-12	10-12	2/13/2017	180-63507-1	0.605	<0.009U	<0.0088U	<0.0067U	<0.013U	0.49J	0.093J	0.022J	<0.0052U	<0.012U
SSHS-B669	SSHS-B669-SUB-12-14	12-14	2/13/2017	180-63507-2	34.2	<0.098U	<0.096U	<0.073U	<0.15U	22	9.9	2	<0.056U	<0.13U
SSHS-B673	SSHS-B673-SUB-10-12	10-12	2/16/2017	180-63593-1	0.0919	<0.0093U	<0.0091U	<0.007U	<0.014U	0.046J	0.011J	<0.012U	<0.0054U	<0.013U
SSHS-B673	SSHS-B673-SUB-8-10	8-10	2/16/2017	180-63593-1	0.4836	<0.01U	<0.0098U	<0.0075U	<0.015U	0.35J	0.096J	<0.013U	<0.0058U	<0.014U
SSHS-B685	SSHS-B685-SUB-10-12	10-12	3/23/2017	180-64584-1	<0.0908	<0.0099U	<0.0097U	<0.0074U	<0.015U	<0.0089U	<0.0082U	<0.013U	<0.0057U	<0.013U
SSHS-B685	SSHS-B685-SUB-12-14	12-14	3/23/2017	180-64584-1	0.5714	<0.0099U	<0.0097U	<0.0074U	<0.015U	0.4	0.12	0.021	<0.0057U	<0.013U
SSHS-B686	SSHS-B686-SUB-10-12	10-12	3/22/2017	180-64526-3	0.06015	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.021	<0.0079U	<0.012U	<0.0055U	<0.013U
SSHS-B686	SSHS-B686-SUB-12-14	12-14	3/22/2017	180-64526-1	0.7658	<0.0093U,F2,F1	<0.009U	<0.0069U	<0.014U	0.56	0.15	0.027F2	<0.0053U	<0.013U
SSHS-B686A	SSHS-B686A-SUB-10-12	10-12	7/10/2017	180-68038-1	4.94	<0.0099U	<0.0096U	<0.0074U	<0.015U	3.5J	1.3J	0.11J	<0.0057U	<0.013U
SSHS-B687	SSHS-B687-SUB-10-12	10-12	3/22/2017	180-64526-3	<0.0865	<0.0095U	<0.0092U	<0.0071U	<0.014U	<0.0085U	<0.0078U	<0.012U	<0.0054U	<0.013U
SSHS-B688	SSHS-B688-SUB-2-4	2-4	3/21/2017	180-64494-1	2.959	<0.0096U	<0.0094U	<0.0072U	<0.014U	2.3	0.5	0.13	<0.0055U	<0.013U
SSHS-B689	SSHS-B689-SUB-2-4	2-4	3/23/2017	180-64584-1	0.4281	<0.01U	<0.0098U	<0.0075U	<0.015U	0.27	0.1	0.027	<0.0058U	<0.014U
SSHS-B689	SSHS-B689-SUB-4-6	4-6	3/23/2017	180-64584-1	0.0833	<0.0099U	<0.0096U	<0.0074U	<0.015U	0.026	0.014J	0.013J	<0.0057U	<0.013U
SSHS-B693	SSHS-B693-SUB-10-12	10-12	3/23/2017	180-64584-3	<0.086	<0.0094U	<0.0091U	<0.007U	<0.014U	<0.0084U	<0.0077U	<0.012U	<0.0054U	<0.013U
SSHS-B693	SSHS-B693-SUB-8-10	8-10	3/23/2017	180-64584-3	0.095	<0.0094U	<0.0092U	<0.007U	<0.014U	0.041	0.019	<0.012U	<0.0054U	<0.013U
SSHS-B695	SSHS-B695-SUB-8-10	8-10	3/23/2017	180-64584-1	0.09435	<0.0096U	<0.0094U	<0.0072U	<0.014U	0.046	0.013J	<0.012U	<0.0055U	<0.013U
SSHS-B700	SSHS-B700-SUB-10-12	10-12	3/22/2017	180-64526-1	<0.0931	<0.01U	<0.01U	<0.0076U	<0.015U	<0.0092U	<0.0084U	<0.013U	<0.0059U	<0.014U
SSHS-B700	SSHS-B700-SUB-12-14	12-14	3/22/2017	180-64526-1	0.5133	<0.01U	<0.01U	<0.0077U	<0.015U	0.34	0.11	0.032	<0.0059U	<0.014U
SSHS-B700	SSHS-B700-SUB-6-8	6-8	3/22/2017	180-64526-2	0.0595	<0.0092U	<0.0089U	<0.0068U	<0.014U	0.017	0.0084J	<0.012U	<0.0053U	<0.012U
SSHS-B701	SSHS-B701-SUB-10-12	10-12	3/23/2017	180-64584-1	<0.091	<0.01U	<0.0097U	<0.0074U	<0.015U	<0.009U	<0.0082U	<0.013U	<0.0057U	<0.013U
SSHS-B701	SSHS-B701-SUB-12-14	12-14	3/23/2017	180-64584-1	0.2999	<0.0093U	<0.0091U	<0.007U	<0.014U	0.2	0.058	0.013J	<0.0054U	<0.013U
SSHS-B701	SSHS-B701-SUB-8-10	8-10	3/23/2017	180-64584-2	0.1881	<0.0097U	<0.0095U	<0.0073U	<0.015U	0.11	0.042	<0.012U	<0.0056U	<0.013U
SSHS-B702	SSHS-B702-SUB-2-4	2-4	3/21/2017	180-64494-1	0.1234	<0.0096U	<0.0094U	<0.0072U	<0.014U	0.063	0.025	<0.012U	<0.0055U	<0.013U
SSHS-B703	SSHS-B703-SUB-2-4	2-4	3/23/2017	180-64584-1	0.366	<0.0097U	<0.0095U	<0.0072U	<0.015U	0.18	0.12	0.036	<0.0056U	<0.013U
SSHS-B706	SSHS-B706-SUB-10-12	10-12	3/22/2017	180-64526-1	0.124	<0.0097U	<0.0095U	<0.0072U	<0.015U	0.048	0.022	0.024	<0.0056U	<0.013U
SSHS-B708	SSHS-B708-SUB-8-10	8-10	3/21/2017	180-64494-1	0.1555	<0.01U	<0.0098U	<0.0075U	<0.015U	0.096	0.022p	<0.013U	<0.0057U	<0.014U
SSHS-B709	SSHS-B709-SUB-6-8	6-8	3/22/2017	180-64526-2	0.0721	<0.0095U	<0.0092U	<0.0071U	<0.014U	0.026	0.011J	<0.012U	<0.0054U	<0.013U
SSHS-B710	SSHS-B710-SUB-6-8	6-8	3/23/2017	180-64584-2	<0.0863	<0.0094U	<0.0092U	<0.007U	<0.014U	<0.0085U	<0.0078U	<0.012U	<0.0054U	<0.013U
SSHS-B711	SSHS-B711-SUB-6-8	6-8	3/23/2017	180-64584-2	1.349	<0.01U	<0.0099U	<0.0075U	<0.015U	0.86	0.38	0.078	<0.0058U	<0.014U
SSHS-B714	SSHS-B714-SUB-12-14	12-14	3/22/2017	180-64526-2	0.2343	<0.01U	<0.01U	<0.0077U	<0.015U	0.14	0.049	0.014J	<0.0059U	<0.014U
SSHS-B715	SSHS-B715-SUB-12-14	12-14	3/22/2017	180-64526-2	0.2673	<0.0099U	<0.0096U	<0.0074U	<0.015U	0.18	0.045	0.012J	<0.0057U	<0.013U
SSHS-B738	SSHS-B738-SUB-6-8	6-8	4/13/2017	180-65226-1	0.06	<0.0095U	<0.0092U	<0.0071U	<0.014U	0.021	<0.0078U	<0.012U	<0.0054U	<0.013U
SSHS-B739	SSHS-B739-SUB-4-6	4-6	4/12/2017	180-65174-2	3.981	<0.01U	<0.01U	<0.0077U	<0.015U	2.7	1.1	0.15	<0.0059U	<0.014U
SSHS-B739	SSHS-B739-SUB-6-8	6-8	4/12/2017	180-65174-1	<0.0892	<0.0098U	<0.0096U	<0.0073U	<0.015U	<0.0088U	<0.0081U	<0.012U	<0.0056U	<0.013U
SSHS-B742	SSHS-B742-SUB-10-12	10-12	4/12/2017	180-65174-1	<0.0892	<0.0098U	<0.0096U	<0.0073U	<0.015U	<0.0088U	<0.0081U	<0.012U	<0.0056U	<0.013U
SSHS-B742	SSHS-B742-SUB-12-14	12-14	4/12/2017	180-65174-1	4.101	<0.01U	<0.01U	<0.0077U	<0.015U	3.1	0.84	0.13	<0.0059U	<0.014U
SSHS-B742A	SSHS-B742A-SUB-10-12	10-12	7/13/2017	180-68203-1	0.0669	<0.0094U	<0.0092U	<0.007U	<0.014U	0.022	0.0099J	<0.012U	<0.0054U	<0.013U
SSHS-B743	SSHS-B743-SUB-6-8	6-8	4/13/2017	180-65226-1	0.0559	<0.0094U	<0.0092U	<0.007U	<0.014U	0.017J	<0.0078U	<0.012U	<0.0054U	<0.013U
SSHS-B744	SSHS-B744-SUB-2-4	2-4	4/13/2017	180-65226-1	0.341	<0.0094U	<0.0091U	<0.007U	<0.014U	0.18	0.1	0.032	<0.0054U	<0.013U
SSHS-B787	SSHS-B787-SUB-8-10	8-10	5/15/2017	180-66369-1	0.9361	<0.0095U	<0.0092U	<0.0071U	<0.014U	0.62	0.25	0.037	<0.0054U	<0.013U
SSHS-B8	B23484	4-5	5/11/2000		3.47	<0.037U	<0.037U	<0.037U	<0.037U	3.3D	<0.037U	0.17	-	-
SSHS-B812	SSHS-B812-SUB-12-14	12-14	5/15/2017	180-66369-1	13.13	<0.095U	<0.093U	<0.071U	<0.14U	9.6	2.6	0.64	<0.055U	<0.13U
SSHS-B812	SSHS-B812-SUB-8-10	8-10	5/15/2017	180-66369-1	0.75	<0.0094U	<0.0092U	<0.007U	<0.014U	0.55	0.15	0.021	<0.0054U	<0.013U
SSHS-IRM3-B001	SSHS-IRM3-B001-C	6.3-6.3	8/5/2019	180-93683-2	3.404	<0.0057U	<0.0063U	<0.0043U	<0.0026U	2.3J	0.85J	0.24J	<0.0024U	<0.0062U
SSHS-IRM3-B002	SSHS-IRM3-B002-C	5.7-5.7	7/31/2019	180-93493-1	0.4163	<0.0064U	<0.0069U	<0.0048U	<0.0029U	0.23J	0.14J	0.031J	<0.0026U	<0.0069U
SSHS-IRM3-B003	SSHS-IRM3-B003-C	5.7-5.7	8/5/2019	180-93683-2	3.344	<0.0058U	<0.0063U	<0.0043U	<0.0026U	2.1J	0.92J	0.31J	<0.0024U	<0.0062U
SSHS-IRM3-B004	SSHS-IRM3-B004-C	6.1-6.1	8/5/2019	180-93683-2	1.833	<0.0056U	<0.0061U	<0.0042U	<0.0025U	1.2J	0.47J	0.15J	<0.0023U	<0.0061U
SSHS-IRM3-B007	SSHS-IRM3-B007-C	6.9-6.9	8/2/2019	180-93640-1	7.015	<0.057U	<0.062U	<0.042U	<0.025U	5.1J	1.4J	0.38J	<0.023U	<0.061U
SSHS-IRM3-B010	SSHS-IRM3-B010	10.1-10.1	7/19/2019	180-92988-1	0.0326	<0.0058U	<0.0063U	<0.0044U	<0.0026U	<0.0043UJ	0.014J	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-B013	SSHS-IRM3-B013-C	12-12	8/5/2019	180-93683-2	1.222	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.84J	0.28J	0.089J	<0.0023U	<0.0061U
SSHS-IRM3-B020	SSHS-IRM3-B020-C	13.3-13.3	8/5/2019	180-93683-2	1.601	<0.0056U	<0.0061U	<0.0042U	<0.0025U	1.1J	0.39J	0.098J	<0.0023U	<0.0061U
SSHS-IRM3-B021	SSHS-IRM3-B021-C	13.7-13.7	8/5/2019	180-93683-1	0.5567	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.38J	0.13J	0.033J	<0.0024U	<0.0062U
SSHS-IRM3-B028	SSHS-IRM3-B028-07-09-19	2.7-2.7	7/9/2019	180-92392-1	0.0624	<0.0059U	<0.0064U	<0.0044U	<0.0026U	0.03J	0.013J	0.0054J	<0.0024U	<0.0063U
SSHS-IRM3-B101	SSHS-IRM3-B101-C	2.2-2.2	7/29/2019	180-93352-1	0.1029	<0.0062U	<0.0068U	<0.0047U	<0.0028U	0.052J	0.024J	0.012J	<0.0026U	<0.0067U
SSHS-IRM3-B108	SSHS-IRM3-B108-C	12-12	8/2/2019	180-93640-1	0.5137	<0.0061U	<0.0067U	<0.0046U	<0.0028U	0.37J	0.1J	0.029J	<0.0025U	<0.0066U
SSHS-IRM3-B109	SSHS-IRM3-B109-C	12.1-12.1	8/2/2019	180-93640-1	12.12	<0.056U	<0.061U	<0.042U	<0.025U	8.9J	2.4J	0.69J	<0.023U	<0.061U
SSHS-IRM3-B110	SSHS-IRM3-B110-C	9.9-9.9	8/2/2019	180-93640-1	0.09095	<0.006U	<0.0065U	<0.0045U	<0.0027U	0.054J	0.02J	<0.0052U	<0.0025U	<0.0065U
SSHS-IRM3-B111	SSHS-IRM3-B111-C	6.9-6.9	8/2/2019	180-93640-1	11.42	<0.055U	<0.06U	<0.041U	<0.025U	8.2J	2.4J	0.69J	<0.023U	<0.06U
SSHS-IRM3-PIPE	SSHS-IRM3-PIPE13-C	4.4-4.4	8/2/2019	180-93641-1	0.05355	<0.006U	<0.0066U	<0.0045U	<0.0027U	0.028	0.0085J	<0.0053U	<0.0025U	<0.0065U
SSHS-IRM3-PIPE2	SSHS-IRM3-PIPE21-C	6.1-6.1	8/2/2019	180-93641-1	21.94	<0.06U	<0.065U	<0.045U	<0.027U	14	5.7	2.1	<0.025U	<0.065U
SSHS-IRM3-S043	SSHS-IRM3-S043-C	4.1-4.1	7/12/2019	180-92615-1	0.1757	<0.0062U	<0.0068U	<0.0047U	<0.0028U	0.098J	0.06J	<0.0055U	<0.0026U	<0.0067U
SSHS-IRM3-S045	SSHS-IRM3-S045-C	3.4-3.4	7/22/2019	180-93060-1	0.9354	<0.0064U	<0.007U	<0.0048U	<0.0029U	0.54J	0.28J	0.1J	<0.0027U	<0.0069U
SSHS-IRM3-S046	SSHS-IRM3-S046-D	2.4-2.4	7/15/2019	180-92661-1	0.6424	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.39	0.19	0.049	<0.0023U	<0.0061U
SSHS-IRM3-S047	SSHS-IRM3-S047-D	2.6-2.6	7/15/2019	180-92661-1	0.3747	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.22	0.11	0.031	<0.0024U	<0.0062U
SSHS-IRM3-S049	SSHS-IRM3-S049-D	2.7-2.7	7/12/2019	180-92616-1	24.54	<0.06U	<0.065U	<0.045U	<0.027U	16	7.3	1.1	<0.025U	<0.065U
SSHS-IRM3-S049	SSHS-IRM3-S049F-D	2.9-2.9	8/8/2019	180-93896-2	75.34	<0.31U	<0.33U	<0.23U	<0.14U	49J	21J	4.6J	<0.13U	<0.33U
SSHS-IRM3-S050	SSHS-IRM3-S050-D	2.9-2.9	8/5/2019	180-93684-2	2.484	<0.0058U	<0.0063U	<0.0043U	<0.0026U	1.6	0.7	0.17	<0.0024U	<0.0063U
SSHS-IRM3-S051	SSHS-IRM3-S051-D	1.1-1.1	8/5/2019	180-93684-3	0.02545	<0.0055U	<0.006U	<0.0041U	<0.0025U	0.0073J	<0.0051U	<0.0048U	<0.0023U	<0.006U
SSHS-IRM3-S053	SSHS-IRM3-S053-D	3.2-3.2	7/11/2019	180-92542-1	11.69	<0.062U	<0.067U	<0.046U	<0.028U	7.8	3.1	0.64	<0.025U	<0.067U
SSHS-IRM3-S054	SSHS-IRM3-S054-D	3.7-3.7	7/11/2019	180-92542-1	0.1139	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.079	0.019	<0.0049U	<0.0023U	<0.0061U
SSHS-IRM3-S071	SSHS-IRM3-S071-C	4.6-4.6	7/16/2019	180-92715-1	0.02605	<0.0058U	<0.0063U	<0.0044U	<0.0026U	0.0069J	<0.0054U	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-S072	SSHS-IRM3-S072-C	4.1-4.1	7/16/2019	180-92715-1	0.4114	<0.006U	<0.0065U	<0.0045U	<0.0027U	0.3J	0.073J	0.024J	<0.0025U	<0.0065U
SSHS-IRM3-S073	SSHS-IRM3-S073-D	4.3-4.3	8/5/2019	180-93684-2	22.93	<0.056U	<0.061U	<0.042U	<0.025U	16	5.9	0.9	<0.023U	<0.06U
SSHS-IRM3-S073	SSHS-IRM3-S073A-C	3.9-3.9	8/5/2019	180-93683-2	34.03	<0.056U	<0.061U	<0.042U	<0.025U	26J	6.2J	1.7J	<0.023U	<0.061U
SSHS-IRM3-S073	SSHS-IRM3-S073B-D	5.4-5.4	7/16/2019	180-92717-1	<0.0445	<0.0061U	<0.0066U	<0.0046U	<0.0027U	<0.0045U	<0.0056U	<0.0053U	<0.0025U	<0.0066U
SSHS-IRM3-S073	SSHS-IRM3-S073BF-D	4-4	8/8/2019	180-93896-2	1.712	<0.0058U	<0.0064U	<0.0044U	<0.0026U	1.2J	0.42J	0.078J	<0.0024U	<0.0063U
SSHS-IRM3-S074	SSHS-IRM3-S074-D	5.3-5.3	8/5/2019	180-93684-2	17.12	<0.056U	<0.061U	<0.042U	<0.025U	11	5.1	0.89	<0.023U	<0.061U
SSHS-IRM3-S075	SSHS-IRM3-S075-D	5.5-5.5	8/5/2019	180-93684-2	1.025	<0.0063U	<0.0069U	<0.0048U	<0.0029U	0.42	0.38	0.21	<0.0026U	<0.0069U
SSHS-IRM3-S076	SSHS-IRM3-S076-D	5.1-5.1	8/5/2019	180-93684-2	10.82	<0.057U	<0.062U	<0.043U	<0.026U	7	3	0.68	<0.024U	<0.062U
SSHS-IRM3-S077	SSHS-IRM3-S077-D	3.3-3.3	8/5/2019	180-93684-3	6.613	<0.0055U,F1	<0.006U	<0.0042U	<0.0025U	3.7	2.2	0.7	<0.0023U	<0.006U
SSHS-IRM3-S078	SSHS-IRM3-S078-D	4.4-4.4	8/5/2019	180-93684-3	425.4	<0.59U	<0.65U	<0.44U	<0.27U	300	100	24	<0.25U	<0.64U
SSHS-IRM3-S079	SSHS-IRM3-S079-D	4.8-4.8	8/5/2019	180-93684-3	2.755	<0.0062U	<0.0067U	<0.0046U	<0.0028U	1.6	0.91	0.23	<0.0026U	<0.0067U
SSHS-IRM3-S094	SSHS-IRM3-S094-C	6.4-6.4	8/1/2019	180-93547-1	<0.0424	<0.0058U	<0.0063U	<0.0043U	<0.0026U	<0.0043J	<0.0053J	<0.0051J	<0.0024U	<0.0063U
SSHS-IRM3-S095	SSHS-IRM3-S095-C	8.1-8.1	8/2/2019	180-93640-2	0.2494	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.15J	0.067J	0.019J	<0.0023U	<0.006U
SSHS-IRM3-S097	SSHS-IRM3-S097-C	7.6-7.6	8/2/2019	180-93640-1	1.249	<0.0055U	<0.006U	<0.0041U	<0.0025U	0.78J	0.36J	0.096J	<0.0023U	<0.0059U
SSHS-IRM3-S098	SSHS-IRM3-S098-C	9-9	8/2/2019	180-93640-2	0.5184	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.34J	0.13J	0.035J	<0.0023U	<0.006U
SSHS-IRM3-S099	SSHS-IRM3-S099-D	5.9-5.9	8/5/2019	180-93684-2	49.46	<0.11U	<0.12U	<0.083U	<0.05U	35	12	2.2	<0.046U	<0.12U
SSHS-IRM3-S100	SSHS-IRM3-S100-D	7.9-7.9	8/5/2019	180-93684-2	0.2714	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.15	0.091	0.017	<0.0023U	<0.0061U
SSHS-IRM3-S101	SSHS-IRM3-S101-D	5.4-5.4	8/5/2019	180-93684-3	45.1	<0.29U	<0.32U	<0.22U	<0.13U	31	11	2.4	<0.12U	<0.32U
SSHS-IRM3-S102	SSHS-IRM3-S102-D	6.4-6.4	8/5/2019	180-93684-3	428.5	<0.61U	<0.67U	<0.46U	<0.28U	300	110	17	<0.25U	<0.66U
SSHS-IRM3-S103	SSHS-IRM3-S103-D	6.9-6.9	8/5/2019	180-93684-1	18.96	<0.057U,F1	<0.062U	<0.043U	<0.026U	13	4.9	0.92F1,F2	<0.024U	<0.062U
SSHS-IRM3-S104	SSHS-IRM3-S104-D	5.7-5.7	8/5/2019	180-93684-1	25.34	<0.058U	<0.064U	<0.044U	<0.026U	13	8.8	3.4	<0.024U	<0.063U
SSHS-IRM3-S111	SSHS-IRM3-S111-C	9.8-9.8	7/24/2019	180-93173-1	<0.0426	<0.0058U	<0.0063U	<0.0044U	<0.0026U	<0.0043U	<0.0054U	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-S118	SSHS-IRM3-S118-C	8-8	8/1/2019	180-93547-1	<0.0455	<0.0062U	<0.0068U	<0.0047U	<0.0028U	<0.0046J	<0.0057J	<0.0054J	<0.0026U	<0.0067U
SSHS-IRM3-S120	SSHS-IRM3-S120-C	10.5-10.5	8/5/2019	180-93683-2	0.6107	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.33J	0.2J	0.067J	<0.0024U	<0.0062U
SSHS-IRM3-S121	SSHS-IRM3-S121-C	9.5-9.5	8/5/2019	180-93683-2	<0.0416	<0.0057U	<0.0062U	<0.0043U	<0.0026U	<0.0042U	<0.0052U	<0.005U	<0.0023U	<0.0061U
SSHS-IRM3-S122	SSHS-IRM3-S122-D	10-10	8/5/2019	180-93684-2	22.53	<0.056U	<0.061U	<0.042U	<0.025U	14	7.3	1.1	<0.023U	<0.061U
SSHS-IRM3-S123	SSHS-IRM3-S123-D	10.6-10.6	8/5/2019	180-93684-2	2.533	<0.0055U	<0.006U	<0.0041U	<0.0025U	1.7	0.67	0.15	<0.0023U	<0.0059U
SSHS-IRM3-S125	SSHS-IRM3-S125-D	9.9-9.9	8/5/2019	180-93684-2	503.4	<0.59U	<0.64U	<0.44U	<0.26U	310	150	42	<0.24U	<0.63U
SSHS-IRM3-S126	SSHS-IRM3-S126-D	9.7-9.7	8/5/2019	180-93684-2	0.1208	<0.0058U	<0.0063U	<0.0044U	<0.0026U	0.068	0.03	0.0089J	<0.0024U	<0.0063U
SSHS-IRM3-S127	SSHS-IRM3-S127-D	8.6-8.6	8/5/2019	180-93684-2	0.04385	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.025	<0.0053U	<0.005U	<0.0024U	<0.0062U
SSHS-IRM3-S133	SSHS-IRM3-S133-C	10.8-10.8	8/5/2019	180-93683-1	0.1992	<0.0055U	<0.006U	<0.0041U	<0.0025U	0.12J	0.051J	0.015J	<0.0023U	<0.006U
SSHS-IRM3-S135	SSHS-IRM3-S135-C	11.4-11.4	7/26/2019	180-93321-1	0.1607	<0.0059U	<0.0064U	<0.0044U	<0.0027U	0.096J	0.048J	<0.0052U	<0.0024U	<0.0064U
SSHS-IRM3-S143	SSHS-IRM3-S143-C	11.9-11.9	8/5/2019	180-93683-2	0.2037	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.13J	0.046J	0.014J	<0.0024U	<0.0062U
SSHS-IRM3-S144	SSHS-IRM3-S144-C	11.9-11.9	8/5/2019	180-93683-2	5.193	<0.0054U	<0.0059U	<0.0041U	<0.0024U	3.1J	1.6J	0.48J	<0.0022U	<0.0059U
SSHS-IRM3-S145	SSHS-IRM3-S145-D	11.8-11.8	8/5/2019	180-93684-2	0.05555	<0.0055U	<0.006U	<0.0041U	<0.0025U	0.027	0.013J	<0.0048U	<0.0023U	<0.0059U
SSHS-IRM3-S146	SSHS-IRM3-S146-D	12.7-12.7	8/5/2019	180-93684-2	1.904	<0.0059U	<0.0064U	<0.0044U	<0.0026U	1.3	0.48	0.11	<0.0024U	<0.0063U
SSHS-IRM3-S147	SSHS-IRM3-S147-D	13.1-13.1	8/5/2019	180-93684-2	1.924	<0.0057U	<0.0062U	<0.0043U	<0.0026U	1.3	0.5	0.11	<0.0024U	<0.0062U
SSHS-IRM3-S148	SSHS-IRM3-S148-D	11.8-11.8	8/5/2019	180-93684-1	0.05935	<0.0061U	<0.0067U	<0.0046U	<0.0028U	0.026	0.016J	<0.0054U	<0.0025U	<0.0066U
SSHS-IRM3-S149	SSHS-IRM3-S149-D	13.2-13.2	8/5/2019	180-93684-1	<0.0435	<0.0059U	<0.0065U	<0.0044U	<0.0027U	<0.0044U	<0.0055U	<0.0052U,F2	<0.0025U	<0.0064U
SSHS-IRM3-S154	SSHS-IRM3-S154-C	12.1-12.1	8/5/2019	180-93683-1	0.3669	<0.0058U	<0.0063U	<0.0044U	<0.0026U	0.23J	0.096J	0.027J	<0.0024U	<0.0063U
SSHS-IRM3-S161	SSHS-IRM3-S161-C	13.3-13.3	8/5/2019	180-93683-2	0.02715	<0.0056U	<0.0061U	<0.0042U	<0.0025U	0.0087J	<0.0052U	<0.0049U	<0.0023U	<0.0061U
SSHS-IRM3-S162	SSHS-IRM3-S162-C	13-13	8/5/2019	180-93683-2	0.0358	<0.0063U	<0.0069U	<0.0047U	<0.0029U	0.015J	<0.0058U	<0.0055U	<0.0026U	<0.0069U
SSHS-IRM3-S164	SSHS-IRM3-S164-C	13.5-13.5	8/5/2019	180-93683-2	5.404	<0.0058U	<0.0063U	<0.0044U	<0.0026U	3.6J	1.4J	0.39J	<0.0024U	<0.0063U
SSHS-IRM3-S165	SSHS-IRM3-S165-D	12.5-12.5	8/5/2019	180-93684-1	<0.0409	<0.0056U	<0.0061U	<0.0042U	<0.0025U	<0.0041U	<0.0052U	<0.0049U	<0.0023U	<0.006U
SSHS-IRM3-S168	SSHS-IRM3-S168-D	13.1-13.1	7/26/2019	180-93321-1	108.7	<0.58U	<0.64U	<0.44U	<0.26U	71J	31J	5.3J	<0.24U	<0.63U
SSHS-IRM3-S171	SSHS-IRM3-S171-D	11.9-11.9	8/5/2019	180-93684-1	1.22	<0.0059U	<0.0064U	<0.0044U	<0.0026U	0.74	0.37	0.096	<0.0024U	<0.0063U
SSHS-IRM3-S173	SSHS-IRM3-S173-D	13.1-13.1	8/5/2019	180-93684-3	0.1848	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.1	0.059	0.012J	<0.0024U	<0.0062U
SSHS-IRM3-S203	SSHS-IRM3-S203-D	5-5	8/5/2019	180-93684-3	3.784	<0.0058U	<0.0063U	<0.0043U	<0.0026U	2.4	1.1	0.27	<0.0024U	<0.0063U
SSHS-RIM3-S124	SSHS-RIM3-S124-D	9-9	8/5/2019	180-93684-2	0.2538	<0.0057U	<0.0063U	<0.0043U	<0.0026U	0.14	0.083	0.017J	<0.0024U	<0.0062U

Notes:
J - estimated value
U - non-detect
F1 - MS and/or MSD recovery is outside acceptable limits
F2 - MS/MSD RPD exceeds control limits
mg/kg - milligrams per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
PCBs - polychlorinated biphenyls
SCO - Soil Cleanup Objective
PCB or Metals concentrations detected above Restricted-Residential Soil Cleanup Objectives (6 NYCRR Part 375) are presented in light gray.
PCB concentrations detected above New York State hazardous waste threshold (6 NYCRR Part 371.4 (e)) are presented in dark grey

TABLE 3
Summary of PCB Results for Subsurface Soils (<14 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, New York

					PCBs									
					Total PCBs	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.0055	0.006	0.0041	0.0025	0.0041	0.0052	0.0049	0.0023	0.0059
Subsurface Soil Criteria (Water Table Zone)					3.2									
NYS Hazardous Material					50									
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**										
SSHS-B2629	SSHS-B2629-SUB-14-16	14-16	4/25/2019	180-89522-1	4.064	<0.0059U	<0.0064U	<0.0044U	<0.0026U	2.9J	0.86J	0.29J	<0.0024U	<0.0063U
SSHS-B2679	SSHS-B2679-SUB-14-16	14-16	4/24/2019	180-89408-2	28.83	<0.058U	<0.064U	<0.044U	<0.026U	21J	6.7J	0.99J	<0.024U	<0.063U
SSHS-B2760A	SSHS-B2760-SUB-16-18	16-18	5/18/2019	180-90319-3	0.04535	<0.0062U	<0.0067U	<0.0046U	<0.0028U	0.025	<0.0057U	<0.0054U	<0.0026U	<0.0067U
SSHS-B2811	SSHS-B2811-SUB-14-16	14-16	5/18/2019	180-90319-3	0.2694	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.18J	0.073J	<0.0051U	<0.0024U	<0.0063U
SSHS-B2812	SSHS-B2812-SUB-14-16	14-16	5/18/2019	180-90319-3	<0.0463	<0.0063U	<0.0069U	<0.0047U	<0.0029U	<0.0047U	<0.0058U	<0.0055U	<0.0026U	<0.0069U
SSHS-B2813	SSHS-B2813-SUB-14-16	14-16	5/18/2019	180-90319-3	<0.0438	<0.006U	<0.0065U	<0.0045U	<0.0027U	<0.0044U	<0.0055U	<0.0052U	<0.0025U	<0.0065U
SSHS-B2814	SSHS-B2814-SUB-14-16	14-16	5/18/2019	180-90319-3	2.146	<0.0065U	<0.0071U	<0.0049U	<0.0029U	1.3J	0.57J	0.26J	<0.0027U	<0.007U
SSHS-B2817	SSHS-B2817-SUB-14-16	14-16	5/18/2019	180-90319-3	<0.0437	<0.006U	<0.0065U	<0.0045U	<0.0027U	<0.0044U	<0.0055U	<0.0052U	<0.0025U	<0.0064U
SSHS-B621	SSHS-B621-SUB-14-16	14-16	2/13/2017	180-63507-2	0.0923	<0.0099U	<0.0096U	<0.0074U	<0.015U	0.029	0.027	<0.012U	<0.0057U	<0.013U
SSHS-B631	SSHS-B631-SUB-14-16	14-16	2/16/2017	180-63593-2	<0.0827	<0.0091U	<0.0089U	<0.0068U	<0.014U	<0.0082U	<0.0075U	<0.011U	<0.0052U	<0.012U
SSHS-B645	SSHS-B645-SUB-14-16	14-16	2/13/2017	180-63507-2	0.1133	<0.0096U	<0.0093U	<0.0071U	<0.014U	0.046	0.032	<0.012U	<0.0055U	<0.013U
SSHS-B646	SSHS-B646-SUB-14-16	14-16	2/13/2017	180-63507-2	0.9963	<0.0095U	<0.0093U	<0.0071U	0.96	<0.0085U	<0.0078U	<0.012U	<0.0054U	<0.013U
SSHS-B650	SSHS-B650-SUB-14-16	14-16	2/14/2017	180-63507-2	<0.087	<0.0096U	<0.0093U	<0.0071U	<0.014U	<0.0086U	<0.0079U	<0.012U	<0.0055U	<0.013U
SSHS-B651	SSHS-B651-SUB-14-16	14-16	2/14/2017	180-63507-2	<0.0823	<0.009U	<0.0088U	<0.0067U	<0.014U	<0.0081U	<0.0075U	<0.011U	<0.0052U	<0.012U
SSHS-B652	SSHS-B652-SUB-14-16	14-16	2/14/2017	180-63507-2	0.4841	<0.0092U	<0.0089U	<0.0068U	<0.014U	0.33	0.12	<0.012U	<0.0053U	<0.012U
SSHS-B653	SSHS-B653-SUB-14-16	14-16	2/14/2017	180-63507-2	0.3888	<0.0093U	<0.0091U	<0.0069U	<0.014U	0.28	0.074	<0.012U	<0.0053U	<0.013U
SSHS-B659	SSHS-B659-SUB-14-16	14-16	2/16/2017	180-63593-2	0.05395	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.0094J	0.0094J	<0.012U	<0.0054U	<0.013U
SSHS-B669	SSHS-B669-SUB-14-16	14-16	2/13/2017	180-63507-2	0.3742	<0.0095U	<0.0093U	<0.0071U	<0.014U	0.22	0.11	0.015J	<0.0055U	<0.013U
SSHS-B685	SSHS-B685-SUB-14-16	14-16	3/23/2017	180-64584-2	<0.0888	<0.0097U	<0.0095U	<0.0073U	<0.015U	<0.0087U	<0.008U	<0.012U	<0.0056U	<0.013U
SSHS-B685A	SSHS-B685A-SUB-14-16	14-16	7/12/2017	180-68139-1	7.072	<0.01U	<0.01U	<0.0077U	<0.016U	4.8	2	0.24	<0.006U	<0.014U
SSHS-B717	SSHS-B717-SUB-14-16	14-16	3/23/2017	180-64584-2	<0.0891	<0.0098U	<0.0095U	<0.0073U	<0.015U	<0.0088U	<0.0081U	<0.012U	<0.0056U	<0.013U
SSHS-B717A	SSHS-B717A-SUB-14-16	14-16	7/12/2017	180-68139-1	0.068	<0.01U	<0.0097U	<0.0074U	<0.015U	0.027	<0.0082U	<0.013U	<0.0057U	<0.013U
SSHS-B723	SSHS-B723-SUB-16-18	16-18	4/13/2017	180-65226-1	16.99	<0.096U	<0.093U	<0.071U	<0.14U	11	4.7	1	<0.055U	<0.13U
SSHS-B723	SSHS-B723-SUB-18-20	18-20	4/13/2017	180-65226-1	0.293	<0.0097U	<0.0095U	<0.0072U	<0.015U	0.19	0.06	0.013J	<0.0056U	<0.013U
SSHS-IRM3-B014	SSHS-IRM3-B014-C	14-14	8/5/2019	180-93683-2	1.222	<0.0055U	<0.006U	<0.0041U	<0.0025U	0.84J	0.28J	0.089J	<0.0023U	<0.0059U
SSHS-IRM3-B015	SSHS-IRM3-B015-C	14.6-14.6	7/26/2019	180-93321-1	2.494	<0.0059U	<0.0064U	<0.0044U	<0.0026U	1.7J	0.64J	0.14J	<0.0024U	<0.0063U
SSHS-IRM3-B016	SSHS-IRM3-B016-C	14.7-14.7	7/26/2019	180-93321-1	2.694	<0.006U	<0.0066U	<0.0045U	<0.0027U	1.8J	0.7J	0.18J	<0.0025U	<0.0065U
SSHS-IRM3-B024	SSHS-IRM3-B024-C	15.8-15.8	7/30/2019	180-93419-1	0.3597	<0.007U	<0.0076U	<0.0052U	<0.0031U	0.23J	0.09J	0.023J	<0.0029U	<0.0075U
SSHS-IRM3-B025	SSHS-IRM3-B025-C	15.7-15.7	7/29/2019	180-93352-1	<0.0469	<0.0064U	<0.007U	<0.0048U	<0.0029U	<0.0047U	<0.0059U	<0.0056U	<0.0027U	<0.0069U
SSHS-IRM3-B026	SSHS-IRM3-B026-C	16.1-16.1	7/26/2019	180-93321-1	1.346	<0.0066U	<0.0072U	<0.0049U	<0.003U	0.79J	0.39J	0.15J	<0.0027U	<0.0071U
SSHS-IRM3-B027	SSHS-IRM3-B027-C	15.7-15.7	7/26/2019	180-93321-1	2.655	<0.0063U	<0.0068U	<0.0047U	<0.0028U	1.8J	0.66J	0.18J	<0.0026U	<0.0068U
SSHS-IRM3-B102	SSHS-IRM3-B102-C	15.8-15.8	8/1/2019	180-93547-1	18.35	<0.06U	<0.066U	<0.045U	<0.027U	13J	4.4J	0.81J	<0.025U	<0.065U
SSHS-IRM3-B103	SSHS-IRM3-B103-C	15.9-15.9	8/1/2019	180-93547-1	49.97	<0.32U	<0.35U	<0.24U	<0.15U	35J	12J	2.2J	<0.13U	<0.35U
SSHS-IRM3-MH1A	MH1 A	16-16	7/30/2019	180-93419-1	0.0804	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.043J	0.021J	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-MH1B	MH1 B	16-16	7/30/2019	180-93419-1	0.2939	<0.0058U	<0.0063U	<0.0044U	<0.0026U	0.19J	0.073J	0.017J	<0.0024U	<0.0063U
SSHS-IRM3-MH1C	MH1 C	16-16	7/30/2019	180-93419-1	0.17	<0.0058U	<0.0064U	<0.0044U	<0.0026U	0.091J	0.049J	0.016J	<0.0024U	<0.0063U
SSHS-IRM3-MH1DA	SSHS-IRM3-MH1DA-C	15.8-15.8	8/2/2019	180-93640-2	0.3618	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.23J	0.096J	0.022J	<0.0024U	<0.0062U
SSHS-IRM3-S156	SSHS-IRM3-S156-C	14.4-14.4	8/5/2019	180-93683-1	0.7688	<0.0057U	<0.0063U	<0.0043U	<0.0026U	0.51J	0.2J	0.045J	<0.0024U	<0.0062U
SSHS-IRM3-S156A	SSHS-IRM3-S156A-C	14.1-14.1	8/5/2019	180-93683-1	0.2507	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.16J	0.065J	0.012J	<0.0024U	<0.0062U
SSHS-IRM3-S156B	SSHS-IRM3-S156B-C	14.3-14.3	8/5/2019	180-93683-2	1.112	<0.0059U	<0.0064U	<0.0044U	<0.0027U	0.74J	0.29J	0.068J	<0.0024U	<0.0064U
SSHS-IRM3-S156C	SSHS-IRM3-S156C-C	15.1-15.1	7/26/2019	180-93321-1	0.1035	<0.0058U	<0.0063U	<0.0044U	<0.0026U	0.06J	0.027J	<0.0051U	<0.0024U	<0.0063U
SSHS-IRM3-S163	SSHS-IRM3-S163-C	14.6-14.6	8/5/2019	180-93683-2	0.09405	<0.0057U	<0.0062U	<0.0042U	<0.0026U	0.055J	0.023J	<0.005U	<0.0023U	<0.0061U
SSHS-IRM3-S166	SSHS-IRM3-S166-D	14.6-14.6	8/5/2019	180-93684-1	0.1678	<0.0058U	<0.0063U	<0.0043U	<0.0026U	0.079	0.055	0.02	<0.0024U	<0.0062U
SSHS-IRM3-S167	SSHS-IRM3-S167-D	14.2-14.2	8/5/2019	180-93684-1	<0.041	<0.0056U	<0.0061U	<0.0042U	<0.0025U	<0.0041U	<0.0052U	<0.0049U	<0.0023U	<0.0061U
SSHS-IRM3-S177	SSHS-IRM3-S177-C	14.9-14.9	7/29/2019	180-93352-1	<0.0438	<0.006U	<0.0065U	<0.0045U	<0.0027U	<0.0044U	<0.0055U	<0.0052U	<0.0025U	<0.0065U
SSHS-IRM3-S177A	SSHS-IRM3-S177A-C	14.5-14.5	7/30/2019	180-93419-1	0.086	<0.006U	<0.0065U	<0.0045U	<0.0027U	0.044J	0.025J	<0.0053U	<0.0025U	<0.0065U
SSHS-IRM3-S178	SSHS-IRM3-S178-C	15-15	7/30/2019	180-93419-1	1.987	<0.0059U	<0.0064U	<0.0044U	<0.0027U	1.3J	0.58J	0.093J	<0.0024U	<0.0064U
SSHS-IRM3-S179	SSHS-IRM3-S179-D	15.4-15.4	7/29/2019	180-93353-1	0.0492	<0.0057U	<0.0062U	<0.0043U	<0.0026U	0.023	0.01J	<0.005U	<0.0024U	<0.0062U
SSHS-IRM3-S179A	SSHS-IRM3-S179A-C	15.1-15.1	7/30/2019	180-93419-1	<0.0459	<0.0063U	<0.0068U	<0.0047U	<0.0028U	<0.0046UJ	<0.0058UJ	<0.0055UJ	<0.0026U	<0.0068U
SSHS-IRM3-S187	SSHS-IRM3-S187-C	14.9-14.9	7/26/2019	180-93321-1	0.2163	<0.0056U	<0.006U	<0.0042U	<0.0025U	0.14J	0.046J	0.017J	<0.0023U	<0.006U
SSHS-IRM3-S188	SSHS-IRM3-S188-C	14.2-14.2	7/26/2019	180-93321-1	0.3128	<0.0057U	<0.0063U	<0.0043U	<0.0026U	0.2J	0.078J	0.021J	<0.0024U	<0.0062U
SSHS-IRM3-S201	SSHS-IRM3-S201-C	14.5-14.5	8/1/2019	180-93547-1	5.804	<0.0058U	<0.0063U	<0.0043U	<0.0026U	4.1J	1.4J	0.29J	<0.0024U	<0.0063U
SSHS-IRM3-S202	SSHS-IRM3-S202-C	14.3-14.3	8/1/2019	180-93547-1	24	<0.29U	<0.32U	<0.22U	<0.13U	15J	7.2J	1.1J	<0.12U	<0.32U

Notes:
J - estimated value
U - non-detect
F1 - MS and/or MSD recovery is outside acceptable limits
F2 - MS/MSD RPD exceeds control limits
mg/kg - milligrams per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
PCBs - polychlorinated biphenyls
SCO - Soil Cleanup Objective
PCB or Metals concentrations detected above Restricted-Residential Soil Cleanup Objectives (6 NYCRR Part 375) are presented in light gray.
PCB concentrations detected above New York State hazardous waste threshold (6 NYCRR Part 371.4 (e)) are presented in dark grey

Table 4
Summary of IRM#4 Metals in Shallow Subsurface (0.17-2 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, NY

						Metals																			
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Thallium	Vanadium	Zinc
						mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						18	0.3	0.9	18	0.36	0.038	490	0.45	4.5	2.2	9	0.9	450	1.3	0.008	3.6	450	0.51	0.094	0.22	4.5	1.8
Restricted - Residential SCO								16	400	72	4.3		110		270		400		2000	0.81	310		180	180			10000
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Elevation (ft MSL)**	**Sample Date**	**Lab Report Number**																					
SSHS-B2238	SSHS-B2238-SUB-0.17-2	0.17-2		7/23/2018	180-80091-1	6600	<0.36U	4.2	42	0.26J	0.09J	80,000	8.9	5.7	20	15,000	7	15,000	350	<0.008U	16	640	<0.55U	<0.11U	<0.22U	10	59
SSHS-B2238	SSHS-B2238-SUB-SS	0-0.17		7/23/2018	180-80091-4	8500	<0.39U	5.1	58	0.34J	0.083J	21,000	11	6.9	21	17,000	18	4600	340	0.019J	17	710	<0.6U	<0.12U	<0.24U	12	56
SSHS-B2746	SSHS-B2746-SUB-0.17-2	0.17-2	760.18	4/22/2019	180-89294-1	<10,000U	<0.41U	6.7	120	0.53	1.1	4100	13	9.3	16	20,000	15	3000	560	0.05	22	980	<0.62U	<0.13U	<0.39U	14	64
SSHS-B2748	SSHS-B2748-SUB-0.17-2	0.17-2	741.35	4/23/2019	180-89344-1	7200	<0.38UJ	7.8	110	0.39J	0.16J	16,000J-	15	7.1	140J-	29,000=	68	5800J-	510=	0.032J	150J-	920	0.74J	<0.12U	<0.36U	12	72
SSHS-B2749	SSHS-B2749-SUB-0.17-2	0.17-2	747.84	4/23/2019	180-89344-1	7700	0.44J	6.5	140	0.38J	0.26J	10,000J	12	6.7	42J-	19,000=	63J-	3600	420=	0.045	33	800	<0.57U	<0.12U	<0.35U	13	87J
SSHS-B2750	SSHS-B2750-SUB-0.17-2	0.17-2	743.49	4/23/2019	180-89344-1	9100	0.48J	7.4	110	0.43J	0.12J	4600	14	7.6	38	21,000	39	2600	470	0.05	28	910	<0.62U	<0.13U	<0.39U	15	67
SSHS-IRM3-B100-BOT2	SSHS-IRM3-B100 BOT BOT	1.4-1.4	853.56	8/1/2019	180-93547-2	12,000	0.53J	5.7	84	0.46	<0.038U	1300	13	6.7	14	19,000	9.4	2500	280=	<0.018U	18	570	<0.54U	<0.11U	<0.34U	17	55J+
SSHS-IRM3-S001	SSHS-IRM3-S001-07-10-19	0.1-0.1	855.58	7/10/2019	180-92467-1	8300	<0.35U	6.1	72	0.33J	0.11J	30,000	11	7.1	20	17,000	14	7600	370	<0.015U	17	750	0.6J	<0.11U	<0.33U	12	55
SSHS-IRM3-S002	SSHS-IRM3-S002-07-09-19	0.3-0.3	855.70	7/9/2019	180-92395-1	6800	<0.36U,F1	4.6	51	0.28J	0.17J	70,000	8.9	5.9	24	16,000	7.6	12,000	400	<0.014U	17	680	1J	<0.11U	<0.34U	10	71F1
SSHS-IRM3-S003	SSHS-IRM3-S003-07-09-19	0.2-0.2	855.90	7/9/2019	180-92395-1	9100	0.38J	5.9	59	0.36J	0.13J	26,000	12	7.5	21	19,000	15	5800	370	<0.016U	18	590	0.83J	<0.11U	<0.35U	13	58
SSHS-IRM3-S020	SSHS-IRM3-S020-07-10-19	0-0	854.99	7/10/2019	180-92462-1	8600	0.83J	7.9	140	0.41J	0.25J	13,000	22	7.7	55=	22,000	71	3900	500	0.047	38	880	0.89J	<0.11U	<0.34U	15	91
SSHS-IRM3-S020A	SSHS-IRM3-S020A-C	1.7-1.7	853.32	7/29/2019	180-93352-1	8500	0.66J	8.1	150	0.38J	0.15J	9400	16	6.9	57	21,000	100	3200	440	0.036	40	740	<0.56U	<0.12U	<0.35U	14	81
SSHS-IRM3-S021A	SSHS-IRM3-S021A-C	1.8-1.8	853.15	7/29/2019	180-93352-1	10,000	0.49J	7.1	110	0.51	0.12J	2500	14	8.7	18	20,000	21	2800	590	0.022J	21	1200	<0.62U	<0.13U	<0.39U	14	56
SSHS-IRM3-S022A	SSHS-IRM3-S022A-C	1.9-1.9	853.11	7/29/2019	180-93352-1	12,000	<0.45U	7.4	120	0.57	0.5J	4300	15	9.8	16	22,000	14	3500	530	0.02J	23	1700	<0.68U	<0.14U	<0.42U	16	61
SSHS-IRM3-S023AA	SSHS-IRM3-S023AA-C	0.8-0.8	854.41	8/1/2019	180-93547-2	10,000	0.55J	7.4	110	0.54	0.18J	2000	13	9.5	16	19,000	17	2800	520=	0.025J	23	890	<0.56U	<0.11U	<0.35U	14	61J+
SSHS-IRM3-S023AB	SSHS-IRM3-S023AB-C	1.3-1.3	853.84	8/1/2019	180-93547-2	9300	0.59J	7.2	100	0.48	0.46J	5000	12	8.8	20	18,000	20	3000	640=	0.02J	22	670	<0.51U	<0.1U	<0.32U	14	58J+
SSHS-IRM3-S023A-BOT	SSHS-IRM3-S023A BOT-C	1.5-1.5	853.64	8/1/2019	180-93547-2	9100	0.68J	7.4	86	0.42	0.1J	6200	12	7.7	24	20,000	25	2800	650=	0.019J	21	650	<0.51U	<0.1U	<0.32U	15	82J+
SSHS-IRM3-S023AC	SSHS-IRM3-S023AC-C	0.8-0.8	854.35	8/1/2019	180-93547-2	10,000	0.55J	7.1	120	0.54	0.18J	3200	13	9.5	15	19,000	16	2900	550=	0.022J	22	900	<0.57U	<0.12U	<0.36U	14	58J+
SSHS-IRM3-S023AD	SSHS-IRM3-S023AD-C	0.6-0.6	854.42	8/1/2019	180-93547-2	9700	0.5J	6.7	130	0.49	0.18J	6300	13	9	20	19,000	24	3500	520=	0.12	25	800	<0.52U	<0.11U	<0.33U	14	67J+
SSHS-IRM3-S024A	SSHS-IRM3-S024A-C	1.4-1.4	853.89	7/29/2019	180-93352-1	7200	<0.3U	4.1	46	0.28J	0.13J	59,000	9.4	5.9	23	15,000	6.3	6400	370	<0.014U	17	680	1	<0.094U	<0.29U	11	66
SSHS-IRM3-S025	SSHS-IRM3-S025-07-09-19	0.6-0.6	854.64	7/9/2019	180-92395-1	7300	<0.36U	4.7	53	0.3J	0.15J	57,000	9.8	6.8	22	16,000	9.2	8500	380	<0.015U	18	630	1.3	<0.11U	<0.34U	11	65
SSHS-IRM3-S026	SSHS-IRM3-S026-07-09-19	0.2-0.2	855.29	7/9/2019	180-92395-1	7700	<0.35U	5.2	56	0.3J	0.15J	51,000	10	6.8	22	16,000	13	9200	400	<0.014U	17	650	1.2	<0.11U	<0.33U	11	65
SSHS-IRM3-S027	SSHS-IRM3-S027-07-10-19	0.4-0.4	855.25	7/10/2019	180-92467-1	8700	0.47J	6.1	63	0.35J	0.12J	35,000	12	7.6	23	18,000	79	6200	400	<0.015U	19	710	0.74J	<0.12U	<0.35U	13	64
SSHS-IRM3-S028	SSHS-IRM3-S028-07-10-19	0.1-0.1	855.32	7/10/2019	180-92467-1	7000	<0.37U	4.7	53	0.27J	0.13J	76,000	9.6	6.5	24	16,000	9	22,000	360	<0.015U	17	740	1.1	<0.12U	<0.35U	11	65
SSHS-IRM3-S028d	SSHS-IRM3-S028-D	0.4-0.4	855.08	8/5/2019	180-93684-3	8800B	0.43J	6.1	61	0.37J	0.14J	41,000	12B	7.4	26	19,000B	14	8200	440B	<0.015U	19	840	0.89J	<0.11U	<0.32U	13	69
SSHS-IRM3-S029	SSHS-IRM3-S029-D	0.6-0.6	855.00	8/5/2019	180-93684-3	9200B	0.6J	6.7	75	0.38J	0.14J	30,000	12B	7.5	30	20,000B	24	12,000	420B	0.025J	22	880	0.74J	<0.11U	<0.33U	14	78
SSHS-IRM3-S044	SSHS-IRM3-S044-C	1.5-1.5	853.53	7/12/2019	180-92615-1	8600	<0.36U	5.9	100	0.36J	0.48J	22,000	10	6.7	58	16,000	25	4900	410	0.02J	20	960	0.63J	<0.11U	<0.34U	12	62
SSHS-IRM3-S048	SSHS-IRM3-S048-D	0.1-0.1	855.23	7/12/2019	180-92616-1	6500	<0.37U	5.6	120	0.28J	0.18J	83,000	8.4	5.5	24	16,000	24	19,000	380	0.018J	16	830	1.4	<0.12U	<0.35U	11	60
SSHS-IRM3-S052	SSHS-IRM3-S052-D	1.6-1.6	854.07	7/15/2019	180-92661-1	7800	1.7	7.3	120	0.36J	0.16J	21,000	20	8.2	270	25,000	150	3000	420	0.025J	170	690	0.82J	<0.11U	<0.35U	14	99

Notes:
EQL- Estimated Quantitation Limit
mg/kg - milligram per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
U - Non-detect
J - estimated value
B - analyte found in method blank
TCLP - Toxicity Characteristic Leaching Procedure
F1 - MS and/or MSD recovery is outside acceptable limits
Concentrations detected above 20x TCLP (200x for Lead) are shown in dark gray

Table 5
Summary of IRM#4 Metals in Subsurface (2-16 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, NY

					Metals																		
					Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					18	0.31	0.9	18	0.36	0.042	450	0.45	4.5	2.2	9	0.9	450	1.3	0.0081	3.6	450	0.46	0.095	0.22	4.5	1.8
Metals 20x TCLP Screening (Lead = 1000 ppm)							100	2000		20		100				1000			4			20	100			
Protection of Ground-water SCO							16	820	47	7.5		19		1720		450		2000	0.73	130		4	8.3			2480
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																						
SSHS-B2238	SSHS-B2238-SUB-10-12	10-12	7/23/2018	180-80091-1	6400	<1.9U	5.4	460	0.27J	1.1	17,000	12	5.2J	81	30,000	2100	2800	380	0.031J	29	570	<0.58U	<0.12U	<0.24U	13	120
SSHS-B2238	SSHS-B2238-SUB-12-14	12-14	7/23/2018	180-80091-1	6200	<0.38U	4.3	120	0.24J	0.31J	25,000	10	5.1J	32	15,000	33	5400	460	<0.0081U	23	700	<0.57U	<0.12U	<0.23U	10	90
SSHS-B2238	SSHS-B2238-SUB-2-4	2-4	7/23/2018	180-80091-1	7600F2	<0.37U,F2,F1	6.3F2,F1	110F2,F1	0.32J,F2,F1	0.22J	28,000F2	13F2,F1	6.3F2,F1	55F2,F1	21,000F2	140F1	5000F2,F1	570F2	0.021J	62F2,F1	670F2,F1	<0.55U,F1	<0.11U	<0.23U,F1	13F2,F1	100F1
SSHS-B2238	SSHS-B2238-SUB-4-6	4-6	7/23/2018	180-80091-1	8000	<0.37U	7.9	220	0.35J	0.99	17,000	12	7.2	78	23,000	75	3700	550	0.027J	35	730	<0.56U	<0.11U	<0.23U	13	160
SSHS-B2238	SSHS-B2238-SUB-6-8	6-8	7/23/2018	180-80091-1	6900	<0.38U	6.7	320	0.3J	1.3	44,000	17	6.5	130	19,000	100	5800	430	0.034J	61	780	<0.57U	<0.12U	<0.23U	13	240
SSHS-B2238	SSHS-B2238-SUB-8-10	8-10	7/23/2018	180-80091-1	6500	<0.39U	7.2	250	0.32J	0.79	24,000	13	6.3	81	21,000	190	4600	380	0.027J	44	640	<0.59U	<0.12U	<0.24U	12	180
SSHS-B2239	SSHS-B2239-SUB-10-12	10-12	7/23/2018	180-80091-3	8600	<0.37U	5.7	140	0.3J	0.13J	25,000	13	7.3	44	22,000	33	5600	560	0.0087J	25	580	<0.56U	<0.11U	<0.23U	13	98
SSHS-B2239	SSHS-B2239-SUB-12-14	12-14	7/23/2018	180-80091-3	7100	<0.38U	5.3	110	0.26J	0.09J	41,000	11	5.8	38	18,000	29	7600	420	<0.0088U	26	630	<0.57U	<0.12U	<0.23U	12	70
SSHS-B2239	SSHS-B2239-SUB-4-6	4-6	7/23/2018	180-80091-3	7100	1.9	9.9	950	0.33J	0.35J	73,000	29	7.7	220	26,000	320	3900	480	0.05	110	710	0.69J	<0.12U	<0.23U	14	210
SSHS-B2239	SSHS-B2239-SUB-6-8	6-8	7/23/2018	180-80091-3	7300	0.73J	6.7	620F1	0.32J	0.21J	22,000F1,F2	18F1	6	130	22,000F2	150F1,F2	4100F1,F2	390	0.037J	56F1	610	0.74J	<0.11U	<0.23U	13	150F1
SSHS-B2239	SSHS-B2239-SUB-8-10	8-10	7/23/2018	180-80091-3	8000	<0.39U	5.9	170	0.31J	0.11J	18,000	25	7.8	53	21,000	38	4300	650	0.024J	47	650	<0.58U	<0.12U	<0.24U	13	98
SSHS-B2240	SSHS-B2240-SUB-10-12	10-12	7/23/2018	14	5700	<0.36U	4.5	39	0.24J	0.083J	47,000	9.3	5.2J	23	14,000	9.7	9600	310	<0.0085U	15	670	<0.55U	<0.11U	<0.22U	10	59
SSHS-B2240	SSHS-B2240-SUB-12-14	12-14	7/23/2018	180-80091-2	6100	<0.37U	5.8	42	0.3J	0.08J	1900	7.8	5.5	20	16,000	10	1800	530	0.014J	14	640	<0.56U	<0.11U	<0.23U	11	58
SSHS-B2240	SSHS-B2240-SUB-2-4	2-4	7/23/2018	180-80091-2	4300	<0.37U	5.3	65	0.3J	0.16J	150,000	7.6	5.5	29	12,000	55	4700	360	0.023J	19	740	0.88J	<0.11U	<0.23U	8.7	41
SSHS-B2240	SSHS-B2240-SUB-4-6	4-6	7/23/2018	180-80091-2	8600	<0.39U,F1	6	73	0.4J	0.045J	8700	11	7	64F1	18,000	37	2600	440	0.018J	20	730	<0.58U	<0.12U	<0.24U	17	59
SSHS-B2240	SSHS-B2240-SUB-6-8	6-8	7/23/2018	180-80091-2	6100	<0.39U	6.3	130	0.35J	0.16J	34,000	12	6.8	84	18,000	96	1900	440	0.035J	46	570	0.6J	<0.12U	<0.24U	13	85
SSHS-B2240	SSHS-B2240-SUB-8-10	8-10	7/23/2018	180-80091-2	5900	<0.36U	5	54	0.28J	0.057J	6800	9.1	5.5	39	14,000	23	2200	370	0.014J	18	590	<0.55U	<0.11U	<0.22U	10	51
SSHS-B2242	SSHS-B2242-SUB-2-4	2-4	7/23/2018	180-80091-3	7700	<0.38U	6.2	93	0.33J	0.12J	27,000	14	6.9	42	19,000	50	7800	350	0.027J	44	690	<0.57U	<0.12U	<0.23U	14	83
SSHS-B2242	SSHS-B2242-SUB-4-6	4-6	7/23/2018	180-80091-3	7700	<0.38U	7.9	200	0.41J	0.25J	27,000	22	7.8	75	29,000	110	4800	410	0.047	90	860	0.84J	<0.12U	<0.24U	18	120
SSHS-B2242	SSHS-B2242-SUB-6-8	6-8	7/23/2018	180-80091-3	8300	<0.39U	7.2	220	0.41J	0.35J	37,000	19	6.7	88	24,000	130	4500	450	0.041	69	800	<0.59U	<0.12U	<0.24U	15	160
SSHS-B2243	SSHS-B2243-SUB-10-12	10-12	7/23/2018	180-80091-2	7100	<0.39U	6.3	100	0.33J	0.17J	17,000	14	7	38	19,000	30	4900	710	0.038	30	710	<0.59U	<0.12U	<0.24U	14	100
SSHS-B2243	SSHS-B2243-SUB-2-4	2-4	7/23/2018	180-80091-2	8200	<0.38U	7	180	0.39J	0.18J	31,000	13	6.9	89	19,000	68	3200	400	0.035J	28	700	<0.57U	<0.12U	<0.23U	15	130
SSHS-B2243	SSHS-B2243-SUB-4-6	4-6	7/23/2018	180-80091-2	12,000	<0.38U	5	220	0.35J	0.77	46,000	24	8.2	180	18,000	96	4500	480	0.04	28	710	<0.58U	<0.12U	<0.24U	15	220
SSHS-B2243	SSHS-B2243-SUB-6-8	6-8	7/23/2018	180-80091-2	9100	<0.81U,F1	7.3F2,F1	300F2,F1	0.47J,F2,F1	0.37J,F2,F1	53,000	20F1	11F2,F1	110F2,F1	21,000F2	180F2,F1	4500F1	440	0.051F1	43F1	810	0.9J,F2,F1	<0.13U,F2,F1	<0.25U,F2,F1	15F2,F1	140F2,F1
SSHS-B2243	SSHS-B2243-SUB-8-10	8-10	7/23/2018	180-80091-2	6200	<0.4U	3.3	110	0.28J	1.2	58,000	11	4.7J	44	12,000	37	8500	390	0.022J	15	710	<0.6U	<0.12U	<0.24U	9.4	710
SSHS-B2629	SSHS-B2629-SUB-2-4	2-4	4/25/2019	180-89522-1	6700	0.66J	6.4	160	0.35J	0.15J	8700	12	6.3	48	21,000	140	2100	480	0.1	38	600	<0.56U	<0.11U	<0.35U	13	72
SSHS-B2741	SSHS-B2741-SUB-10-12	10-12	4/24/2019	180-89408-1	6800	0.57J	6.1	250	0.3J	0.15J	22,000	11	6.1	62	19,000	170	5300	400	0.031J	63	660	<0.58U	<0.12U	<0.36U	11	76
SSHS-B2742	SSHS-B2742-SUB-10-12	10-12	4/25/2019	180-89522-1	6300	<0.35U	4.8	160	0.26J	0.13J	56,000	9.1	6.2	34	18,000	77	6500	480	0.033	28	590	1.1	<0.11U	<0.33U	10	57
SSHS-B2743	SSHS-B2743-SUB-10-12	10-12	4/24/2019	180-89408-1	7900	4.8J	6.7	260	0.33J	0.31J	41,000	15	6.8	100	22,000	5700	9300	620	0.052	67	750	1.1	<0.12U	<0.37U	12	140
SSHS-B2745	SSHS-B2745-SUB-10-12	10-12	4/24/2019	180-89408-1	7600	0.46J	6.2	150	0.34J	0.16J	42,000	14	7.1	85	18,000	280J	8300	520	0.032J	47	700	0.99J	<0.11U	<0.35U	15	83
SSHS-B2746	SSHS-B2746-SUB-10-12	10-12	4/22/2019	180-89294-1	<5300U	<0.36U	4.6	67J	0.24J	0.15J	87,000	7.6J	5.1J	21	14,000	12	9000	530	0.034	14	600	<1.2U	<0.11U	<0.34U	8.4	60
SSHS-B2746	SSHS-B2746-SUB-12-14	12-14	4/22/2019	180-89294-1	<6300U	<0.36U	5.8	82J	0.26J	0.21J	18,000	9.8	5.8	22	18,000	16	4800	340	0.052	15	650	0.57J	<0.11U	<0.34U	13	120
SSHS-B2746	SSHS-B2746-SUB-2-4	2-4	4/22/2019	180-89294-1	<8000U	<0.37U	5.8	240J	0.37J	0.14J	7700	11	6.2	28	23,000	52	3000	680	0.049	19	650	<0.55U	<0.11U	<0.34U	13	96
SSHS-B2746	SSHS-B2746-SUB-4-6	4-6	4/22/2019	180-89294-1	<8400U	<0.39U	8.8	940J	0.39J	0.5J	13,000	13	6.6	41	22,000	94	3100	510	0.081	28	750	0.59J	<0.12U	<0.37U	15	160
SSHS-B2746	SSHS-B2746-SUB-6-8	6-8	4/22/2019	180-89294-1	<6000U	<0.36U	4.2	110J	0.24J	1.5	3000	7.1J	4J	18	13,000	35	1500	390	0.048	11J	380J	<0.55U	<0.11U	<0.34U	8.6	1200
SSHS-B2746	SSHS-B2746-SUB-8-10	8-10	4/22/2019	180-89294-1	<7900U	<0.37U	6.6	120J	0.34J	0.28J	3900	13	7.3	24	19,000	45	2500	950	0.053	18	770	<0.56U	<0.11U	<0.35U	13	140
SSHS-B2747	SSHS-B2747-SUB-10-12	10-12	4/23/2019	180-89344-1	8100	<0.38U	6.1	85	0.36J	0.12J	18,000	11	6.3	40	21,000	37	6800	520	0.015J	20	670	0.67J	<0.12U	<0.36U	12	75
SSHS-B2747	SSHS-B2747-SUB-12-14	12-14	4/23/2019	180-89344-1	7200	<0.39U	5.2	67	0.3J	0.11J	46,000	9	6.2	22	17,000	17	17,000	540	<0.016U	16	810	0.83J	<0.12U	<0.37U	11	55
SSHS-B2747	SSHS-B2747-SUB-2-4	2-4	4/23/2019	180-89344-1	7200	<0.4U	7.9	110	0.36J	0.12J	26,000	13	6.5	44	20,000	66	7000	400	0.025J	26	730	0.79J	<0.12U	<0.37U	14	65
SSHS-B2747	SSHS-B2747-SUB-6-8	6-8	4/23/2019	180-89344-1	7800	<0.37U	5.6	58	0.29J	0.091J	19,000	10	5.8	30	18,000	22	2700	360	0.019J	17	600	<0.55U	<0.11U	<0.34U	12	62
SSHS-B2747	SSHS-B2747-SUB-8-10	8-10	4/23/2019	180-89344-1	7500	<0.38U	5.8	68	0.32J	0.094J	5900	9.7	5.9	23	18,000	17	3700	550	<0.019U	16	700	<0.58U	<0.12U	<0.36U	12	73
SSHS-B2748	SSHS-B2748-SUB-10-12	10-12	4/23/2019	180-89344-1	7200	<0.4U	4.6	60	0.32J	0.087J	5400	9.4	6.1	17	17,000	9.5	3500	470	0.013J	16	610	<0.6U	<0.12U	<0.37U	11	51
SSHS-B2748	SSHS-B2748-SUB-12-14	12-14	4/23/2019	180-89344-1	6700	<0.37U	6.1	56	0.3J	0.075J	13,000	9	5.5	22	17,000	10	5800	630	<0.016U	16	650	<0.55U	<0.11U	<0.35U	11	50
SSHS-B2748	SSHS-B2748-SUB-2-4	2-4	4/23/2019	180-89344-1	8900	<0.4U	4.7	210	0.4J	0.13J	11,000	12	5.8J	27	18,000	630	4800	860	0.055	19	680	<0.61U	<0.12U	<0.38U	13	67
SSHS-B2748	SSHS-B2748-SUB-4-6	4-6	4/23/2019	180-89344-1	8300	<0.37U	6.2	81	0.35J	0.093J	6700	12	6.4	24	19,000	20	4400	400	0.017J	17	650	<0.55U	<0.11U	<0.34U	14	53
SSHS-B2748	SSHS-B2748-SUB-6-8	6-8	4/23/2019	180-89344-1	8500	<0.37U	5.8	90	0.35J	0.084J	2500	12	6.7	28	20,000	11	3100	540	<0.015U	17	610	<0.56U	<0.11U	<0.35U	13	53
SSHS-B2748	SSHS-B2748-SUB-8-10	8-10	4/23/2019	180-89344-1	10,000	<0.52U	7.7	100	0.45J	0.12J	29,000	13	7.9	30	24,000	18	19,000	850	<0.024U	23	900	<0.79U	<0.16U	<0.49U	15	77
SSHS-B2749	SSHS-B2749-SUB-10-12	10-12	4/23/2019	180-89344-1	6200	<0.39U	5.6J	60J	0.24J	0.1J	36,000	8.5	5.9	22	16,000	160J	11,000	640	<0.015U	15	720	0.59J	<0.12U	<0.37U	11	52
SSHS-B2749	SSHS-B2749-SUB-12-14	12-14	4/23/2019	180-89344-1	7800	<0.39U	5.8	88	0.31J	0.11J	26,000	11	6.7	24	17,000	17	6200	510	<0.015U	18	840	0.68J	<0.12U	<0.37U	12	60
SSHS-B2749	SSHS-B2749-SUB-2-4	2-4	4/23/2019	180-89344-1	7600	0.46J	5.4	150	0.31J	0.21J	32,000	9.9	6.1	42	17,000	160	5500	400	0.04J	20	700	0.83J	<0.12U	<0.35U	11	71
SSHS-B2749	SSHS-B2749-SUB-4-6	4-6	4/23/2019	180-89344-1	8400	0.38J	6.6	160	0.37J	0.16J	18,000	11	7	45	22,000	43	5100	590	0.035	23	690	<0.57U	<0.12U	<0.36U	13	93
SSHS-B2749	SSHS-B2749-SUB-6-8	6-8	4/23/2019	180-89344-1	8600	<0.39U	6.5	150	0.37J	0.12J	12,000	11	7.2	37	20,000	170	3400	460	0.049	24	700	<0.58U	<0.12U	<0.36U	13	76
SSHS-B2749	SSHS-B2749-SUB-8-10	8-10	4/23/2019	180-89344-1	6900	<0.38U	6	59	0.31J	0.11J	3300	12	6.3	26	18,000	17	2600	530	0.018J	18	670	0.61J	<0.12U	<0.36U	11	61
SSHS-B2750	SSHS-B2750-SUB-10-12	10-12	4/23/2019	180-89344-1	6900	<0.38U	4.4	43	0.26J	0.081J	29,000	8.9	6.8	21	17,000	7.3	12,000	400	<0.013U	16	650	0.64J	<0.12U	<0.36U	12	58
SSHS-B2750	SSHS-B2750-SUB-12-14	12-14	4/23/2019	180-89344-1	7400	<0.37U	5.3	46	0.27J	0.086J	26,000	9.9	6	19	17,000	8.8	5800	410	<0.012U	15	700	0.88J	<0.12U	<0.35U	11	54
SSHS-B2750	SSHS-B2750-SUB-2-4	2-4	4/23/2019	180-89344-1	8100	<0.37U	6.2	130	0.47	0.07J	2200	11	5.4	21	20,000	17	1300	720	0.028J	14	590	0.79J	<0.11U	<0.35U	16	43
SSHS-B2750	SSHS-B2750-SUB-4-6	4-6	4/23/2019	180-89344-1	9400	<0.39U	5.6	86	0.4J	0.058J	1600	12	6.5	22	20,000	14	2100	610	0.019J	15	600	<0.59U	<0.12U	<0.37U	16	56
SSHS-B2750	SSHS-B2750-SUB-6-8	6-8	4/23/2019	180-89344-1	10,000	<0.39U	7.2	69	0.44J	0.061J	1300	13	9.1	18	22,000	15	3000	390	<0.018U	20	910	<0.59U	<0.12U	<0.37U	16	61
SSHS-B2750	SSHS-B2750-SUB-8-10	8-10	4/23/2019	180-89344-1	8500	<0.38U	5.3	57	0.32J	0.084J	1000	10	6.7	25	19,000	16	2400	620	<0.014U	17	590	<0.58U	<0.12U	<0.36U	12	74
SSHS-B2752	SSHS-B2752-SUB-4-6	4-6	4/24/2019	180-89408-1	7200	<0.41U	7.6	82	0.37J	0.11J	8900	11	6.1	48	19,000	50	2400	400	0.048	25	570J	0.73J	<0.13U	<0.38U	12	79
SSHS-B2752	SSHS-B2752-SUB-6-8	6-8	4/24/2019	180-89408-1	7200	0.53J	6.1	74	0.35J	0.14J	42,000	14	6.6	71	19,000	37	3900	440	0.09	25	610	0.87J	<0.12U	<0.37U	12	73

Table 5
Summary of IRM#4 Metals in Subsurface (2-16 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, NY

					Metals																				
					Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					18	0.31	0.9	18	0.36	0.042	450	0.45	4.5	2.2	9	0.9	450	1.3	0.0081	3.6	450	0.46	0.095	0.22	4.5	1.8
Metals 20x TCLP Screening (Lead = 1000 ppm)							100	2000		20		100				1000			4			20	100			
Protection of Ground-water SCO							16	820	47	7.5		19		1720		450		2000	0.73	130		4	8.3			2480
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																					
SSHS-B2753	SSHS-B2753-SUB-10-12	10-12	4/23/2019	180-89344-1	8700	0.38J	6.3	110	0.36J	0.09J	8500	12	7	24	21,000	53	3900	510	<0.016U	18	690	<0.57U	<0.12U	<0.35U	13	54
SSHS-B2753	SSHS-B2753-SUB-12-14	12-14	4/23/2019	180-89344-1	6600	<0.38U	4.6	46	0.27J	0.098J	20,000	8.7	5.7	21	16,000	11	5000	440	<0.015U	15	680	<0.58U	<0.12U	<0.36U	10	52
SSHS-B2753	SSHS-B2753-SUB-6-8	6-8	4/23/2019	180-89344-1	8000	<0.37U	6	68	0.33J	0.11J	12,000	9.9	7	23	19,000	14	5000	640	<0.014U	18	680	<0.57U	<0.12U	<0.35U	12	63
SSHS-B2753	SSHS-B2753-SUB-8-10	8-10	4/23/2019	180-89344-1	12,000	<0.47UJ	8.1	130	0.46J	0.082J	3900J	16	9.5	37	30,000	31J	3900J	540	<0.018UJ	24	830	<0.71U	<0.15UJ	<0.44U	17	69
SSHS-B2767	SSHS-B2767-SUB-10-12	10-12	4/23/2019	180-89344-1	7700	<0.37U	7.4	67	0.33J	0.11J	18,000	10	7	31	19,000	10	3800	470	<0.017U	18	760	<0.56U	<0.12U	<0.35U	14	70
SSHS-B2767	SSHS-B2767-SUB-12-14	12-14	4/23/2019	180-89344-1	7000	<0.38U	5.3	65	0.28J	0.13J	56,000	10	6.2	25	18,000	14	10,000	490	<0.016U	34	700	1.2	<0.12U	<0.36U	11	64
SSHS-B2767	SSHS-B2767-SUB-2-4	2-4	4/23/2019	180-89344-1	8600	<0.37UJ	5.8	85	0.36J	0.12J	27,000J	15	7.1	27	19,000	30	6300J	480	0.02J	23	720	0.91J	<0.11U	<0.35U	14	73J-
SSHS-B2767	SSHS-B2767-SUB-4-6	4-6	4/23/2019	180-89344-1	8300	5.6	8.2	320	0.35J	0.41J	39,000	17	7.8	35	24,000	230	4700	440	0.069	26	850	0.59J	<0.12U	<0.35U	13	160
SSHS-B2767	SSHS-B2767-SUB-6-8	6-8	4/23/2019	180-89344-1	8700	<0.37U	5.6	190	0.33J	0.14J	16,000	13	7.4	24	21,000	31	4400	920	0.038	20	820	0.65J	<0.12U	<0.35U	13	76
SSHS-B2767	SSHS-B2767-SUB-8-10	8-10	4/23/2019	180-89344-1	7800	<0.39U	5.7	100	0.3J	0.11J	11,000	11	6.2	24	18,000	21	4200	450	0.018J	17	760	<0.59U	<0.12U	<0.37U	14	69
SSHS-B2960	SSHS-B2960-SUB-10-12	10-12	11/7/2019	180-98520-1	7900	1.1	12	100	0.37J	0.16J	30,000	12J+	7	43	24,000	50	5700	490J+	<0.024U	16	740	<0.51U	<0.1U	<0.32U	19	94
SSHS-B2977	SSHS-B2977-SUB-10-12	10-12	11/7/2019	180-98520-1	9800	0.77J	7.6	130	0.44	0.075J	9700	15J+	8.1	100	23,000	76	4900	550J+	0.024J	39	840	<0.51U	<0.1U	<0.32U	17	86
SSHS-B2977	SSHS-B2977-SUB-12-14	12-14	11/7/2019	180-98520-1	6900	0.47J	6.7	75	0.29J	0.099J	54,000	10J+	6.2	56	15,000	31	6600	540J+	<0.025U	25	730	<0.51U	<0.1U	<0.32U	12	56
SSHS-B8	B23484	4-5	5/11/2000		-	-	7.4	426	<0.53U	<0.53U	-	12.9	-	243	-	286	-	-	<0.05U	202	-	<0.53U	<1.1U	-	-	145
SSHS-IRM3-B001	SSHS-IRM3-B001-C	6.3-6.3	8/5/2019	180-93683-2	8300	0.66J	6.9	150	0.39J	0.12J	10,000	11	6.4	32	19,000	50	2700	430	0.036	20	580	<0.53U	<0.11U	<0.33U	13	75
SSHS-IRM3-B002	SSHS-IRM3-B002-C	5.7-5.7	7/31/2019	180-93493-1	11,000	<0.43U	7.9	110	0.54	0.18J	3000	14	9.2	18	20,000	16	3000	570	<0.036U	21	1300	<0.65U	<0.13U	<0.41U	16	61
SSHS-IRM3-B003	SSHS-IRM3-B003-C	5.7-5.7	8/5/2019	180-93683-2	8700	<1.9UJ	7.7	200	0.36J	0.13J	5100	13	6.5	36	21,000	2000J	2600	340	0.049	22	620	<0.57UJ	<0.12U	<0.35U	14	83
SSHS-IRM3-B004	SSHS-IRM3-B004-C	6.1-6.1	8/5/2019	180-93683-2	11,000	0.36J	7.1	75	0.41	0.078J	1500	12	7.2	23	21,000	15	2800	370	0.015J	17	620	<0.53U	<0.11U	<0.33U	16	58
SSHS-IRM3-B007	SSHS-IRM3-B007-C	6.9-6.9	8/2/2019	180-93640-1	8500	0.6J	7.9	68	0.37J	0.078J	3400	10	7.3	28	20,000	22	2700	490	<0.032U	19	700	<0.55U	<0.11U	<0.34U	13	72
SSHS-IRM3-B010	SSHS-IRM3-B010	10.1-10.1	7/19/2019	180-92988-1	6500	<0.39U	7.5	39	0.28J	0.072J	830	8.3	6.2	20	16,000	7.3	2000	400	<0.014U	15	750	<0.6U	<0.12U	<0.37U	10	52
SSHS-IRM3-B013	SSHS-IRM3-B013-C	12-12	8/5/2019	180-93683-2	6400	<0.36U	6	49	0.28J	0.1J	13,000	8.6	5.7	22	16,000	25	5300	410	<0.014U	15	660	<0.55U	<0.11U	<0.34U	11	58
SSHS-IRM3-B014	SSHS-IRM3-B014-C	14-14	8/5/2019	180-93683-2	6200	0.39J	4.7	48	0.25J	1.3	1400	7.9	5.9	21	15,000	12	2200	370	<0.015U	14	670	<0.49U	<0.1U	<0.31U	10	610
SSHS-IRM3-B015	SSHS-IRM3-B015-C	14.6-14.6	7/26/2019	180-93321-1	6300=	0.48J	7.5	190	0.28J	0.11J	3200	7.9	5.8	23	17,000	14	2600	640	<0.016U	15	710	<0.59U	<0.12U	<0.36U	12	68
SSHS-IRM3-B016	SSHS-IRM3-B016-C	14.7-14.7	7/26/2019	180-93321-1	6200=	0.56J	10	85	0.31J	0.37J	5600	8.7	8.3	26	20,000	12	2700	1900	<0.015U	22	820	<0.55U	<0.11U	<0.34U	13	160
SSHS-IRM3-B020	SSHS-IRM3-B020-C	13.3-13.3	8/5/2019	180-93683-2	7300	0.39J	7.1	54	0.33J	0.11J	14,000	9.5	6.5	23	18,000	10	4100	440	<0.031U	17	940	<0.55U	<0.11U	<0.34U	13	66
SSHS-IRM3-B021	SSHS-IRM3-B021-C	13.7-13.7	8/5/2019	180-93683-1	6600	<0.36U	6.2	58	0.29J	0.11J	5400	8.4	6.2	22	17,000	9.3	4300	680	<0.014U	15	780	<0.55U	<0.11U	<0.34U	11	63
SSHS-IRM3-B024	SSHS-IRM3-B024-C	15.8-15.8	7/30/2019	180-93419-1	5800	<0.42U	7.3	57	0.28J	0.1J	5500	7.7	5.8J	22	15,000	10	3700	520	<0.018U	14	760	<0.64U	<0.13U	<0.4U	10	61
SSHS-IRM3-B025	SSHS-IRM3-B025-C	15.7-15.7	7/29/2019	180-93352-1	6100	<0.38U	4.6J	48	0.24J	0.071J	7700J	7.4	5.3J	30J-	15,000	6.6	4800J	380	-	13	670J	<0.57U	<0.12U	<0.36U	9.7	59J-
SSHS-IRM3-B026	SSHS-IRM3-B026-C	16.1-16.1	7/26/2019	180-93321-1	8200	<0.41U	5.6	69	0.29J	0.11J	22,000	11	7.4	26	19,000	12	9700	590	<0.017U	15	1400	<0.62U	<0.13U	<0.39U	16	78
SSHS-IRM3-B027	SSHS-IRM3-B027-C	15.7-15.7	7/26/2019	180-93321-1	6700	<0.4U	5.7	81	0.3J	0.12J	36,000	9.3	5.7J	26	15,000	17	6600	310	<0.014U	15	1100	0.84J	<0.12U	<0.38U	12	72
SSHS-IRM3-B028	SSHS-IRM3-B028-07-09-19	2.7-2.7	7/9/2019	180-92392-1	8200	<0.36U	5.8	65	0.36J	0.12J	14,000	11	7.7	28	18,000	32	4600	510	<0.014U	21	600	<0.54U	<0.11U	<0.34U	12	84
SSHS-IRM3-B101	SSHS-IRM3-B101-C	2.2-2.2	7/29/2019	180-93352-1	9000	0.8J	7.3	100	0.4J	0.16J	12,000	15	6.9	63	20,000	83	2800	470	0.032J	34	910	0.73J	<0.12U	<0.37U	15	120J
SSHS-IRM3-B102	SSHS-IRM3-B102-C	15.8-15.8	8/1/2019	180-93547-1	7800	<0.34U	6.4	100	0.35J	0.16J	140,000	11	8.5	20	15,000	7.5	6200	390	<0.017U	22	1200	1.8	<0.1U	<0.32U	12	43B
SSHS-IRM3-B103	SSHS-IRM3-B103-C	15.9-15.9	8/1/2019	180-93547-1	6900	<0.4U	6.3	60	0.3J	0.13J	27,000	9	6.4	24	16,000	14	11,000	430	<0.015U	17	880	0.62J	<0.12U	<0.38U	11	66B
SSHS-IRM3-B108	SSHS-IRM3-B108-C	12-12	8/2/2019	180-93640-1	5800	<0.4U	7.7	40	0.27J	0.14J	17,000	8.5	6.1	22	17,000	8.3	4800	260	<0.015U	16	790	0.9J	<0.12U	<0.38U	11	63
SSHS-IRM3-B109	SSHS-IRM3-B109-C	12.1-12.1	8/2/2019	180-93640-1	8100	0.54J	9.7	95	0.36J	0.37J	6100	11	7.8	35	21,000	28	3700	580	<0.036U	21	660	<0.47U	<0.096U	<0.29U	13	120
SSHS-IRM3-B110	SSHS-IRM3-B110-C	9.9-9.9	8/2/2019	180-93640-1	7600	<0.35U	8	1000	0.35J	0.12J	1600	11	6.8	24	18,000	11	2700	490	<0.015U	18	760	<0.52U	<0.11U	<0.33U	13	130
SSHS-IRM3-B111	SSHS-IRM3-B111-C	6.9-6.9	8/2/2019	180-93640-1	8000	0.42J	7.1	170	0.35J	0.13J	5400	11	7.3	38	19,000	73	2500	390	<0.034U	24	630	0.5J	<0.099U	<0.3U	14	77
SSHS-IRM3-MH1A	MH1 A	16-16	7/30/2019	180-93419-1	4600	<0.35U	4	58	0.19J	0.13J	140,000	7.3	4.9J	16	12,000	7.2	3800	310	<0.012U	12	450J	1.7	<0.11U	<0.33U	7.3	50
SSHS-IRM3-MH1B	MH1 B	16-16	7/30/2019	180-93419-1	6600	0.35J	5.3	42	0.28J	0.11J	23,000	9.2	6	24	16,000	11	9400	420	<0.015U	16	760	<0.5U	<0.1U	<0.31U	11	58
SSHS-IRM3-MH1C	MH1 C	16-16	7/30/2019	180-93419-1	5700	<0.38U	5.1	27	0.26J	0.1J	13,000	7.8	5.5J	20	14,000	8.7	3500	310	<0.015U	15	640	<0.58U	<0.12U	<0.36U	9.4	50
SSHS-IRM3-MH1DA	SSHS-IRM3-MH1DA-C	15.8-15.8	8/2/2019	180-93640-2	5300	<0.38U	4.4	29	0.22J	0.11J	28,000	7.1	4.8J	17	13,000	7	5100	330	<0.015U	13	570	0.71J	<0.12U	<0.36U	8.4	62
SSHS-IRM3-PIPE13	SSHS-IRM3-PIPE13-C	4.4-4.4	8/2/2019	180-93641-1	7800	0.75J,F1	5.1	180F1	0.37J	0.072J	2100F1	9.8	5.2J	26F2,F1	18,000	58F2,F1	1600	520	0.019J	16	570	<0.57U	<0.12U	<0.36U	15	52F1
SSHS-IRM3-PIPE21	SSHS-IRM3-PIPE21-C	6.1-6.1	8/2/2019	180-93641-1	8800	0.94J	9.4	800	0.39J	0.47J	8100	17	7	130	25,000	140	2800	580	0.045	33	630	<0.61U	<0.13U	<0.38U	15	210
SSHS-IRM3-S043	SSHS-IRM3-S043-C	4.1-4.1	7/12/2019	180-92615-1	5000	1.3	14	110	0.43J	0.094J	3700	9.2	4.9J	36	24,000	100	1200	270	0.052	16	610	1.3	<0.12U	<0.36U	18	44
SSHS-IRM3-S045	SSHS-IRM3-S045-C	3.4-3.4	7/22/2019	180-93060-1	8200	0.61J	7.9	190	0.41J	0.27J	23,000J	11	7.8	38	19,000	52J-	4700J-	570	0.036J	24	650	0.61J	<0.12U	<0.36U	13	100J-
SSHS-IRM3-S046	SSHS-IRM3-S046-D	2.4-2.4	7/15/2019	180-92661-1	9700	0.62J	8.1	120	0.43	0.088J	3500	13	8.6	27	20,000	37	2600	700	0.017J	21	870	<0.51U	<0.11U	<0.32U	15	65
SSHS-IRM3-S047	SSHS-IRM3-S047-D	2.6-2.6	7/15/2019	180-92661-1	8800	0.68J,F1	7	83	0.38J	0.11J	16,000	12	7.6	29	20,000	30F2,F1	3800F1	500	0.017J,F2	21	780	<0.57U	<0.12U	<0.36U	15	72F1
SSHS-IRM3-S049	SSHS-IRM3-S049-D	2.7-2.7	7/12/2019	180-92616-1	8700	0.42J	7.4	150	0.38J	0.18J	10,000	11	6.8	29	20,000	47	3300	500	0.049	22	750	<0.56U	<0.12U	<0.35U	15	110
SSHS-IRM3-S049F	SSHS-IRM3-S049F-D	2.9-2.9	8/8/2019	180-93896-2	6600	2.3J	13	460	0.31J	0.35J	78,000	12	5.9	43	23,000	2200	4100	360	0.025J	34	770	1.7	<0.1U	<0.31U	14	130
SSHS-IRM3-S050	SSHS-IRM3-S050-D	2.9-2.9	8/5/2019	180-93684-2	8200	3.5	6.7	120	0.38J	0.17J	28,000	16	7.3	140	23,000	300	5700	490	0.045	60	780	<0.58U	<0.12U	<0.36U	14	120
SSHS-IRM3-S051	SSHS-IRM3-S051-D	2.5-2.5	8/5/2019	180-93684-3	7500B	<0.35U	4.7	52	0.29J	0.11J	33,000	11B	6.2	22	18,000B	7.7	7100	350B	<0.014U	17	720	0.63J	<0.11U	<0.33U	11	64
SSHS-IRM3-S053	SSHS-IRM3-S053-D	3.2-3.2	7/11/2019	180-92542-1	8000	<0.39U	6.7	120	0.34J	0.18J	38,000	16	6.7	41	18,000	96	7700	450	0.027J	52	820	<0.59U	<0.12U	<0.37U	13	84
SSHS-IRM3-S054	SSHS-IRM3-S054-D	3.7-3.7	7/11/2019	180-92542-1	8400	0.38J	5.3	68	0.31J	0.15J	58,000	11	7.6	41	19,000	7.8	10,000	420	0.018J	21	880	0.85J	<0.11U	<0.34U	13	77
SSHS-IRM3-S071	SSHS-IRM3-S071-C	4.6-4.6	7/16/2019	180-92715-1	8300	0.36J	7	39	0.3J	0.097J	1500	14	6.2	19	16,000	8.9	2200	270	0.017J	15	370J	<0.53U	<0.11U	<0.33U	11	80
SSHS-IRM3-S072	SSHS-IRM3-S072-C	4.1-4.1	7/16/2019	180-92715-1	7000	0.36J	10	61	0.28J	0.076J	1800	7.7	5.4	37	16,000	9.5	2000	340	0.012J	15	480J	<0.54U	<0.11U	<0.33U	10	43
SSHS-IRM3-S073	SSHS-IRM3-S073-D	4.3-4.3	8/5/2019	180-93684-2	9200	0.45J	8.4	160	0.38J	0.27J	7800	12	6.9	35	20,000	52	3000	550	0.034	25	720	<0.53U	<0.11U	<0.33U	15	180
SSHS-IRM3-S073A	SSHS-IRM3-S073A-C	3.9-3.9	8/5/2019	180-93683-2	8200	0.95J	10	740	0.37J	0.47J	21,000	18	7.5	60	24,000	460	2600	570	0.14	41	690	0.69J	<0.11U	<0.34U	14	240
SSHS-IRM3-S073B	SSHS-IRM3-S073B-D	5.4-5.4	7/16/2019	180-92717-1	11,000B	<0.4U	5.4	94	0.43J	<0.042U	460J	11	6	11	18,000	8	2100	290	<0.016U	14	510J	<0.6U	<0.12U	<0.37U	16	51
SSHS-IRM3-S073BF	SSHS-IRM3-S073BF-D	4-4	8/8/2019	180-93896-2	8800	<0.37U	6.9	130	0.39J	0.13J	17,000	12	6.6	28	18,000	56	3700	470	0.026J	20	770	0.83J	<0.12U	<0.35U	15	79
SSHS-IRM3-S074	SSHS-IRM3-S074-D	5.3-5.3	8/5/2019	180-93684-2	9600	<0.37U	7.1	210	0.4J	0.23J	12,000	13	7.1	30	21,000	59	4700	450	0.016J	22	820	<0.56U	<0.11U	<0.35U	15	150

Table 5
Summary of IRM#4 Metals in Subsurface (2-16 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, NY

					Metals																			
					Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					18	0.31	0.9	18	0.36	0.042	450	0.45	4.5	2.2	9	0.9	450	1.3	0.0081	3.6	450	0.46	0.095	0.22	4.5	1.8
Metals 20x TCLP Screening (Lead = 1000 ppm)							100	2000		20		100				1000			4			20	100			
Protection of Ground-water SCO							16	820	47	7.5		19		1720		450		2000	0.73	130		4	8.3			2480
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																						
SSHS-IRM3-S075	SSHS-IRM3-S075-D	5.5-5.5	8/5/2019	180-93684-2	7500	5.5J	43	6500	0.5	12	10,000	82	15	100	170,000	880	2200	890	0.19	210	760	1J	0.19J	<0.38U	21J	4800
SSHS-IRM3-S076	SSHS-IRM3-S076-D	5.1-5.1	8/5/2019	180-93684-2	9900	0.43J	6.7	64	0.4J	0.084J	22,000	13	8.3	31	22,000	23	5200	360	<0.014U	23	960	<0.53U	<0.11U	<0.33U	14	63
SSHS-IRM3-S077	SSHS-IRM3-S077-D	3.3-3.3	8/5/2019	180-93684-3	9400B	0.81J	17	110F1	0.45	0.17J	31,000	16B	13	36F1,F2	25,000B	46F1	5900F1	470B	0.036	43	870	<0.55U	<0.11U	<0.34U	15	77F1,F2
SSHS-IRM3-S078	SSHS-IRM3-S078-D	4.4-4.4	8/5/2019	180-93684-3	9500B	2.1	9.9	120	0.45	0.21J	6900	17B	8.3	310	26,000B	180	3100	470B	0.038	130	790	<0.53U	<0.11U	<0.33U	16	150
SSHS-IRM3-S079	SSHS-IRM3-S079-D	4.8-4.8	8/5/2019	180-93684-3	10,000B	2.8F1	15	230F1	0.51	0.26J	12,000F1,F2	33B,F1,F2	9.2	120F1,F2	36,000B	160F1,F2	2600	620B,F2	0.15F2,F1	23	840	1.7	<0.12U	<0.37U	22F1,F2	170F2
SSHS-IRM3-S094	SSHS-IRM3-S094-C	6.4-6.4	8/1/2019	180-93547-1	7200	0.45J	6.5	63	0.29J	0.079J	820	8.5	6.7	22	17,000	13	2000	520	<0.013U	16	480J	<0.57U	<0.12U	<0.36U	11	50B
SSHS-IRM3-S095	SSHS-IRM3-S095-C	8.1-8.1	8/2/2019	180-93640-2	8100	<0.35U	9.4	100	0.35J	0.11J	2900	11	7.2	27	19,000	22	2700	520	0.016J	19	650	<0.53U	<0.11U	<0.33U	13	89
SSHS-IRM3-S097	SSHS-IRM3-S097-C	7.6-7.6	8/2/2019	180-93640-1	7400	<0.38U	5.8	120J	0.3J	0.14J	1700J	10	6.3	37J	17,000	23J	2300	460	<0.033U	19	600J	<0.58U	<0.12U	<0.36U	11J	67
SSHS-IRM3-S098	SSHS-IRM3-S098-C	9-9	8/2/2019	180-93640-2	8800	1.2	9.7	310	0.42J	0.14J	11,000	13	7.5	56	27,000	120	2400	570	0.02J	32	710	0.69J	<0.12U	<0.37U	17	79
SSHS-IRM3-S099	SSHS-IRM3-S099-D	5.9-5.9	8/5/2019	180-93684-2	9300	0.54J	6	63	0.36J	0.059J	20,000	12	8	30	21,000	23	5100	360	0.015J	21	820	<0.51U	<0.1U	<0.32U	13	59
SSHS-IRM3-S100	SSHS-IRM3-S100-D	7.9-7.9	8/5/2019	180-93684-2	10,000	<0.36U	6.9	51	0.34J	0.048J	1000	11	6.6	20	21,000	7.8	2800	230	<0.014U	17	730	<0.55U	<0.11U	<0.34U	14	58
SSHS-IRM3-S101	SSHS-IRM3-S101-D	5.4-5.4	8/5/2019	180-93684-3	8800B	5.3	17	240	0.47	0.35J	7300	21B	9.6	260	36,000B	270	2500	670B	0.076	110	830	1.2	<0.12U	<0.36U	19	210
SSHS-IRM3-S102	SSHS-IRM3-S102-D	6.4-6.4	8/5/2019	180-93684-3	9900B	1.5	9.4	120	0.45	0.19J	11,000	17B	9.5	80	28,000B	87	3500	430B	0.027J	60	800	0.62J	<0.11U	<0.35U	17	120
SSHS-IRM3-S103	SSHS-IRM3-S103-D	6.9-6.9	8/5/2019	180-93684-1	8300F2	0.89J,F2,F1	7F2,F1	44F2,F1	0.38J,F2,F1	0.083J,F2,F1	2500F2,F1	12F2,F1	7.8F2,F1	28F2,F1	21,000F2	18F2,F1	2300F2,F1	370F2	<0.015U	130F2,F1	840F2,F1	<0.55U,F1	<0.11U,F1	<0.34U,F1	14F2,F1	62F2,F1
SSHS-IRM3-S104	SSHS-IRM3-S104-D	5.7-5.7	8/5/2019	180-93684-1	10,000	1.7	10	240	0.5	0.32J	7900	19	9.1	97	34,000	110	2600	480	0.07	56	1000	<0.58U	<0.12U	<0.36U	18	160
SSHS-IRM3-S111	SSHS-IRM3-S111-C	9.8-9.8	7/24/2019	180-93173-1	6400	<0.35U	7.3	36	0.29J	0.084J	1000	8.3	6.4	20	16,000	7.8	2100	350	<0.014U	16	620	<0.53U	<0.11U	<0.33U	10	53
SSHS-IRM3-S118	SSHS-IRM3-S118-C	8-8	8/1/2019	180-93547-1	8700	0.57J	8.6	75	0.39J	0.096J	1600	11	8.3	23	21,000	11	2500	610	0.018J	20	690	<0.6U	<0.12U	<0.37U	16	65B
SSHS-IRM3-S120	SSHS-IRM3-S120-C	10.5-10.5	8/5/2019	180-93683-2	7800	0.55J	7.8	97	0.33J	0.11J	3000	10	7	29	19,000	24	2400	580	<0.038U	19	650	<0.56U	<0.11U	<0.35U	13	67
SSHS-IRM3-S121	SSHS-IRM3-S121-C	9.5-9.5	8/5/2019	180-93683-2	7600	<0.37U	6.3	63	0.33J	0.1J	25,000	9.2	6.4	21	17,000	7.9	3900	410	<0.012U	16	770	<0.57U	<0.12U	<0.35U	12	65
SSHS-IRM3-S122	SSHS-IRM3-S122-D	10-10	8/5/2019	180-93684-2	9000	<0.36U	7.4	88	0.4J	0.14J	1600	11	8.4	27	20,000	14	2700	900	<0.014U	20	1100	<0.55U	<0.11U	<0.34U	15	72
SSHS-IRM3-S123	SSHS-IRM3-S123-D	10.6-10.6	8/5/2019	180-93684-2	9000	0.39J	7.1	84	0.37J	0.094J	2400	11	7.6	25	21,000	21	2700	460	<0.015U	19	850	<0.5U	<0.1U	<0.31U	14	68
SSHS-IRM3-S125	SSHS-IRM3-S125-D	9.9-9.9	8/5/2019	180-93684-2	9500	1.3	8.5	65	0.45	0.089J	5600	13	8.4	34	22,000	34	2800	460	0.018J	23	830	<0.58U	<0.12U	<0.36U	16	83
SSHS-IRM3-S126	SSHS-IRM3-S126-D	9.7-9.7	8/5/2019	180-93684-2	6200	<0.38U	5.9	33	0.3J	0.051J	1000	8.1	5.7	18	15,000	7.7	1800	310	<0.014U	14	550	<0.57U	<0.12U	<0.35U	10	45
SSHS-IRM3-S127	SSHS-IRM3-S127-D	8.6-8.6	8/5/2019	180-93684-2	5700	<0.37U	4.8	27	0.26J	0.095J	2700	8.3	5.7	18	15,000	7.4	2800	350	<0.015U	13	720	<0.56U	<0.11U	<0.35U	11	55
SSHS-IRM3-S133	SSHS-IRM3-S133-C	10.8-10.8	8/5/2019	180-93683-1	6400	0.48J	7.9	40	0.29J	0.069J	1000	8.5	6.1	19	16,000	8	2200	440	<0.013U	15	720	<0.54U	<0.11U	<0.34U	11	53
SSHS-IRM3-S135	SSHS-IRM3-S135-C	11.4-11.4	7/26/2019	180-93321-1	6500=	0.46J	6.3	44	0.28J	0.12J	2400	8.3	6	22	17,000	7.9	2700	570	<0.015U	16	710	<0.57U	<0.12U	<0.36U	12	54
SSHS-IRM3-S143	SSHS-IRM3-S143-C	11.9-11.9	8/5/2019	180-93683-2	4700	<0.33U	4	110J	0.19J	0.16J	8400	6.8	4.7J	20	12,000	4.7	5700	1200J	<0.014U	12J	500	<0.5U	<0.1U	<0.31U	7.5	47J
SSHS-IRM3-S144	SSHS-IRM3-S144-C	11.9-11.9	8/5/2019	180-93683-2	5600	<0.31U	5.2	33	0.22J	0.12J	30,000	7.6	5.8	20	13,000	6.8	6500	480	<0.015U	13	630	<0.46U	<0.095U	<0.29U	9.5	48
SSHS-IRM3-S145	SSHS-IRM3-S145-D	11.8-11.8	8/5/2019	180-93684-2	4200	<0.33U	4.4	24	0.18J	0.094J	54,000	5.9	3.9J	15	10,000	5.7	3800	250	<0.014U	10	650	0.73J	<0.1U	<0.31U	8.5	43
SSHS-IRM3-S146	SSHS-IRM3-S146-D	12.7-12.7	8/5/2019	180-93684-2	10,000	0.38J	6.7	54	0.41J	0.074J	1500	12	7.1	33	21,000	16	2700	380	<0.015U	19	710	<0.56U	<0.11U	<0.35U	14	59
SSHS-IRM3-S147	SSHS-IRM3-S147-D	13.1-13.1	8/5/2019	180-93684-2	6200	<0.37U	5.8	56	0.29J	0.11J	7600	8.2	5.9	23	16,000	7.9	5100	460	<0.015U	15	740	<0.55U	<0.11U	<0.34U	10	56
SSHS-IRM3-S148	SSHS-IRM3-S148-D	11.8-11.8	8/5/2019	180-93684-1	6200	<0.4U	8.3	64	0.35J	0.13J	1600	10	5.9	23	19,000	11	2100	600	<0.014U	16	780	<0.6U	<0.12U	<0.37U	14	71
SSHS-IRM3-S149	SSHS-IRM3-S149-D	13.2-13.2	8/5/2019	180-93684-1	5600	<0.37U	5.6	59	0.27J	0.14J	1800	7.6	5.8	28	14,000	7.4	1900	830	<0.015U	15	840	<0.56U	<0.11U	<0.35U	9.6	55F1
SSHS-IRM3-S154	SSHS-IRM3-S154-C	12.1-12.1	8/5/2019	180-93683-1	7000	0.37J	6.4	100	0.3J	0.12J	11,000	9.1	6.6	24	18,000	21	7500	640	<0.014U	16	840	<0.55U	<0.11U	<0.34U	14	64
SSHS-IRM3-S156	SSHS-IRM3-S156-C	14.4-14.4	8/5/2019	180-93683-1	6700	0.51J	7.1	58	0.32J	0.11J	7800	9	6.7	24	18,000	16	3600	490	<0.014U	15	880	<0.56U	<0.11U	<0.35U	13	61
SSHS-IRM3-S156A	SSHS-IRM3-S156A-C	14.1-14.1	8/5/2019	180-93683-1	5900	<0.34U	5.7	39	0.25J	0.079J	12,000	7.2	5.1	19=	14,000	13	4700	340=	<0.011U	12	580	<0.51U	<0.1U	<0.32U	9.5	47
SSHS-IRM3-S156B	SSHS-IRM3-S156B-C	14.3-14.3	8/5/2019	180-93683-2	6800	<0.37U	7.5	54	0.34J	0.091J	1900	9.2	6.6	21	17,000	12	2600	380	<0.029U	18	930	<0.56U	<0.11U	<0.35U	12	58
SSHS-IRM3-S156C	SSHS-IRM3-S156C-C	15.1-15.1	7/26/2019	180-93321-1	6700=	<0.38U	6.8	59	0.34J	0.11J	4100	9	6.7	21	18,000	11	3500	520	<0.016U	17	810	<0.57U	<0.12U	<0.35U	12	65
SSHS-IRM3-S161	SSHS-IRM3-S161-C	13.3-13.3	8/5/2019	180-93683-2	6100	<0.36U	6.5	63	0.25J	0.13J	26,000	8.6	5.3	25	15,000	8.4	5300	630	<0.015U	15	720	<0.54U	<0.11U	<0.34U	11	58
SSHS-IRM3-S162	SSHS-IRM3-S162-C	13-13	8/5/2019	180-93683-2	6400	<0.4U	4.5	36	0.3J	0.11J	20,000	8.4	6.1	22	14,000	7.6	4200	430	<0.017U	15	860	<0.61U	<0.12U	<0.38U	11	59
SSHS-IRM3-S163	SSHS-IRM3-S163-C	14.6-14.6	8/5/2019	180-93683-2	5500	<0.37U	5.3	39	0.23J	0.089J	14,000	7.3	5J	19	14,000	6.5	4700	340	<0.013U	12	680	<0.57U	<0.12U	<0.35U	9.5	53
SSHS-IRM3-S164	SSHS-IRM3-S164-C	13.5-13.5	8/5/2019	180-93683-2	7100	0.38J	11	66	0.33J	0.11J	4500	9.4	6.7	28	18,000	14	3600	510	<0.016U	17	820	<0.56U	<0.11U	<0.35U	12	71
SSHS-IRM3-S165	SSHS-IRM3-S165-D	12.5-12.5	8/5/2019	180-93684-1	5000	<0.34U	5.4	47	0.23J	0.1J	31,000	6.8	5	22	14,000	7.1	3900	280	<0.015U	12	610	<0.51U	<0.11U	<0.32U	9.4	49
SSHS-IRM3-S166	SSHS-IRM3-S166-D	14.6-14.6	8/5/2019	180-93684-1	7000	<0.38U	7.4	49	0.33J	0.11J	4000	10	7.2	28	20,000	11	3400	480	<0.015U	17	730	<0.57U	<0.12U	<0.35U	13	67
SSHS-IRM3-S167	SSHS-IRM3-S167-D	14.2-14.2	8/5/2019	180-93684-1	5400	<0.35U	6.1	47	0.24J	0.077J	21,000	6.9	4.7J	19	14,000	10	2800	230	<0.015U	12	690	<0.53U	<0.11U	<0.33U	9.7	56
SSHS-IRM3-S168	SSHS-IRM3-S168-D	13.1-13.1	7/26/2019	180-93321-1	8600=	0.61J	9.5	71	0.4J	0.09J	4600	12	7.5	30	19,000	26	2600	520	0.016J	19	860	<0.6U	<0.12U	<0.37U	15	62
SSHS-IRM3-S171	SSHS-IRM3-S171-D	11.9-11.9	8/5/2019	180-93684-1	6700	0.48J	9.3	64	0.31J	0.081J	3400	9	6.3	20	17,000	10	2200	450	<0.014U	15	800	<0.56U	<0.11U	<0.35U	12	59
SSHS-IRM3-S173	SSHS-IRM3-S173-D	13.1-13.1	8/5/2019	180-93684-3	6500B	<0.38U	5.9	45	0.29J	0.085J	2700	9.1B	5.6	21	16,000B	11	2600	420B	<0.015U	14	670	<0.58U	<0.12U	<0.36U	11	54
SSHS-IRM3-S177	SSHS-IRM3-S177-C	14.9-14.9	7/29/2019	180-93352-1	5100	<0.35U	4.3	40	0.21J	0.066J	1100	6.4	4.4J	21	13,000	5.7	1900	330	<0.012U	11	660	<0.53U	<0.11U	<0.33U	7.9	49
SSHS-IRM3-S177A	SSHS-IRM3-S177A-C	14.5-14.5	7/30/2019	180-93419-1	5600	0.43J	5	41	0.25J	0.074J	910	7.2	5.4	17	13,000	6.4	1800	450	<0.013U	14	550	<0.5U	<0.1U	<0.31U	8.7	51
SSHS-IRM3-S178	SSHS-IRM3-S178-C	15-15	7/30/2019	180-93419-1	6700	<0.35U	6.9	58	0.3J	0.16J	3600	8.8	6.3	23	17,000	12	3000	510	<0.014U	16	770	<0.53U	<0.11U	<0.33U	12	81
SSHS-IRM3-S179	SSHS-IRM3-S179-D	15.4-15.4	7/29/2019	180-93353-1	5400	<0.33U	5.1	61	0.23J	0.078J	12,000	7	4.8J	20	14,000	7	3000	260	<0.015U	13	660	<0.51U	<0.1U	<0.32U	9.7	53
SSHS-IRM3-S179A	SSHS-IRM3-S179A-C	15.1-15.1	7/30/2019	180-93419-1	5400	<0.39UJ	5.8J	34J	0.22J	0.11J	36,000	7.1	5.3J	23	14,000	5.7J	4600	350	<0.014U	13	660	<0.59UJ	<0.12U	<0.37U	9.9	72
SSHS-IRM3-S187	SSHS-IRM3-S187-C	14.9-14.9	7/26/2019	180-93321-1	5400	<0.37U	4.9	30	0.19J	0.097J	35,000	7.4	4.9J	17	13,000	5.6	3600	420	<0.014U	13	570	0.7J	<0.11U	<0.35U	8.7	52
SSHS-IRM3-S188	SSHS-IRM3-S188-C	14.2-14.2	7/26/2019	180-93321-1	5400=	<0.38U	4.7	33	0.24J	0.11J	22,000	7.1	4.8J	19	12,000	7.8	5700	370	<0.015U	13	770	<0.58U	<0.12U	<0.36U	8.8	57
SSHS-IRM3-S201	SSHS-IRM3-S201-C	14.5-14.5	8/1/2019	180-93547-1	6500	<0.38U	5.8	53	0.28J	0.11J	5300	8.2	6.5	21	16,000	12	3600	560	<0.016U	16	640	<0.57U	<0.12U	<0.36U	11	65B
SSHS-IRM3-S202	SSHS-IRM3-S202-C	14.3-14.3	8/1/2019	180-93547-1	8500	0.67J	8	74	0.38J	0.21J	6500	11	7.9	29	19,000	32	2800	480	<0.015U	20	780	<0.59U	<0.12U	<0.36U	14	110B
SSHS-IRM3-S203d	SSHS-IRM3-S203-D	5-5	8/5/2019	180-93684-3	8500	<0.37U	7.4	110	0.37J	0.29J	34,000	14	6.9	94	20,000	59	12,000	410	0.033	59	810	0.61J	<0.12U	<0.35U	14	180
SSHS-RIM3-S124	SSHS-RIM3-S124-D	9-9	8/5/2019	180-93684-2	7800	<0.35U	7.9	46	0.3J	0.046J	910	9	5.9	17	18,000	9.2	2300	310	<0.014U	15	620	<0.52U	<0.11U	<0.33U	11	60

Table 5
Summary of IRM#4 Metals in Subsurface (2-16 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, NY

					Metals																		
					Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Thallium	Vanadium	Zinc
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					18	0.31	0.9	18	0.36	0.042	450	0.45	4.5	2.2	9	0.9	450	1.3	0.0081	3.6	450	0.46	0.095	0.22	4.5	1.8
Metals 20x TCLP Screening (Lead = 1000 ppm)							100	2000		20		100				1000			4			20	100			
Protection of Ground-water SCO							16	820	47	7.5		19		1720		450		2000	0.73	130		4	8.3			2480
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																						

Notes:
EQL- Estimated Quantitation Limit
mg/kg - milligram per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
U - Non-detect
J - estimated value
B - analyte found in method blank
TCLP - Toxicity Characteristic Leaching Procedure
F1 - MS and/or MSD recovery is outside acceptable limits
Concentrations detected above the protection of groundwater SCO are shown in ligth gray
Concentrations detected above 20x TCLP (200x for Lead) are shown in dark gray

TABLE 6
Summary of SVOC and VOC Results for Subsurface Soils (Below 2 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, New York

					SVOCs	VOCs																			
					PAHs (Sum of total)	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-Dichloroethene	1,2-dichloropropane	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dichloromethane	Trichloroethene
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL						0.0004	0.00043	0.00065	0.00065	0.00081	0.00062	0.00039	0.00099	0.00049	0.00047	0.00061	0.00032	0.00067	0.00038	0.0009	0.00059	0.00045	0.00051	0.00029	0.0022	0.00046
Subsurface SCO					100																				
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																					
SSHS-B2238	SSHS-B2238-SUB-0.17-2	0.17-2	7/23/2018	180-80091-1	0.07912	<0.0004U	<0.00043U	<0.00065U	<0.00065U	<0.00081U	<0.00062U	<0.00039U	<0.00099U	<0.00049U	<0.00047U	<0.00061U	<0.00032U	<0.00067U	<0.00038U	<0.0009U	<0.00059U	<0.00045U	<0.00051U	<0.00029U	<0.0022U	<0.00046U
SSHS-B2238	SSHS-B2238-SUB-12-14	12-14	7/23/2018	180-80091-1	-	<0.0027U	<0.0032U	<0.0026U	<0.0019U	<0.0031U	<0.0033U	<0.0016U	<0.0043U	<0.0026U	<0.0021U	<0.0025U	<0.0028U	<0.0036U	<0.0026U	<0.0028U	<0.0023U	<0.0041U	<0.0017U	<0.0017U	<0.0025U	0.002J
SSHS-B2238	SSHS-B2238-SUB-SS	0-0.17	7/23/2018	180-80091-4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B2239	SSHS-B2239-SUB-12-14	12-14	7/23/2018	180-80091-3	-	<0.0027U	<0.0032U	<0.0026U	<0.0019U	<0.003U	<0.0033U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0028U	<0.0035U	<0.0026U	<0.0028U	<0.0022U	<0.0041U	<0.0017U	<0.0017U	<0.0025U	<0.0016U
SSHS-B2240	SSHS-B2240-SUB-12-14	12-14	7/23/2018	180-80091-2	-	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0028U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.0041U	<0.0017U	<0.0017U	0.0025J	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-0.17-2	0.17-2	4/22/2019	180-89294-1	0.281	<0.0028U	<0.0034U	<0.0027U	<0.0021U	<0.0032U	<0.0035U	<0.0016U	<0.0045U	<0.0028U	<0.0022U	<0.0027U	<0.003U	<0.0038U	<0.0027U	<0.0029U	<0.0024U	<0.0044UJ	<0.0018U	<0.0018U	<0.0044U	<0.0017U
SSHS-B2746	SSHS-B2746-SUB-10-12	10-12	4/22/2019	180-89294-1	0.212	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0027U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.004U	<0.0016U	<0.0017U	<0.004U	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-12-14	12-14	4/22/2019	180-89294-1	1.059	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0027U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.004UJ	<0.0017U	<0.0017U	<0.004U	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-2-4	2-4	4/22/2019	180-89294-1	0.831	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0027U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.0041UJ	<0.0017U	<0.0017U	<0.0041U	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-4-6	4-6	4/22/2019	180-89294-1	8.455	<0.0027U	<0.0032U	<0.0026U	<0.0019U	<0.003U	<0.0033U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0028U	<0.0035U	<0.0026U	<0.0027U	<0.0022U	<0.0041UJ	<0.0017U	<0.0017U	<0.0041U	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-6-8	6-8	4/22/2019	180-89294-1	2.271	<0.0028U	<0.0033U	<0.0026U	<0.002U	<0.0031U	<0.0034U	<0.0016U	<0.0044U	<0.0027U	<0.0021U	<0.0026U	<0.0029U	<0.0036U	<0.0026U	<0.0028U	<0.0023U	<0.0042UJ	<0.0017U	<0.0018U	<0.0042U	<0.0016U
SSHS-B2746	SSHS-B2746-SUB-8-10	8-10	4/22/2019	180-89294-1	1.025	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0028U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.0041UJ	<0.0017U	<0.0017U	<0.0041U	<0.0016U
SSHS-B2750	SSHS-B2750-SUB-0.17-2	0.17-2	4/23/2019	180-89344-1	2.805	<0.0029U	<0.0035U	<0.0028U	<0.0021U	<0.0033U	<0.0036U	<0.0017U	<0.0046U	<0.0029U	<0.0022U	<0.0027U	<0.003U	<0.0039U	<0.0028U	<0.003U	<0.0025U	<0.0045U	<0.0018U	<0.0019U	<0.0045U	<0.0017U
SSHS-B2750	SSHS-B2750-SUB-10-12	10-12	4/23/2019	180-89344-1	<0.239	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.0029U	<0.0031U	<0.0015U	<0.0041U	<0.0025U	<0.002U	<0.0024U	<0.0027U	<0.0034U	<0.0025U	<0.0026U	<0.0022U	<0.0039U	<0.0016U	<0.0016U	<0.0039U	<0.0015U
SSHS-B2750	SSHS-B2750-SUB-12-14	12-14	4/23/2019	180-89344-1	<0.246	<0.0026U	<0.0031U	<0.0025U	<0.0019U	<0.003U	<0.0032U	<0.0015U	<0.0042U	<0.0026U	<0.002U	<0.0025U	<0.0027U	<0.0035U	<0.0025U	<0.0027U	<0.0022U	<0.0041U	<0.0017U	<0.0017U	<0.004U	<0.0016U
SSHS-B2750	SSHS-B2750-SUB-2-4	2-4	4/23/2019	180-89344-1	1.515	<0.0027U	<0.0032U	<0.0026U	<0.002U	<0.0031U	<0.0033U	<0.0016U	<0.0043U	<0.0027U	<0.0021U	<0.0026U	<0.0028U	<0.0036U	<0.0026U	<0.0028U	<0.0023U	<0.0042U	<0.0017U	<0.0017U	<0.0042U	<0.0016U
SSHS-B2750	SSHS-B2750-SUB-4-6	4-6	4/23/2019	180-89344-1	0.5335	<0.0029U	<0.0035U	<0.0028U	<0.0021U	<0.0033U	<0.0036U	<0.0017U	<0.0046U	<0.0029U	<0.0022U	<0.0027U	<0.003U	<0.0039U	<0.0028U	<0.003U	<0.0025U	<0.0045U	<0.0018U	<0.0019U	<0.0045U	<0.0017U
SSHS-B2750	SSHS-B2750-SUB-6-8	6-8	4/23/2019	180-89344-1	<0.265	<0.0029U	<0.0034U	<0.0028U	<0.0021U	<0.0033U	<0.0035U	<0.0017U	<0.0046U	<0.0028U	<0.0022U	<0.0027U	<0.003U	<0.0038U	<0.0028U	<0.003U	<0.0024U	<0.0044U	<0.0018U	<0.0018U	<0.0044U	<0.0017U
SSHS-B2750	SSHS-B2750-SUB-8-10	8-10	4/23/2019	180-89344-1	<0.25	<0.0028U	<0.0033U	<0.0027U	<0.002U	<0.0032U	<0.0034U	<0.0016U	<0.0044U	<0.0027U	<0.0021U	<0.0026U	<0.0029U	<0.0037U	<0.0027U	<0.0029U	<0.0023U	<0.0043U	<0.0017U	<0.0018U	<0.0043U	<0.0017U
SSHS-B2763	SSHS-B2763-SUB-10-12	10-12	4/26/2019	180-89521-1	<0.237	<0.0025U	<0.003U	<0.0024U	<0.0018U	<0.0028U	<0.0031U	<0.0014U	<0.004U	<0.0024U	<0.0019U	<0.0023U	<0.0026U	<0.0033U	<0.0024U	<0.0026U	<0.0021U	<0.0038U	<0.0016U	<0.0016U	<0.0038U	<0.0015U
SSHS-B2763	SSHS-B2763-SUB-6-8	6-8	4/26/2019	180-89521-1	<0.274	<0.0028U	<0.0034U	<0.0027U	<0.002U	<0.0032U	<0.0035U	<0.0016U	<0.0045U	<0.0028U	<0.0022U	<0.0027U	<0.0029U	<0.0037U	<0.0027U	<0.0029U	<0.0024U	<0.0044U	<0.0018U	<0.0018U	<0.0043U	<0.0017U
SSHS-B2763	SSHS-B2763-SUB-8-10	8-10	4/26/2019	180-89521-1	<0.256	<0.0028U	<0.0033U	<0.0026U	<0.002U	<0.0031U	<0.0034U	<0.0016U	<0.0044U	<0.0027U	<0.0021U	<0.0026U	<0.0029U	<0.0036U	<0.0026U	<0.0028U	<0.0023U	<0.0042U	<0.0017U	<0.0018U	<0.0042U	<0.0016U
SSHS-B2977	SSHS-B2977-SUB-10-12	10-12	11/7/2019	180-98520-1	2.046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B2977	SSHS-B2977-SUB-12-14	12-14	11/7/2019	180-98520-1	0.5415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B8	B23484	4-5	5/11/2000		0.042	<0.0055U	-	-	<0.0055U	<0.0055U	-	<0.0055U	-	-	-	-	-	<0.0055U	-	-	0.0013J	-	<0.0055U	-	<0.0055U	0.0022J

Notes:
EQL- Estimated Quantitation Limit
mg/kg - milligram per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
U - Non-detect
J - estimated value
B - analyte found in method blank
F1 - MS and/or MSD recovery is outside acceptable limits
SVOCs: semi-volatile organic compounds
VOCs: volatile organic compounds
UJ - compound not detected at an estimated value

TABLE 6
Summary of SVOC and VOC Results for Subsurface Soils (Below 2 ft bgs)
IRM 4

Former Sperry Remington Site - North Portion
Elmira, New York

					VOCs																				
					Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	Chlorobenzene	1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane	Trichlorofluoromethane	Isopropylbenzene	Styrene	Methyl Ethyl Ketone	2-hexanone (MBK)	4-Methyl-2-pentanone	Acetone	Carbon disulfide	Cyclohexane	Methyl-tert-butyl ether	1,4-dichlorobenzene
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.00044	0.00062	0.00035	0.00087	0.00045	0.0006	0.00045	0.00073	0.00041	0.0004	0.0014	0.00041	0.001	0.00064	0.00057	0.00077	0.00083	0.0011	0.0029	0.0028	0.0011	0.00044	0.00047
Subsurface SCO																											
Location	**Sample Name**	**Sample Depth Range (ft bgs)**	**Sample Date**	**Lab Report Number**																							
SSHS-B2238	SSHS-B2238-SUB-0.17-2	0.17-2	7/23/2018	180-80091-1	<0.00044U	<0.00062U	<0.00035U	<0.00087U	<0.00045U	<0.0006U	<0.00045U	<0.00073U	<0.00041U	<0.0004U	<0.0014U	<0.00041U	<0.001U	<0.00064U	<0.00057U	<0.00077U	<0.00083U	<0.0011U	<0.011U	0.0013J	0.0044J	<0.00044U	<0.00047U
SSHS-B2238	SSHS-B2238-SUB-12-14	12-14	7/23/2018	180-80091-1	<0.0021U	<0.0027U	<0.0019U	<0.0039U	<0.0022U	<0.0017U	<0.0043U	<0.0017U	<0.0017U	<0.0029U	<0.0048U	<0.0031U	<0.0016U	<0.0025U	<0.0014U	<0.0031U	<0.0045U	<0.002U	0.015J	<0.0032U	<0.0013U	<0.004U	<0.0011U
SSHS-B2238	SSHS-B2238-SUB-SS	0-0.17	7/23/2018	180-80091-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B2239	SSHS-B2239-SUB-12-14	12-14	7/23/2018	180-80091-3	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0022U	<0.0017U	<0.0043U	<0.0017U	<0.0017U	<0.0029U	<0.0048U	<0.0031U	<0.0015U	<0.0025U	<0.0014U	<0.0031U	<0.0045U	<0.002U	0.013J	<0.0032U	0.0017J	<0.0039U	<0.0011U
SSHS-B2240	SSHS-B2240-SUB-12-14	12-14	7/23/2018	180-80091-2	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0022U	<0.0017U	<0.0042U	<0.0017U	<0.0017U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.0031U	<0.0044U	<0.002U	0.082	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-0.17-2	0.17-2	4/22/2019	180-89294-1	<0.0023U	<0.0029U	<0.002U	<0.0042U	<0.004U	<0.0042U	<0.0023U	<0.0018U	<0.0018U	<0.0031U	<0.0051U	<0.0033U	<0.0017U	<0.0026U	<0.0015U	<0.0033U	<0.0047U	<0.0021U	<0.0036UJ	<0.0034U	<0.0014U	<0.0042U	<0.0012U
SSHS-B2746	SSHS-B2746-SUB-10-12	10-12	4/22/2019	180-89294-1	<0.0021U	<0.0027U	<0.0018U	<0.0038U	<0.0037U	<0.0039U	<0.0021U	<0.0017U	<0.0016U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.003U	<0.0044U	<0.0019U	<0.0033U	<0.0031U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-12-14	12-14	4/22/2019	180-89294-1	<0.0021U	<0.0027U	<0.0018U	<0.0038U	<0.0037U	<0.0039U	<0.0021U	<0.0017U	<0.0017U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.003U	<0.0044U	<0.0019U	<0.0033UJ	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-2-4	2-4	4/22/2019	180-89294-1	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0037U	<0.0039U	<0.0021U	<0.0017U	<0.0017U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.003U	<0.0044U	<0.002U	<0.0033UJ	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-4-6	4-6	4/22/2019	180-89294-1	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0038U	<0.004U	<0.0021U	<0.0017U	<0.0017U	<0.0029U	<0.0048U	<0.0031U	<0.0015U	<0.0025U	<0.0014U	<0.0031U	<0.0045U	<0.002U	<0.0033UJ	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-6-8	6-8	4/22/2019	180-89294-1	<0.0022U	<0.0028U	<0.0019U	<0.004U	<0.0039U	<0.0041U	<0.0022U	<0.0017U	<0.0017U	<0.003U	<0.0049U	<0.0032U	<0.0016U	<0.0025U	<0.0015U	<0.0032U	<0.0046U	<0.002U	<0.0035UJ	<0.0033U	<0.0013U	<0.004U	<0.0011U
SSHS-B2746	SSHS-B2746-SUB-8-10	8-10	4/22/2019	180-89294-1	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0037U	<0.0039U	<0.0021U	<0.0017U	<0.0017U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.0031U	<0.0044U	<0.002U	<0.0033UJ	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2750	SSHS-B2750-SUB-0.17-2	0.17-2	4/23/2019	180-89344-1	<0.0023U	<0.003U	<0.002U	<0.0043U	<0.0041U	<0.0043U	<0.0023U	<0.0019U	<0.0018U	<0.0032U	<0.0052U	<0.0034U	<0.0017U	<0.0027U	<0.0016U	<0.0034U	<0.0049U	<0.0022U	<0.0037U	<0.0035U	<0.0014U	<0.0043U	<0.0012U
SSHS-B2750	SSHS-B2750-SUB-10-12	10-12	4/23/2019	180-89344-1	<0.002U	<0.0026U	<0.0018U	<0.0038U	<0.0036U	<0.0038U	<0.002U	<0.0016U	<0.0016U	<0.0028U	<0.0046U	<0.003U	<0.0015U	<0.0024U	<0.0014U	<0.003U	<0.0043U	<0.0019U	<0.0032U	<0.0031U	<0.0013U	<0.0038U	<0.001U
SSHS-B2750	SSHS-B2750-SUB-12-14	12-14	4/23/2019	180-89344-1	<0.0021U	<0.0027U	<0.0018U	<0.0039U	<0.0037U	<0.0039U	<0.0021U	<0.0017U	<0.0017U	<0.0029U	<0.0047U	<0.0031U	<0.0015U	<0.0024U	<0.0014U	<0.003U	<0.0044U	<0.002U	<0.0033U	<0.0032U	<0.0013U	<0.0039U	<0.0011U
SSHS-B2750	SSHS-B2750-SUB-2-4	2-4	4/23/2019	180-89344-1	<0.0022U	<0.0027U	<0.0019U	<0.004U	<0.0038U	<0.004U	<0.0022U	<0.0017U	<0.0017U	<0.003U	<0.0049U	<0.0032U	<0.0016U	<0.0025U	<0.0014U	<0.0031U	<0.0045U	<0.002U	<0.0034U	<0.0033U	<0.0013U	<0.004U	<0.0011U
SSHS-B2750	SSHS-B2750-SUB-4-6	4-6	4/23/2019	180-89344-1	<0.0023U	<0.0029U	<0.002U	<0.0043U	<0.0041U	<0.0043U	<0.0023U	<0.0019U	<0.0018U	<0.0032U	<0.0052U	<0.0034U	<0.0017U	<0.0027U	<0.0015U	<0.0034U	<0.0049U	<0.0022U	<0.0037U	<0.0035U	<0.0014U	<0.0043U	<0.0012U
SSHS-B2750	SSHS-B2750-SUB-6-8	6-8	4/23/2019	180-89344-1	<0.0023U	<0.0029U	<0.002U	<0.0042U	<0.0041U	<0.0043U	<0.0023U	<0.0018U	<0.0018U	<0.0031U	<0.0052U	<0.0033U	<0.0017U	<0.0027U	<0.0015U	<0.0033U	<0.0048U	<0.0021U	<0.0036U	<0.0035U	<0.0014U	<0.0042U	<0.0012U
SSHS-B2750	SSHS-B2750-SUB-8-10	8-10	4/23/2019	180-89344-1	<0.0022U	<0.0028U	<0.0019U	<0.0041U	<0.0039U	<0.0041U	<0.0022U	<0.0018U	<0.0017U	<0.003U	<0.005U	<0.0032U	<0.0016U	<0.0026U	<0.0015U	<0.0032U	<0.0046U	<0.0021U	<0.0035U	<0.0033U	<0.0014U	<0.0041U	<0.0011U
SSHS-B2763	SSHS-B2763-SUB-10-12	10-12	4/26/2019	180-89521-1	<0.002U	<0.0025U	<0.0017U	<0.0036U	<0.0035U	<0.0037U	<0.002U	<0.0016U	<0.0016U	<0.0027U	<0.0045U	<0.0029U	<0.0014U	<0.0023U	<0.0013U	<0.0029U	<0.0042U	<0.0018U	<0.0031U	<0.003U	<0.0012U	<0.0037U	<0.001U
SSHS-B2763	SSHS-B2763-SUB-6-8	6-8	4/26/2019	180-89521-1	<0.0023U	<0.0029U	<0.002U	<0.0041U	<0.004U	<0.0042U	<0.0023U	<0.0018U	<0.0018U	<0.0031U	<0.0051U	<0.0033U	<0.0016U	<0.0026U	<0.0015U	<0.0033U	<0.0047U	<0.0021U	<0.0036U	<0.0034U	<0.0014U	<0.0042U	<0.0012U
SSHS-B2763	SSHS-B2763-SUB-8-10	8-10	4/26/2019	180-89521-1	<0.0022U	<0.0028U	<0.0019U	<0.004U	<0.0039U	<0.0041U	<0.0022U	<0.0017U	<0.0017U	<0.003U	<0.0049U	<0.0032U	<0.0016U	<0.0025U	<0.0015U	<0.0032U	<0.0046U	<0.002U	<0.0035U	<0.0033U	<0.0013U	<0.004U	<0.0011U
SSHS-B2977	SSHS-B2977-SUB-10-12	10-12	11/7/2019	180-98520-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B2977	SSHS-B2977-SUB-12-14	12-14	11/7/2019	180-98520-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSHS-B8	B23484	4-5	5/11/2000		0.0029J	<0.0055U	-	<0.0055U	-	-	<0.37U	<0.37U	<0.0055U	-	-	-	-	-	-	<0.011U	-	-	<0.022U	-	-	-	<0.37U

Notes:
EQL- Estimated Quantitation Limit
mg/kg - milligram per kilogram
ft bgs - feet below ground surface
ft MSL - feet abouve mean sea level
U - Non-detect
J - estimated value
B - analyte found in method blank
F1 - MS and/or MSD recovery is outside acceptable limits
SVOCs: semi-volatile organic compounds
VOCs: volatile organic compounds
UJ - compound not detected at an estimated value

TABLE 7A
Waste Characterization Results - TCLP

Former Sperry Remington - North Portion
Elmira, New York

				Sample Location	SSHS-B2621	SSHS-B2625	SSHS-B2634	SSHS-B2637	SSHS-B2637	SSHS-B2649	SSHS-B2660	SSHS-B2661	SSHS-B2672	SSHS-B2673	SSHS-B2675
				Sample Depth (ft bgs)	2-4	2-4	6-8	4-6	8-10	2-4	2-4	4-6	2-4	2-4	4-6
				Sampled Date	5/15/2019	5/16/2019	4/24/2019	4/24/2019	4/24/2019	5/17/2019	4/25/2019	4/25/2019	5/19/2019	5/18/2019	5/17/2019
				RCRA Toxicity Characteristics											
Method_Name	**ChemName**	**Units**	**EQL**												
Pesticides and Herbicides	gamma-Chlordane	mg/L	0.0029		<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U
	Endrin	µg/L	0.091	20	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U
	g-BHC (Lindane)	µg/L	0.12	400	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U
	Heptachlor	µg/L	0.18	8	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U
	Heptachlor epoxide	µg/L	0.14		<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U
	Methoxychlor	µg/L	0.31	10000	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U	<0.31UJ	<0.31UJ	<0.31UJ
	Toxaphene	mg/L	0.02	0.5	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U
	2,4,5-TP (Silvex)	mg/L	0.0011	1	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
	Hedonal	mg/L	0.0045	10	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
SVOCs	1,4-dichlorobenzene	µg/L	4.5	7500	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U
	2,4,5-trichlorophenol	µg/L	7.9	400000	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U
	2,4,6-trichlorophenol	µg/L	9.5	2000	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U
	2,4-Dinitrotoluene	µg/L	7.9	30130	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U
	2-methylphenol	µg/L	4	4200000	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U
	4-methylphenol	mg/L	0.0079	4200	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U
	Hexachlorobenzene	µg/L	5.5	30130	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U
	Hexachlorobutadiene	µg/L	8.4	500	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U
	Hexachloroethane	µg/L	4	3000	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U
	Nitrobenzene	µg/L	12	2000	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U
	Pentachlorophenol	µg/L	7.5	100000	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U
	Pyridine	µg/L	8.2	35000	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U
VOCs	1,1-dichloroethene	µg/L	110	700	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U
	1,2-dichloroethane	µg/L	58	500	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U
	Methyl Ethyl Ketone	µg/L	120	200000	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U
	Benzene	µg/L	79	500	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U
	Carbon tetrachloride	µg/L	130	500	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U
	Chlorobenzene	µg/L	63	100000	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U
	Chloroform	µg/L	85	6000	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U
	Trichloroethene	µg/L	60	500	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U
	Tetrachloroethene	µg/L	80	700	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U
	Vinyl chloride	µg/L	150	200	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U
Metals	Arsenic	mg/L	0.041	5	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U
	Barium	mg/L	2	100	2.9	0.73J	2.8	3.2B	1.9J	0.69J	0.76J	2.5	3.3	2.4	2.2
	Cadmium	mg/L	0.0016	1	0.027J	<0.003U	0.004J	0.004J	<0.003UJ	<0.003U	0.54=	<0.5U	0.007J	<0.003U	0.007J
	Chromium (III+VI)	mg/L	0.0078	5	0.018J	0.034J	<0.008U	<0.008U	<0.008U	<0.008U	0.022J	<0.008U	<0.008U	<0.008U	<0.008U
	Lead	mg/L	0.029	5	0.88	0.038J	1.8	1.2	0.64	<0.029U	<0.029U	0.53	8.8	29	0.11J
	Selenium	mg/L	0.036	1	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	0.038J	<0.036U	0.036J
	Silver	mg/L	0.0085	5	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U
	Mercury	mg/L	0.000065	0.2	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U

Notes:
J - estimated value
U - non-detect
µg/L - micrograms per liter
mg/L - milligrams per liter
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light gray.

TABLE 7A
Waste Characterization Results - TCLP

Former Sperry Remington - North Portion
Elmira, New York

				Sample Location	SSHS-B2679	SSHS-B2679	SSHS-B2679	SSHS-B2679	SSHS-B2682	SSHS-B2703	SSHS-B2724	SSHS-B2724	SSHS-B2724	SSHS-B2724	SSHS-B2763
				Sample Depth (ft bgs)	10-12	14-16	4-6	8-10	2-4	0.17-2	12-14	2-4	4-6	6-8	4-6
				Sampled Date	4/24/2019	4/24/2019	4/24/2019	4/24/2019	4/25/2019	5/19/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019	4/26/2019
				RCRA Toxicity Characteristics											
Method_Name	**ChemName**	**Units**	**EQL**												
Pesticides and Herbicides	gamma-Chlordane	mg/L	0.0029		<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U
	Endrin	µg/L	0.091	20	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U	<0.091U
	g-BHC (Lindane)	µg/L	0.12	400	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U	<0.12U
	Heptachlor	µg/L	0.18	8	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U	<0.18U
	Heptachlor epoxide	µg/L	0.14		<0.14U	<0.14U	0.32J	<0.14U	0.46J	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U	<0.14U
	Methoxychlor	µg/L	0.31	10000	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U	<0.31UJ	<0.31U	<0.31U	<0.31U	<0.31U	<0.31U
	Toxaphene	mg/L	0.02	0.5	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U	<0.02U
	2,4,5-TP (Silvex)	mg/L	0.0011	1	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
	Hedonal	mg/L	0.0045	10	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
SVOCs	1,4-dichlorobenzene	µg/L	4.5	7500	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U	<4.5U
	2,4,5-trichlorophenol	µg/L	7.9	400000	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U
	2,4,6-trichlorophenol	µg/L	9.5	2000	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U	<9.5U
	2,4-Dinitrotoluene	µg/L	7.9	30130	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U	<7.9U
	2-methylphenol	µg/L	4	4200000	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U
	4-methylphenol	mg/L	0.0079	4200	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U
	Hexachlorobenzene	µg/L	5.5	30130	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U	<5.5U
	Hexachlorobutadiene	µg/L	8.4	500	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U	<8.4U
	Hexachloroethane	µg/L	4	3000	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U	<4U
	Nitrobenzene	µg/L	12	2000	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U	<12U
	Pentachlorophenol	µg/L	7.5	100000	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U	<7.5U
	Pyridine	µg/L	8.2	35000	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U	<8.2U
VOCs	1,1-dichloroethene	µg/L	110	700	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U	<110U
	1,2-dichloroethane	µg/L	58	500	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U	<58U
	Methyl Ethyl Ketone	µg/L	120	200000	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U	<120U
	Benzene	µg/L	79	500	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U	<79U
	Carbon tetrachloride	µg/L	130	500	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U	<130U
	Chlorobenzene	µg/L	63	100000	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U	<63U
	Chloroform	µg/L	85	6000	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U	<85U
	Trichloroethene	µg/L	60	500	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U	<60U
	Tetrachloroethene	µg/L	80	700	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U	<80U
	Vinyl chloride	µg/L	150	200	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U	<150U
Metals	Arsenic	mg/L	0.041	5	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.5U	<0.041U	<0.041U	<0.041U
	Barium	mg/L	2	100	2.2	1J	3.7	3.1	2.2	0.98J	0.58J	0.91J	1J	1.8J	0.28J
	Cadmium	mg/L	0.0016	1	<0.003U	<0.003U	0.005J	0.003J	<0.5U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.5U
	Chromium (III+VI)	mg/L	0.0078	5	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	<0.008U	0.01J
	Lead	mg/L	0.029	5	2.8	0.31J	3.6	2.2	0.048J	<0.029U	<0.029U	<0.029U	<0.029U	0.046J	<0.029U
	Selenium	mg/L	0.036	1	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	0.041J	0.053J	0.041J	0.036J	<0.036U	<0.036U
	Silver	mg/L	0.0085	5	<0.009U	<0.009U	<0.009U	<0.009U	<0.009UJ	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U
	Mercury	mg/L	0.000065	0.2	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U

Notes:
J - estimated value
U - non-detect
µg/L - micrograms per liter
mg/L - milligrams per liter
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light

TABLE 7A
Waste Characterization Results - TCLP

Former Sperry Remington - North Portion
Elmira, New York

				Sample Location	SSHS-B2765A	SSHS-B2765A	SSHS-B2766	SSHS-B2908	SSHS-B2908	SSHS-B2908	SSHS-B2942	SSHS-B2945	SSHS-B2945	SSHS-B2945	SSHS-B2945
				Sample Depth (ft bgs)	10-12	12-14	6-8	2-4	4-6	6-8	4-6	10-12	2-4	4-6	6-8
				Sampled Date	4/27/2019	4/27/2019	4/23/2019	11/4/2019	11/4/2019	11/4/2019	11/5/2019	11/6/2019	11/6/2019	11/6/2019	11/6/2019
Method_Name	**ChemName**	**Units**	**EQL**	RCRA Toxicity Characteristics											
Pesticides and Herbicides	gamma-Chlordane	mg/L	0.0029		<0.003U	<0.003U	<0.003U	-	-	-	-	-	-	-	-
	Endrin	µg/L	0.091	20	<0.091U	<0.091U	<0.091U	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	µg/L	0.12	400	<0.12U	<0.12U	<0.12U	-	-	-	-	-	-	-	-
	Heptachlor	µg/L	0.18	8	<0.18U	<0.18U	<0.18U	-	-	-	-	-	-	-	-
	Heptachlor epoxide	µg/L	0.14		<0.14U	<0.14U	<0.14U	-	-	-	-	-	-	-	-
	Methoxychlor	µg/L	0.31	10000	<0.31U	<0.31U	<0.31U	-	-	-	-	-	-	-	-
	Toxaphene	mg/L	0.02	0.5	<0.02U	<0.02U	<0.02U	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/L	0.0011	1	<0.001U,*	<0.001U,*	<0.001U	-	-	-	-	-	-	-	-
	Hedonal	mg/L	0.0045	10	<0.005U,*	<0.005U,*	<0.005U	-	-	-	-	-	-	-	-
SVOCs	1,4-dichlorobenzene	µg/L	4.5	7500	<4.5U	<4.5U	<4.5U	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	µg/L	7.9	400000	<7.9U	<7.9U	<7.9U	-	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	µg/L	9.5	2000	<9.5U	<9.5U	<9.5U	-	-	-	-	-	-	-	-
	2,4-Dinitrotoluene	µg/L	7.9	30130	<7.9U	<7.9U	<7.9U	-	-	-	-	-	-	-	-
	2-methylphenol	µg/L	4	4200000	<4U	<4U	<4U	-	-	-	-	-	-	-	-
	4-methylphenol	mg/L	0.0079	4200	<0.008U	<0.008U	<0.008U	-	-	-	-	-	-	-	-
	Hexachlorobenzene	µg/L	5.5	30130	<5.5U	<5.5U	<5.5U	-	-	-	-	-	-	-	-
	Hexachlorobutadiene	µg/L	8.4	500	<8.4U	<8.4U	<8.4U	-	-	-	-	-	-	-	-
	Hexachloroethane	µg/L	4	3000	<4U	<4U	<4U	-	-	-	-	-	-	-	-
	Nitrobenzene	µg/L	12	2000	<12U	<12U	<12U	-	-	-	-	-	-	-	-
	Pentachlorophenol	µg/L	7.5	100000	<7.5U	<7.5U	<7.5U	-	-	-	-	-	-	-	-
	Pyridine	µg/L	8.2	35000	<8.2U	<8.2U	<8.2U	-	-	-	-	-	-	-	-
VOCs	1,1-dichloroethene	µg/L	110	700	<110U	<110U	<110U	-	-	-	-	-	-	-	-
	1,2-dichloroethane	µg/L	58	500	<58U	<58U	<58U	-	-	-	-	-	-	-	-
	Methyl Ethyl Ketone	µg/L	120	200000	<120U	<120U	<120U	-	-	-	-	-	-	-	-
	Benzene	µg/L	79	500	<79U	<79U	<79U	-	-	-	-	-	-	-	-
	Carbon tetrachloride	µg/L	130	500	<130U	<130U	<130U	-	-	-	-	-	-	-	-
	Chlorobenzene	µg/L	63	100000	<63U	<63U	<63U	-	-	-	-	-	-	-	-
	Chloroform	µg/L	85	6000	<85U	<85U	<85U	-	-	-	-	-	-	-	-
	Trichloroethene	µg/L	60	500	<60U	<60U	<60U	-	-	-	-	-	-	-	-
	Tetrachloroethene	µg/L	80	700	<80U	<80U	<80U	-	-	-	-	-	-	-	-
	Vinyl chloride	µg/L	150	200	<150U	<150U	<150U	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/L	0.041	5	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U
	Barium	mg/L	2	100	0.16J	0.34J	1.2J	0.29J	1J	0.63J	1.9J	0.46J	0.86J	0.82J	0.27J
	Cadmium	mg/L	0.0016	1	0.27J,B	0.24J,B	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U
	Chromium (III+VI)	mg/L	0.0078	5	0.019J	0.012J	<0.008U	<0.008UJ	<0.008U	<0.008U	0.012J	0.13J	1.3J	0.096J	0.12J
	Lead	mg/L	0.029	5	<0.029U	<0.029U	<0.029U	0.052J	7.5	0.33J	0.066J	<0.029U	<0.029U	<0.029U	<0.029U
	Selenium	mg/L	0.036	1	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U
	Silver	mg/L	0.0085	5	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009UJ	<0.009U	<0.009U
	Mercury	mg/L	0.000065	0.2	<0U,^	<0U,^	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U	<0U

Notes:
J - estimated value
U - non-detect
µg/L - micrograms per liter
mg/L - milligrams per liter
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light

TABLE 7A
Waste Characterization Results - TCLP

Former Sperry Remington - North Portion
Elmira, New York

				Sample Location	SSHS-B2945	SSHS-B2946	SSHS-B2947	SSHS-B2948	SSHS-B2949	SSHS-B2950	SSHS-B2951
				Sample Depth (ft bgs)	8-10	4-6	4-6	6-8	6-8	8-10	8-10
				Sampled Date	11/6/2019	11/6/2019	11/5/2019	11/6/2019	11/7/2019	11/5/2019	11/5/2019
				RCRA Toxicity Characteristics							
Method_Name	**ChemName**	**Units**	**EQL**								
Pesticides and Herbicides	gamma-Chlordane	mg/L	0.0029		-	-	-	-	-	-	-
	Endrin	µg/L	0.091	20	-	-	-	-	-	-	-
	g-BHC (Lindane)	µg/L	0.12	400	-	-	-	-	-	-	-
	Heptachlor	µg/L	0.18	8	-	-	-	-	-	-	-
	Heptachlor epoxide	µg/L	0.14		-	-	-	-	-	-	-
	Methoxychlor	µg/L	0.31	10000	-	-	-	-	-	-	-
	Toxaphene	mg/L	0.02	0.5	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/L	0.0011	1	-	-	-	-	-	-	-
	Hedonal	mg/L	0.0045	10	-	-	-	-	-	-	-
SVOCs	1,4-dichlorobenzene	µg/L	4.5	7500	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	µg/L	7.9	400000	-	-	-	-	-	-	-
	2,4,6-trichlorophenol	µg/L	9.5	2000	-	-	-	-	-	-	-
	2,4-Dinitrotoluene	µg/L	7.9	30130	-	-	-	-	-	-	-
	2-methylphenol	µg/L	4	4200000	-	-	-	-	-	-	-
	4-methylphenol	mg/L	0.0079	4200	-	-	-	-	-	-	-
	Hexachlorobenzene	µg/L	5.5	30130	-	-	-	-	-	-	-
	Hexachlorobutadiene	µg/L	8.4	500	-	-	-	-	-	-	-
	Hexachloroethane	µg/L	4	3000	-	-	-	-	-	-	-
	Nitrobenzene	µg/L	12	2000	-	-	-	-	-	-	-
	Pentachlorophenol	µg/L	7.5	100000	-	-	-	-	-	-	-
	Pyridine	µg/L	8.2	35000	-	-	-	-	-	-	-
VOCs	1,1-dichloroethene	µg/L	110	700	-	-	-	-	-	-	-
	1,2-dichloroethane	µg/L	58	500	-	-	-	-	-	-	-
	Methyl Ethyl Ketone	µg/L	120	200000	-	-	-	-	-	-	-
	Benzene	µg/L	79	500	-	-	-	-	-	-	-
	Carbon tetrachloride	µg/L	130	500	-	-	-	-	-	-	-
	Chlorobenzene	µg/L	63	100000	-	-	-	-	-	-	-
	Chloroform	µg/L	85	6000	-	-	-	-	-	-	-
	Trichloroethene	µg/L	60	500	-	-	-	-	-	-	-
	Tetrachloroethene	µg/L	80	700	-	-	-	-	-	-	-
	Vinyl chloride	µg/L	150	200	-	-	-	-	-	-	-
Metals	Arsenic	mg/L	0.041	5	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U	<0.041U
	Barium	mg/L	2	100	0.84J	0.67J	0.75J	0.21J	0.62J	0.58J	0.36J
	Cadmium	mg/L	0.0016	1	<0.003U	0.004J	<0.003U	<0.003U	<0.003U	<0.003U	<0.003U
	Chromium (III+VI)	mg/L	0.0078	5	0.17J	0.008J	0.008J	0.011J	<0.008U	0.027J	0.012J
	Lead	mg/L	0.029	5	<0.029U	0.23J	<0.029U	0.2J	<0.029U	0.032J	<0.029U
	Selenium	mg/L	0.036	1	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U	<0.036U
	Silver	mg/L	0.0085	5	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U	<0.009U
	Mercury	mg/L	0.000065	0.2	<0U	<0U	<0U	0J	0	<0U	<0U

Notes:
J - estimated value
U - non-detect
µg/L - micrograms per liter
mg/L - milligrams per liter
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light

TABLE 7B
Waste Characterization Results - Total Constituents

Former Sperry Remington - North Portion
Elmira, New York

					Sample Location	SSHS-B2621	SSHS-B2625	SSHS-B2634	SSHS-B2637	SSHS-B2637	SSHS-B2649	SSHS-B2660	SSHS-B2661	SSHS-B2672	SSHS-B2673	SSHS-B2675	SSHS-B2679	SSHS-B2679	SSHS-B2679	SSHS-B2679
					Sample Depth	2-4	2-4	6-8	4-6	8-10	2-4	2-4	4-6	2-4	2-4	4-6	10-12	14-16	4-6	8-10
					Sample Date	5/15/2019	5/16/2019	4/24/2019	4/24/2019	4/24/2019	5/17/2019	4/25/2019	4/25/2019	5/19/2019	5/18/2019	5/17/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019
				Metals 20x TCLP Screening (Lead = 1000 ppm)	NYS Hazardous Material															
Method_Name	**ChemName**	**Units**	**EQL**																	
Polychlorinated Biphenyls	Total PCBs	mg/kg			50	23.67	5.635	20.78	121.8	37.58	35.69	0.6586	15.77	26.33	255.5	55.04	119.9	28.83	489.9	110.3
	Arochlor 1016	mg/kg	0.0057			<0.031U	<0.0061U	<0.06U	<0.6U	<0.12U	<0.12U	<0.0057U	<0.032U	<0.061U	<0.64U	<0.31U	<0.29U	<0.058U	<1.2U	<0.61U
	Arochlor 1221	mg/kg	0.0062			<0.034U	<0.0067U	<0.066U	<0.65U	<0.13U	<0.13U	<0.0062U	<0.034U	<0.067U	<0.69U	<0.33U	<0.31U	<0.064U	<1.3U	<0.66U
	Arochlor 1232	mg/kg	0.0042			<0.023U	<0.0046U	<0.045U	<0.45U	<0.086U	<0.092U	<0.0042U	<0.024U	<0.046U	<0.48U	<0.23U	<0.22U	<0.044U	<0.88U	<0.46U
	Arochlor 1242	mg/kg	0.0026			<0.014U	<0.0028U	<0.027U	<0.27U	<0.052U	<0.055U	<0.0026U	<0.014U	<0.028U	<0.29U	<0.14U	<0.13U	<0.026U	<0.53U	<0.27U
	Arochlor 1248	mg/kg	0.017			15J	3.5	15J	88J	27J	26J	0.45J	11J	21J	200J	41J	87J	21J	360J	80J
	Arochlor 1254	mg/kg	0.0058			5.8J	1.6	4.7J	28J	8.4J	8.1J	0.15J	3.9J	4.5J	43J	12J	28J	6.7J	110J	25J
	Arochlor 1260	mg/kg	0.0051			2.8J	0.52	0.94J	4.4J	1.9J	1.3J	0.045J	0.79J	0.68J	11J	1.3J	4.2J	0.99J	17J	3.8J
	Arochlor 1268	mg/kg	0.0023			<0.013U	<0.0025U	<0.025U	<0.25U	<0.048U	<0.051U	<0.0023U	<0.013U	<0.025U	<0.26U	<0.13U	<0.12U	<0.024U	<0.49U	<0.25U
	Arochlor 1262	mg/kg	0.0061			<0.034U	<0.0066U	<0.065U	<0.65U	<0.12U	<0.13U	<0.0061U	<0.034U	<0.066U	<0.69U	<0.33U	<0.31U	<0.063U	<1.3U	<0.66U
Miscellaneous	Ignitability	°F				>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140
	Cyanide Total	mg/kg	0.28			0.64	3.5	3.8	10J-	5.7	4.7	1.3	2.4	1.6	12	1.6	2.6	1.4	3.1	2.6
	Sulphide	mg/kg	12			<12UJ	12J	34	31J	27J	17J	28J	29J	16J	42	14J	24J	25J	26J	22J
	pH (Lab)	pH Units	0.1			7.9J	10.8HF	8.2J	8.2J	8.3J	11.5J	8.1J	8.3J	8J	8.2J	8.2J	8.3J	8.3J	8.3J	8.2J
Metals	Aluminum	mg/kg	22			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Antimony	mg/kg	0.37			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arsenic	mg/kg	1.1	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Barium	mg/kg	22	2000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Beryllium	mg/kg	0.43			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.54	20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Calcium	mg/kg	540			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	0.54	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cobalt	mg/kg	5.4			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	2.7			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Iron	mg/kg	11			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lead	mg/kg	1.1	1000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Magnesium	mg/kg	540			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Manganese	mg/kg	1.6			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	4.3			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Potassium	mg/kg	540			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Selenium	mg/kg	0.58	20		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	0.11	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sodium	mg/kg	540			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thallium	mg/kg	0.35			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vanadium	mg/kg	5.4			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	2.2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.037	4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
J - estimated value
U - non-detect
mg/kg - milligrams per kilogram
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light gray.

TABLE 7B
Waste Characterization Results - Total Constituents

Former Sperry Remington - North Portion
Elmira, New York

					Sample Location	SSHS-B2682	SSHS-B2703	SSHS-B2724	SSHS-B2724	SSHS-B2724	SSHS-B2724	SSHS-B2763	SSHS-B2765A	SSHS-B2765A	SSHS-B2766
					Sample Depth	2-4	0.17-2	12-14	2-4	4-6	6-8	4-6	10-12	12-14	6-8
					Sample Date	4/25/2019	5/19/2019	4/24/2019	4/24/2019	4/24/2019	4/24/2019	4/26/2019	4/27/2019	4/27/2019	4/23/2019
				Metals 20x TCLP Screening (Lead = 1000 ppm)	NYS Hazardous Material										
Method_Name	**ChemName**	**Units**	**EQL**												
Polychlorinated Biphenyls	Total PCBs	mg/kg			50	3095	152	0.1664	5.904	15.33	18.49	0.1806	4.817	13.19	9.621
	Arochlor 1016	mg/kg	0.0057			<6.1U	<0.31U	<0.0058U	<0.0058U	<0.06U	<0.06U	<0.0062U	<0.006U	<0.03U	<0.03U
	Arochlor 1221	mg/kg	0.0062			<6.7U	<0.34U	<0.0063U	<0.0063U	<0.065U	<0.065U	<0.0068U	<0.0065U	<0.033U	<0.033U
	Arochlor 1232	mg/kg	0.0042			<4.6U	<0.23U	<0.0043U	<0.0043U	<0.045U	<0.045U	<0.0047U	<0.0045U	<0.023U	<0.022U
	Arochlor 1242	mg/kg	0.0026			<2.8U	<0.14U	<0.0026U	<0.0026U	<0.027U	<0.027U	<0.0028U	<0.0027U	<0.014U	<0.013U
	Arochlor 1248	mg/kg	0.017			2400J	120J	0.11J	3.8J	11J	13J	0.16	1.5	4.5	7.1J
	Arochlor 1254	mg/kg	0.0058			590J	24J	0.04J	1.8J	3.6J	4.6J	<0.0058U	3.3	8.6	2.1J
	Arochlor 1260	mg/kg	0.0051			90J	7.3J	<0.0051U	0.29J	0.59J	0.75J	<0.0055U	<0.0053U,F1	<0.026U	0.35J
	Arochlor 1268	mg/kg	0.0023			<2.5U	<0.13U	<0.0024U	<0.0024U	<0.025U	<0.025U	<0.0026U	<0.0025U	<0.013U	<0.012U
	Arochlor 1262	mg/kg	0.0061			<6.6U	<0.33U	<0.0063U	<0.0062U	<0.065U	<0.065U	<0.0068U	<0.0065U	<0.033U	<0.032U
Miscellaneous	Ignitability	°F				>140	>140	>140	>140	>140	>140	>140	>140	> 140	>140
	Cyanide Total	mg/kg	0.28			12	0.84	<0.28U	0.96J	1	2	<0.3U	1.5	1.4	3.4
	Sulphide	mg/kg	12			40	37J-	23J	21J	26J	25J	41	52	20J	24J
	pH (Lab)	pH Units	0.1			8.3J	10.8J	8.3J	8.3J	8.3J	8.4J	8J	11.4HF	11.1HF	8.3J
Metals	Aluminum	mg/kg	22			-	-	-	-	-	-	-	7100	7500	-
	Antimony	mg/kg	0.37			-	-	-	-	-	-	-	0.39J	<0.37U	-
	Arsenic	mg/kg	1.1	100		-	-	-	-	-	-	-	8.3	6.4	-
	Barium	mg/kg	22	2000		-	-	-	-	-	-	-	67	94	-
	Beryllium	mg/kg	0.43			-	-	-	-	-	-	-	0.36J	0.3J	-
	Cadmium	mg/kg	0.54	20		-	-	-	-	-	-	-	0.14J	0.49J	-
	Calcium	mg/kg	540			-	-	-	-	-	-	-	7200	50,000	-
	Chromium (III+VI)	mg/kg	0.54	100		-	-	-	-	-	-	-	8	11	-
	Cobalt	mg/kg	5.4			-	-	-	-	-	-	-	5.6J	5.3J	-
	Copper	mg/kg	2.7			-	-	-	-	-	-	-	29	35	-
	Iron	mg/kg	11			-	-	-	-	-	-	-	17,000	20,000	-
	Lead	mg/kg	1.1	1000		-	-	-	-	-	-	-	59	100	-
	Magnesium	mg/kg	540			-	-	-	-	-	-	-	2000	4800	-
	Manganese	mg/kg	1.6			-	-	-	-	-	-	-	490	680	-
	Nickel	mg/kg	4.3			-	-	-	-	-	-	-	16	26	-
	Potassium	mg/kg	540			-	-	-	-	-	-	-	740	640	-
	Selenium	mg/kg	0.58	20		-	-	-	-	-	-	-	<0.58U	0.92J	-
	Silver	mg/kg	0.11	100		-	-	-	-	-	-	-	<0.12U	<0.11U	-
	Sodium	mg/kg	540			-	-	-	-	-	-	-	90J	130J	-
	Thallium	mg/kg	0.35			-	-	-	-	-	-	-	<0.36U	<0.35U	-
	Vanadium	mg/kg	5.4			-	-	-	-	-	-	-	12	12	-
	Zinc	mg/kg	2.2			-	-	-	-	-	-	-	70	99	-
	Mercury	mg/kg	0.037	4		-	-	-	-	-	-	-	0.027J	0.1	-

Notes:
J - estimated value
U - non-detect
mg/kg - milligrams per kilogram
ft bgs - feet below groud surface
Chemical concentrations detected above screening criteria are presented in light gray.

TABLE 8
Step-Out and Step-Down Procedures

Former Sperry Remington Site - North Portion
Elmira, New York

Confirmation Sampling		Documentation Sampling
Sidewall sample results exceed IRM cleanup objective	Bottom sample results exceed IRM cleanup objective	Sidewall sample results exceed IRM cleanup objective
Extend excavation a maximum of thirty (30) feet and re-sample sidewall and bottom areas	Excavate area additional two (2) feet and re-sample sidewall and bottom areas.[3]	Document COPCs left in place for future removal

Notes

The feasibility of excavation below the water table will be evaluated based on lithology, transmissivity and field observations. If feasible, groundwater will be managed using water management methods presented in Section 3.4.

TABLE 9
Bottom Excavation Areas and Samples

Former Sperry Remington Site - North Portion
Elmira, New York

Figure Number	Label	Bottom Depth (ft bgs)	Bottom of Excavation Area[1] (SF)	Proposed Bottom Samples		
				Required Number of Samples	Existing Sample	Samples Needed
5	4-1	4	2,556	3	6	0
6	6-1	6	865	1	0	1
7	8-1	8	489	1	1	0
8	10-1	10	776	1	1	0
8	10-2	10	871	1	1	0
10	14-1	14	547	1	0	1
10	14-2	14	347	1	2	0

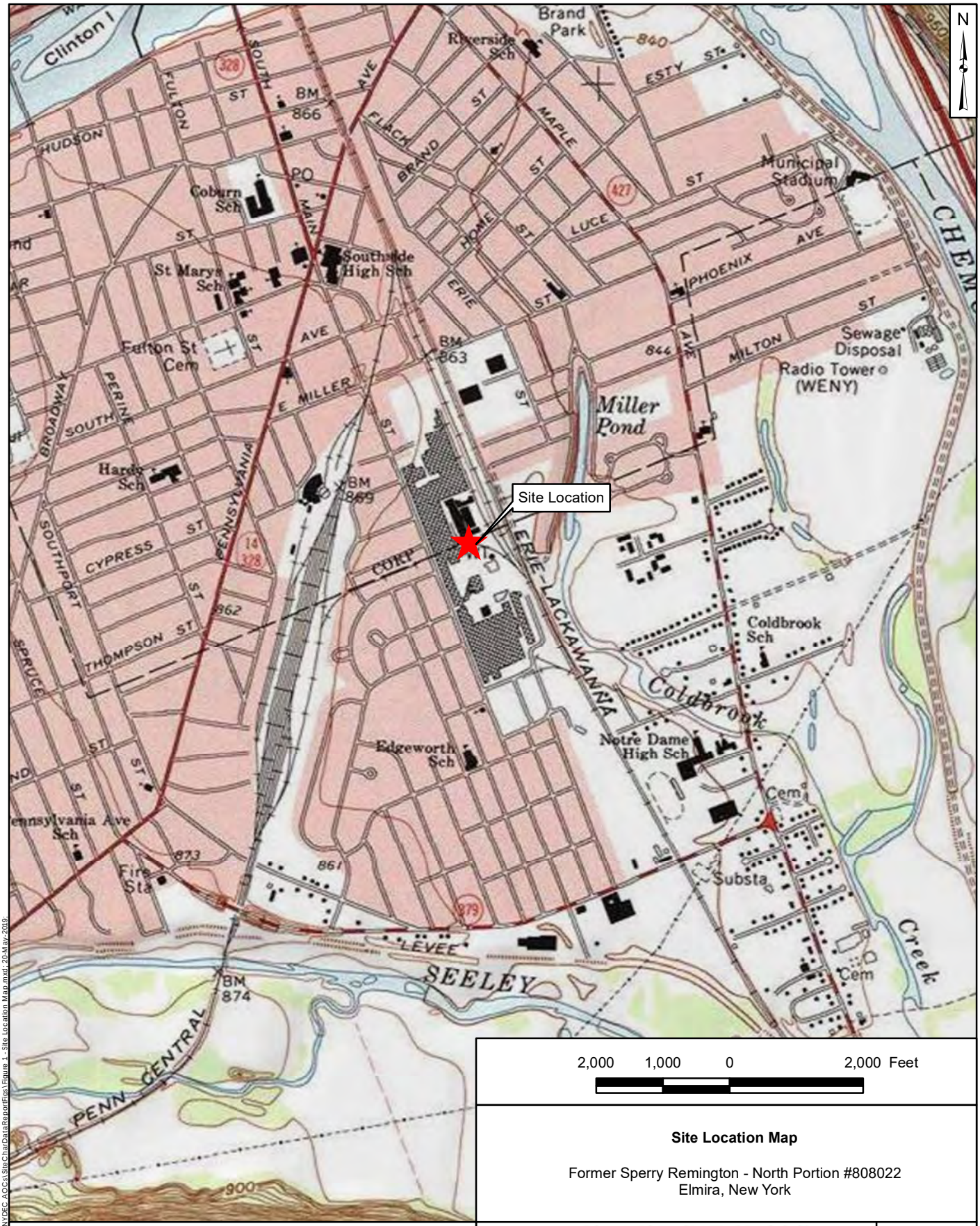
Notes:
SF - square feet
ft bgs - feet below ground surface
[1] Bottom of TSCA excavation of each two-foot interval in areas where the two-foot interval below is not presumed to be a TSCA excavation

TABLE 10
IRM Schedule

Former Sperry Remington - North Portion
Elmira, Chemung County, New York

Task Name	Duration	Start	Finish
IRM Strategy & Planning Meeting	0 days	Tue 11/19/2019	Tue 11/19/2019
IRM #4 Work Plan and Design	117 days		
Pre-Final (95%) Work Plan and Design Preparation	9 wks	Wed 12/18/2019	Fri 2/14/2020
Pre-Final (95%) Work Plan and Submittal	0 days	Fri 2/14/2020	Fri 2/14/2020
Agency and ECSD Review	6 wks	Fri 2/14/2020	Thu 3/26/2020
Agency Comments on Pre-Final (95%) Submittal	0 days	Thu 3/26/2020	Thu 3/26/2020
Final (100%) Work Plan and Design Preparation	5 wks	Fri 3/27/2020	Thu 4/30/2020
Final (100%) Work Plan and Design Submittal	0 days	Thu 4/30/2020	Thu 4/30/2020
Contractor Work Plan	2 wks	Fri 4/17/2020	Thu 4/30/2020
ECSD Comments	0 days	Thu 5/7/2020	Thu 5/7/2020
Response Schedule to ECSD Comments	0 days	Mon 5/11/2020	Mon 5/11/2020
Agency Comments on Final (100%) Submittal	0 days	Wed 5/13/2020	Wed 5/13/2020
Revised Final (100%) Work Plan and Design Preparation	4 days	Thu 5/14/2020	Tue 5/19/2020
Revised Final (100%) Work Plan and Design Submittal	0 days	Tue 5/19/2020	Tue 5/19/2020
Agency and ECSD Review	1 wk	Wed 5/20/2020	Thu 5/28/2020
Revised Contractor Work Plan Submittal	0 days	Thu 5/21/2020	Thu 5/21/2020
Temporary Rally Point Plan Submittal	0 days	Thu 5/21/2020	Thu 5/21/2020
Agency and ECSD Review	4 days	Fri 5/22/2020	Thu 5/28/2020
NYSDEC Approval and NTP	0 days	Thu 5/28/2020	Thu 5/28/2020
2020 IRM Contractor Selection Process	48 days	Wed 1/22/2020	Fri 3/27/2020
IRM #4 Construction	70 days	Mon 6/1/2020	Fri 9/4/2020
Mobilization	0 days	Mon 6/1/2020	Mon 6/1/2020
Existing Conditions Survey/Utility Location/ Grandstand Hazardous Material Survey	8 days	Mon 6/1/2020	Wed 6/10/2020
Install Temporary Fencing	8 days	Wed 6/3/2020	Fri 6/12/2020
Construct Temporary Facilities (haul roads, MSA)	14 days	Wed 6/10/2020	Mon 6/29/2020
Demolition Plan Submittal	0 days	Fri 6/12/2020	Fri 6/12/2020
Agency and ECSD Review of Demolition Plan	2 wks	Mon 6/15/2020	Fri 6/26/2020
Grandstand Demolition	1 mon	Mon 7/6/2020	Fri 7/31/2020
Excavation - West Side (Slope and Bench)	8 days	Tue 6/30/2020	Thu 7/9/2020
Install Soldier Piles	9 days	Tue 6/30/2020	Mon 7/13/2020
Excavation with SOE (Soldier Pile Walls)	18 days	Mon 7/13/2020	Thu 8/6/2020
Backfilling	2 wks	Fri 8/7/2020	Thu 8/20/2020
Site Restoration	2 wks	Fri 8/14/2020	Fri 8/28/2020
Demobilization	0 days	Fri 9/4/2020	Fri 9/4/2020
IRM #4 Construction Completion Report (CCR)			
CCR Preparation	3 mons	Fri 8/28/2020	Fri 11/20/2020
CCR Submittal	0 days	Fri 11/20/2020	Fri 11/20/2020

FIGURES



2,000 1,000 0 2,000 Feet

Site Location Map

Former Sperry Remington - North Portion #808022
Elmira, New York

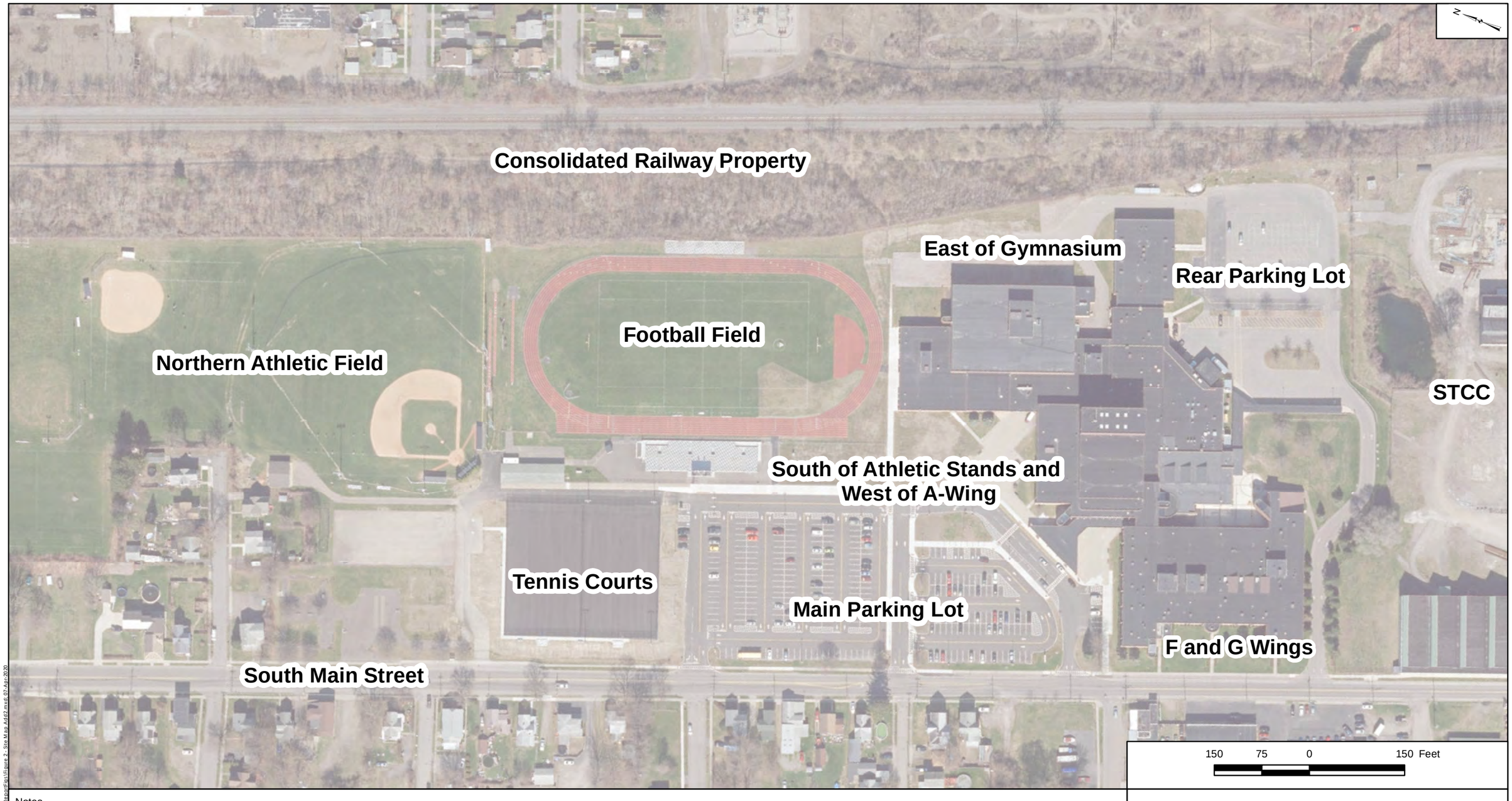
Notes:
Topographic map accessed via ArcGIS Online and provided by National Geographic Society and i-cubed on 20 May 2019. Elmira, New York Quadrangle (1971, photorevised 1976) is shown.

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 1

P:\GIS\Elmira - MW0832\Maps\NYDEC AOC's\SiteCharDataReportFigs\Figure 1 - Site Location Map.mxd; 20-May-2019;



Notes

Aerial imagery accessed via ArcGIS Online and provided by Microsoft on 07 April 2020.

Site Layout Map

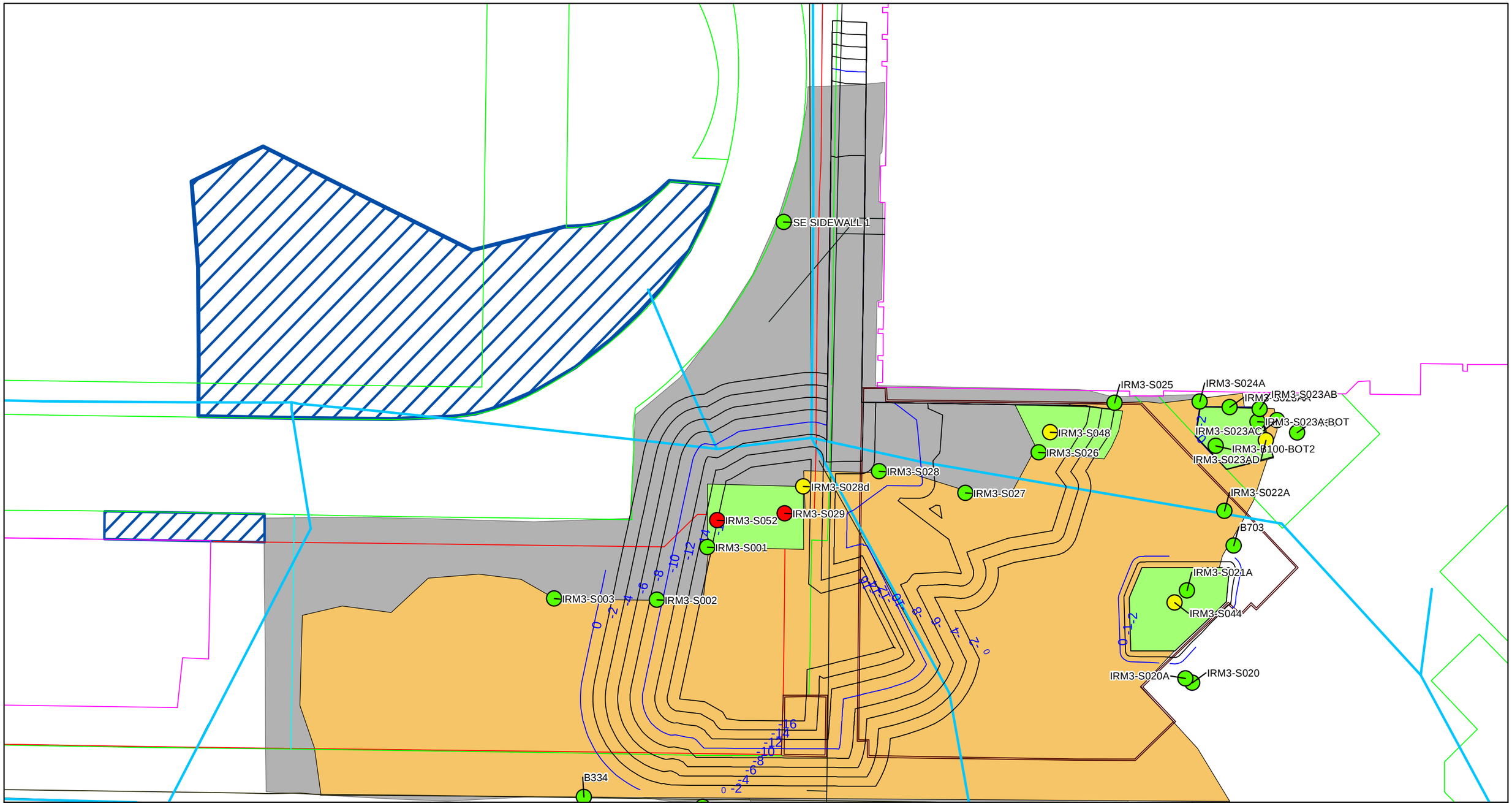
Former Sperry Remington - North Portion #808022
Elmira, New York

Beech and Bonaparte engineering p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure **2**

P:\GIS\Elmira - MN0832\Maps\NYDEC AOC\SiteChatDataReportFigs\Figure 2 - Site Map Add2.mxd; 07-Apr-2020



Legend

- Excavated to 1 ft
- Extent of IRM#1 Backfill
- Extent of IRM#3 Backfill

Excavation Classification (IRM 4)

- Areas with PCBs 10-50 mg/kg

Total PCB Concentration

- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg

- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
mg/kg - milligrams per kilogram
IRM - Interim remedial measure
"SSHS-" prefix removed from sample IDs in labels.
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 0-2 ft bgs

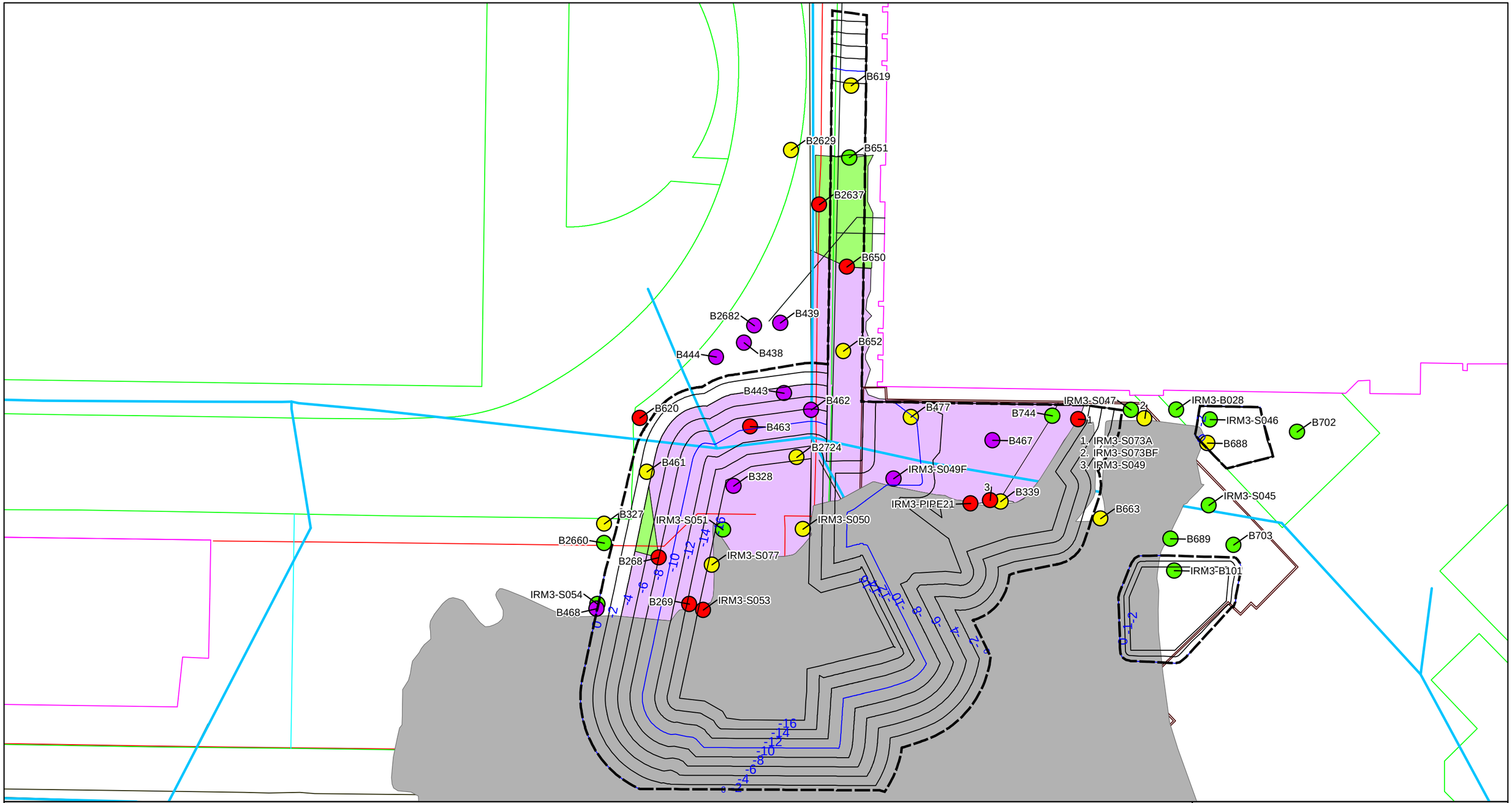
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 3

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 1 - PCBs_0-2.mxd 4/21/2020 4:56:32 PM



Legend

Total PCB Concentration

- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
IRM - Interim remedial measure
mg/kg - milligrams per kilogram
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 2-4 ft bgs

IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 4

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 2 - PCBs_2-4.mxd 2/10/2020 10:39:00 AM

B619
B2629
B651
B2637
B650
B2679
B8
B321
B438
B444
B652
B443
B620
B2661
B477
B467
IRM3-S073B
IRM3-PIPE13
B2724
B653
IRM3-B002
B654
B328
4-1
B622
IRM3-S073
B661
IRM3-S075
IRM3-S074
B327
IRM3-S076
IRM3-S203d
B655
IRM3-S099
IRM3-B003
B689
B2660
B268
B739
B2239
IRM3-S072
IRM3-S101
B468
IRM3-S078
IRM3-S079
B273
IRM3-S071
IRM3-S043
B2763
IRM3-S104

Legend

TSCA Bottoms

Total PCB Concentration
- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- **Excavation Contour (minor)**
- **Excavation Contour (major)**

Excavation Classification (IRM 4)
- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg
- Metals-Driven

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
IRM - Interim remedial measure
mg/kg - milligrams per kilogram
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 4-6 ft bgs

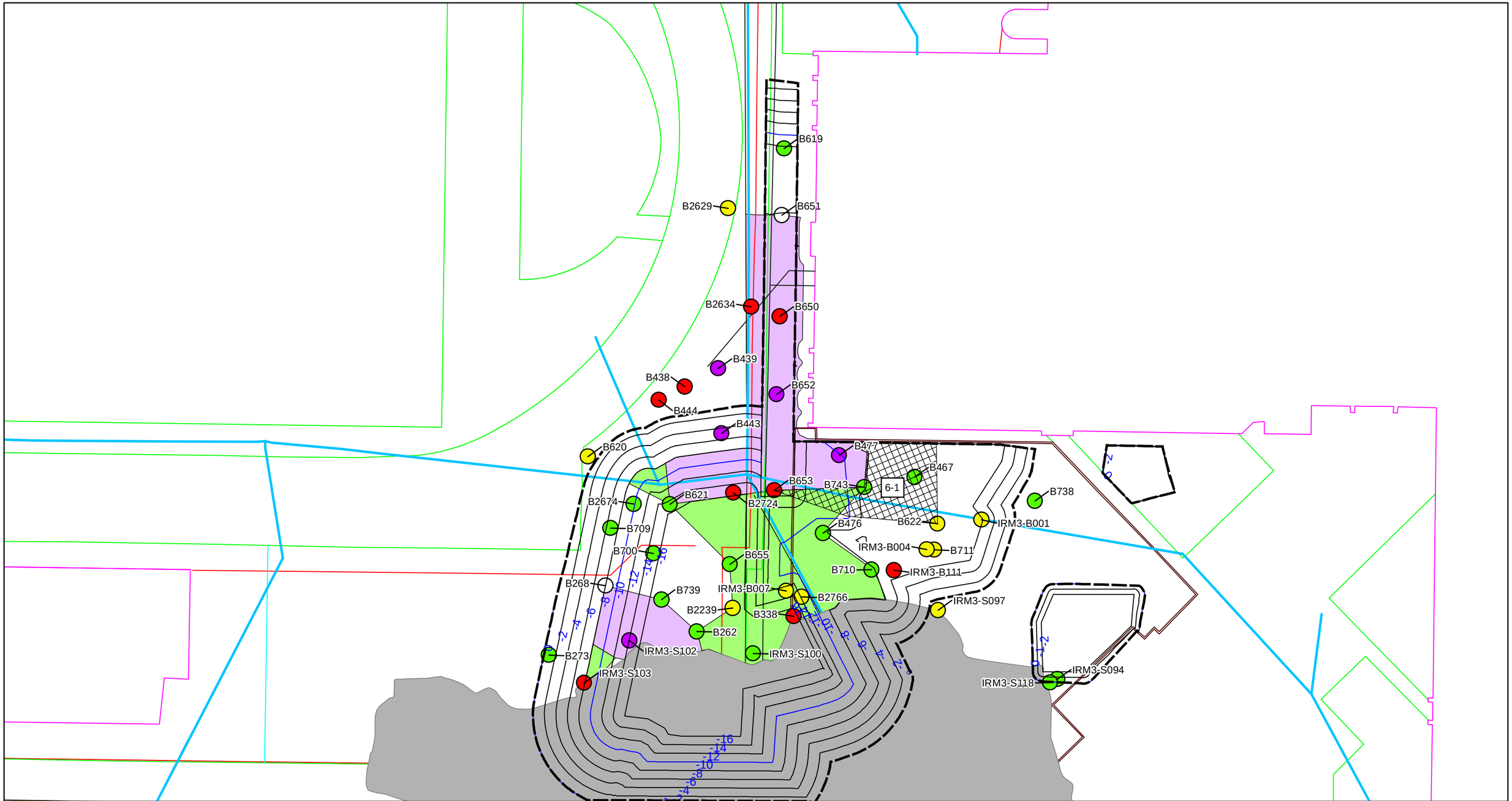
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 5

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 3 - PCBs_4-6.MS.mxd 4/27/2020 1:22:01 PM



Legend

TSCA Bottoms

Total PCB Concentration

- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
IRM - Interim remedial measure
mg/kg - milligrams per kilogram
Aerial imagery provided by ArcGIS Online.

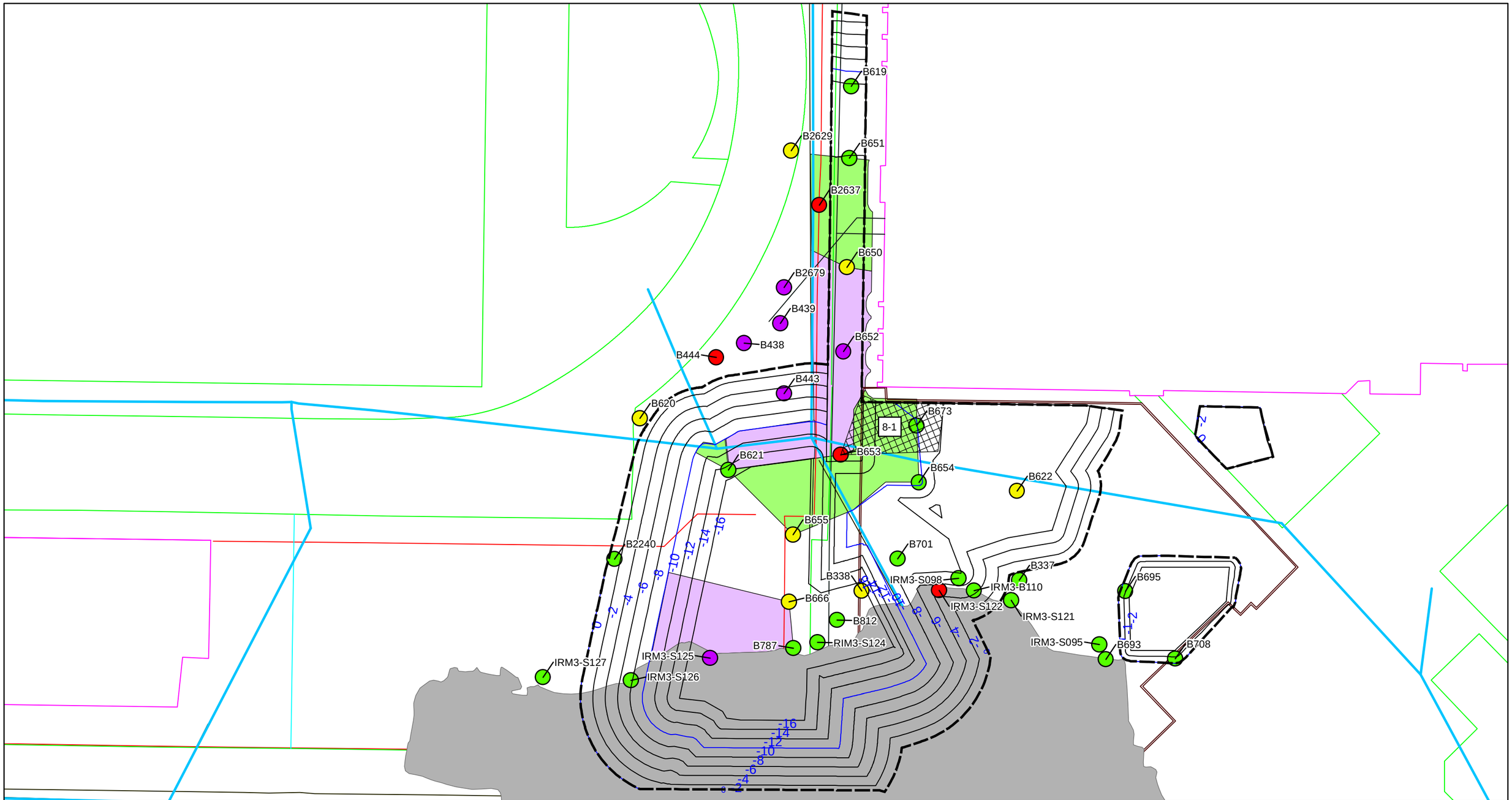
Proposed Excavation – 6-8 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 6

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 4 - PCBs_6-8.mxd 4/23/2020 11:28:16 AM



Legend

- TSCA Bottoms

Total PCB Concentration

- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
mg/kg - milligrams per kilogram
IRM - Interim remedial measure
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 8-10 ft bgs

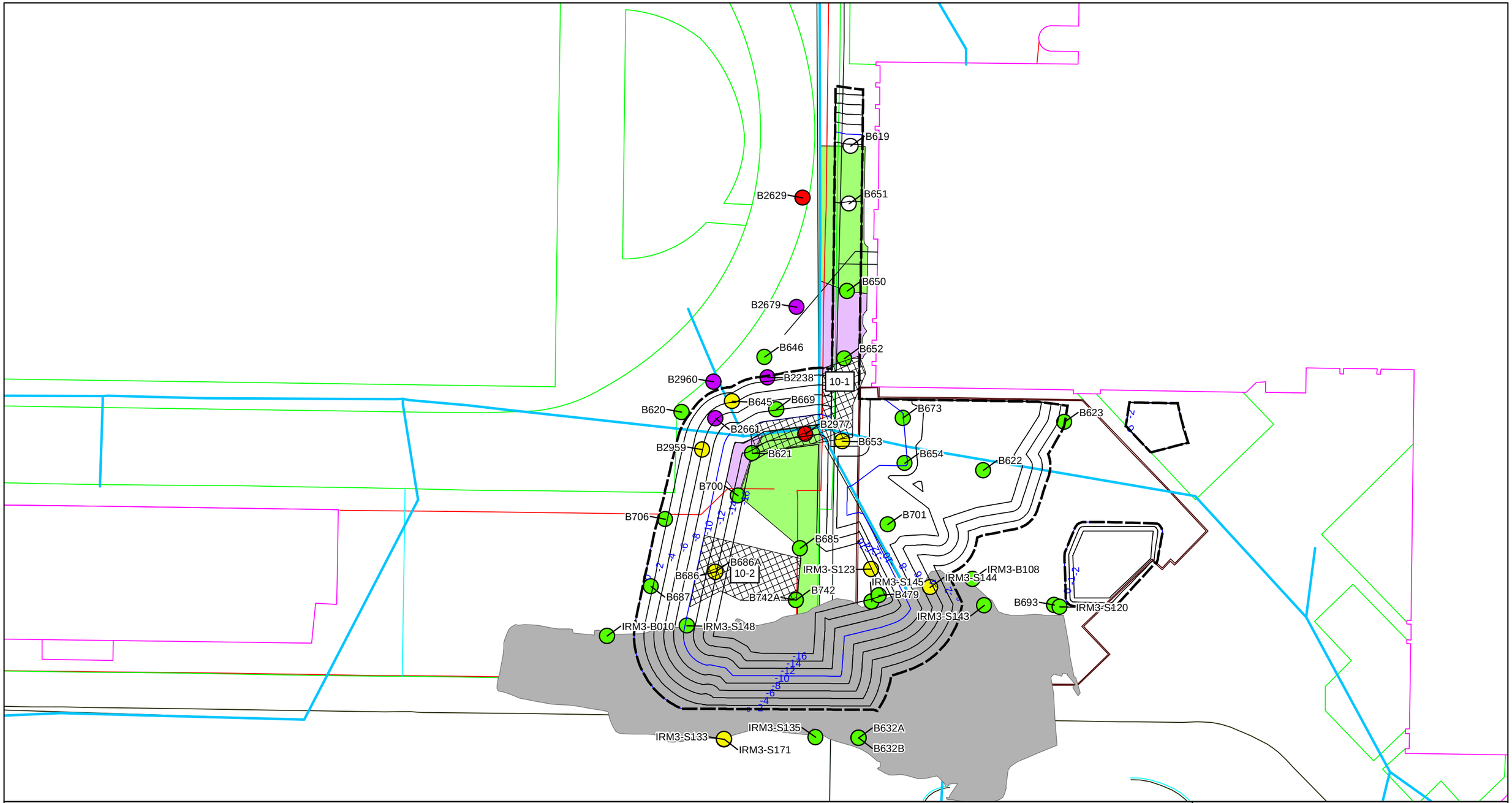
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 7

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 5 - PCBs_8-10.mxd 4/22/2020 1:30:19 PM



Legend

TSCA Bottoms

Total PCB Concentration
- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)
- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
mg/kg - milligrams per kilogram
IRM - Interim remedial measure
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 10-12 ft bgs

IRM #4

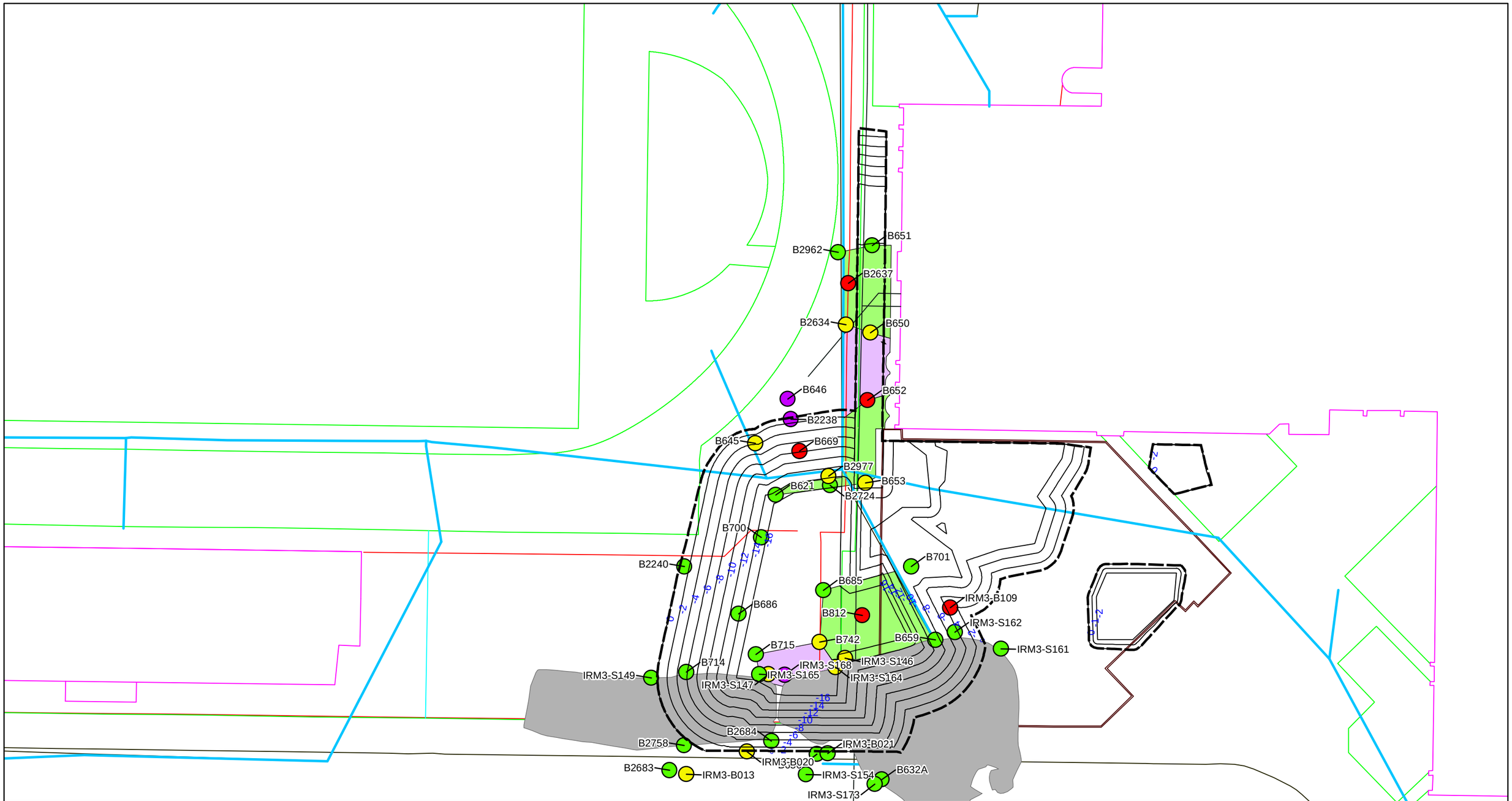
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 8

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 6 - PCBs_10-12.mxd 4/22/2020 1:56:02 PM



Legend

Total PCB Concentration

- Non-Detect
- 0 - 1 mg/kg
- 1 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
IRM - Interim remedial measure
mg/kg - milligrams per kilogram
Aerial imagery provided by ArcGIS Online.

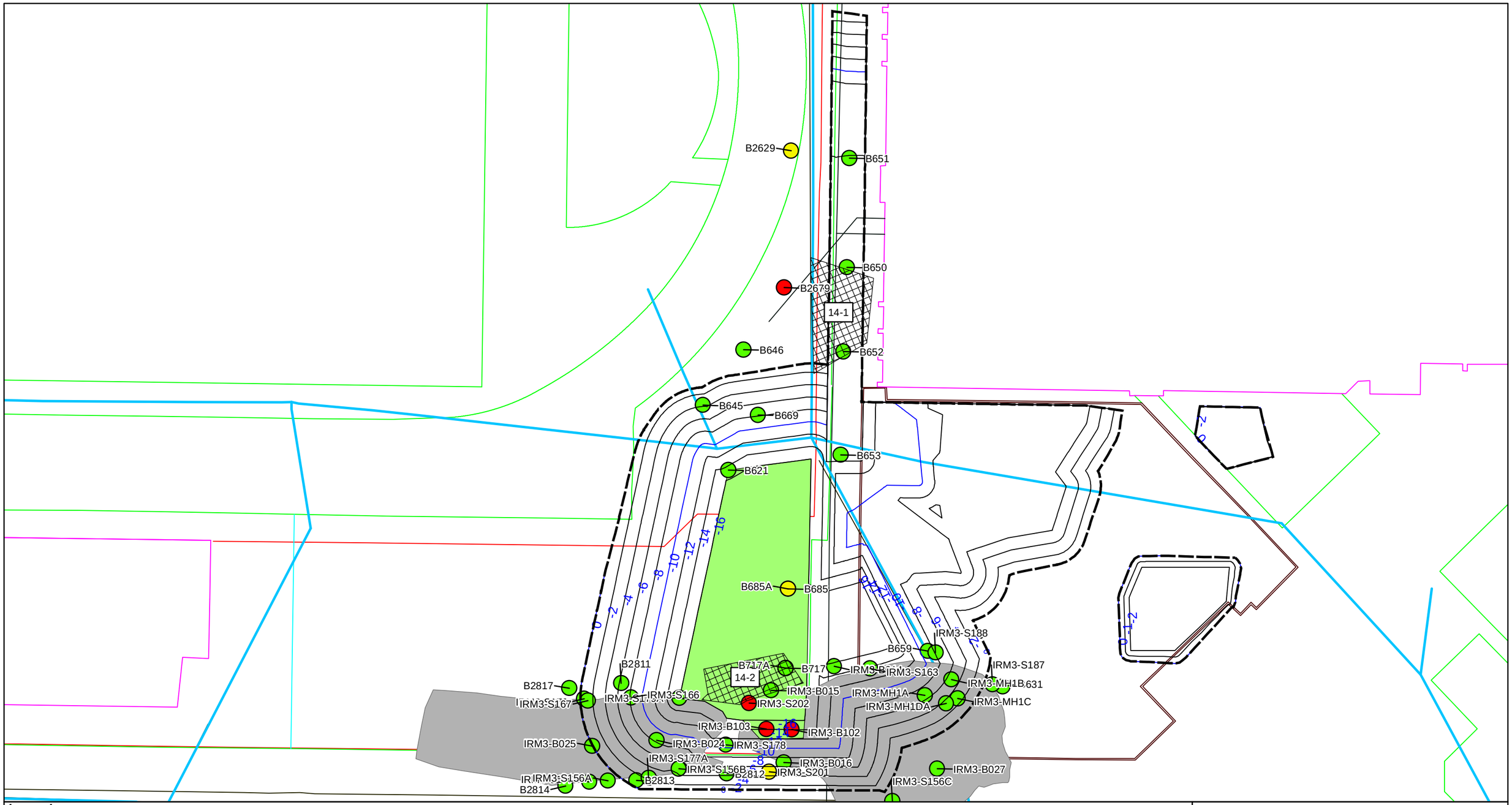
Proposed Excavation – 12-14 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 9

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 7 - PCBs_12-14.mxd 4/22/2020 1:56:41 PM



Legend

TSCA Bottoms

Total PCB Concentration

- Non-Detect
- 0 - 3.2 mg/kg
- 3.2 - 10 mg/kg
- 10 - 50 mg/kg
- >50 mg/kg

- Limits of Excavation
- Excavated
- **Excavation Contour (minor)**
- **Excavation Contour (major)**

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
PCBs - Polychlorinated biphenyls
IRM - Interim remedial measure
mg/kg - milligrams per kilogram
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Proposed Excavation – 14-16 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure 10

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 8 - PCBs_14-16.mxd 4/22/2020 1:45:28 PM

1. IRM3-S024A
2. IRM3-S023AB
3. IRM3-S023A-BOT

B2238
IRM3-S025
B2746
IRM3-S023AA
IRM3-S048
IRM3-B100-BOT2
IRM3-S023AC
IRM3-S023AD
IRM3-S026
IRM3-S028
IRM3-S028d
IRM3-S027
IRM3-S052
IRM3-S029
IRM3-S022A
IRM3-S001
IRM3-S003
IRM3-S002
B2750
IRM3-S021A
IRM3-S044
IRM3-S020A
IRM3-S020

Legend

Metals Exceedances
- Does Not Exceed SCOs
- Exceeds SCOs

- Limits of Excavation
- Site Boundary
- Excavation Contour (Minor)
- Excavation Contour (Major)

Excavation Classification (IRM 4)
- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Excavated to 1 ft
- Excavated
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
SCOs - Restricted Residential Soil Screening Criteria (6 NYCRR PART 375)
IRM - Interim remedial measure
"SSHS-" prefix removed from sample IDs in labels.
Aerial imagery provided by ArcGIS Online.

N
0 30 Feet

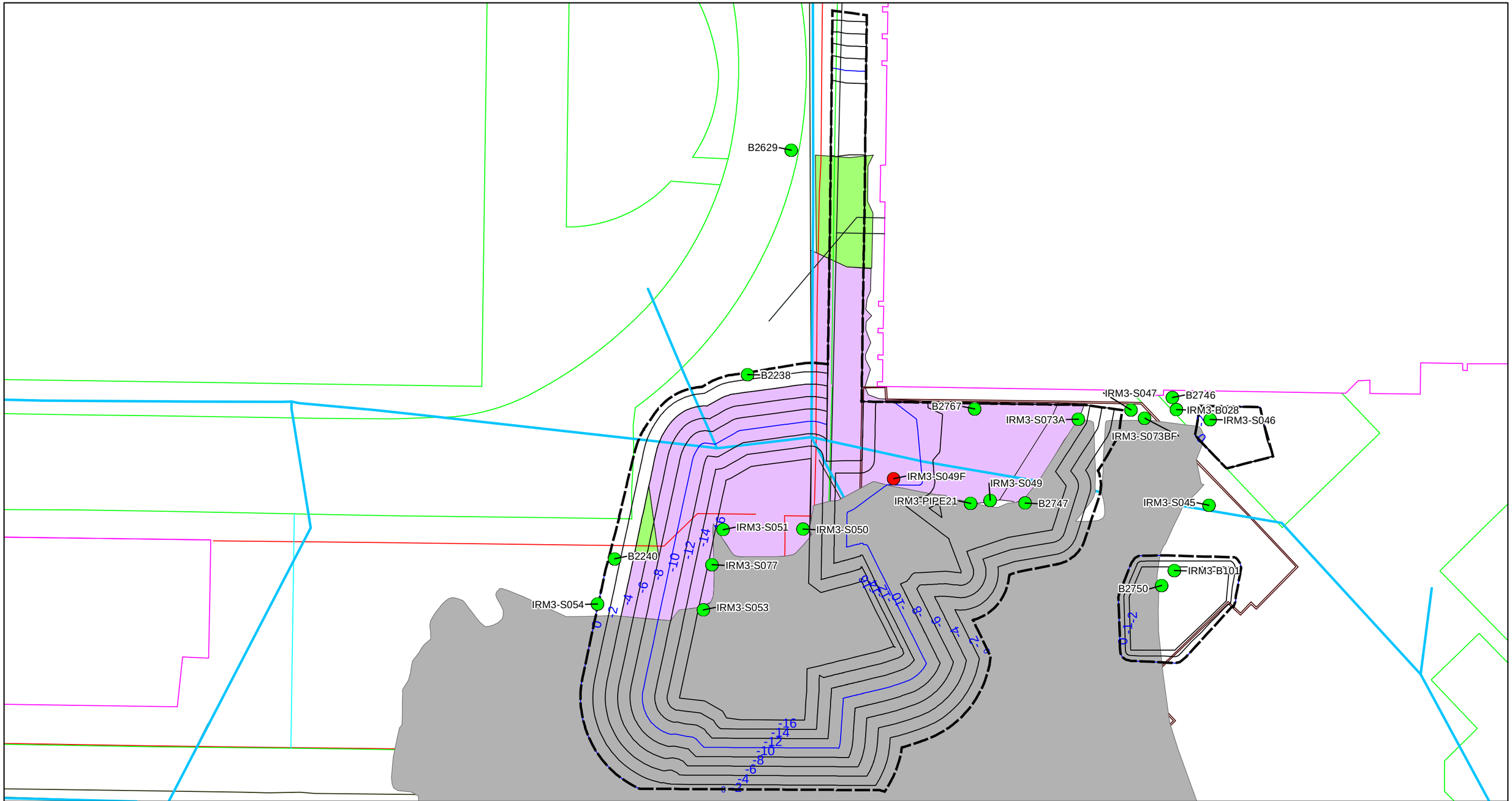
Extent of Metals in Soil – 0-2 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 11

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 11 - Metals_0-2.mxd 2/10/2020 10:30:11 AM



Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes

Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Extent of Metals in Soil – 2-4 ft bgs

IRM #4

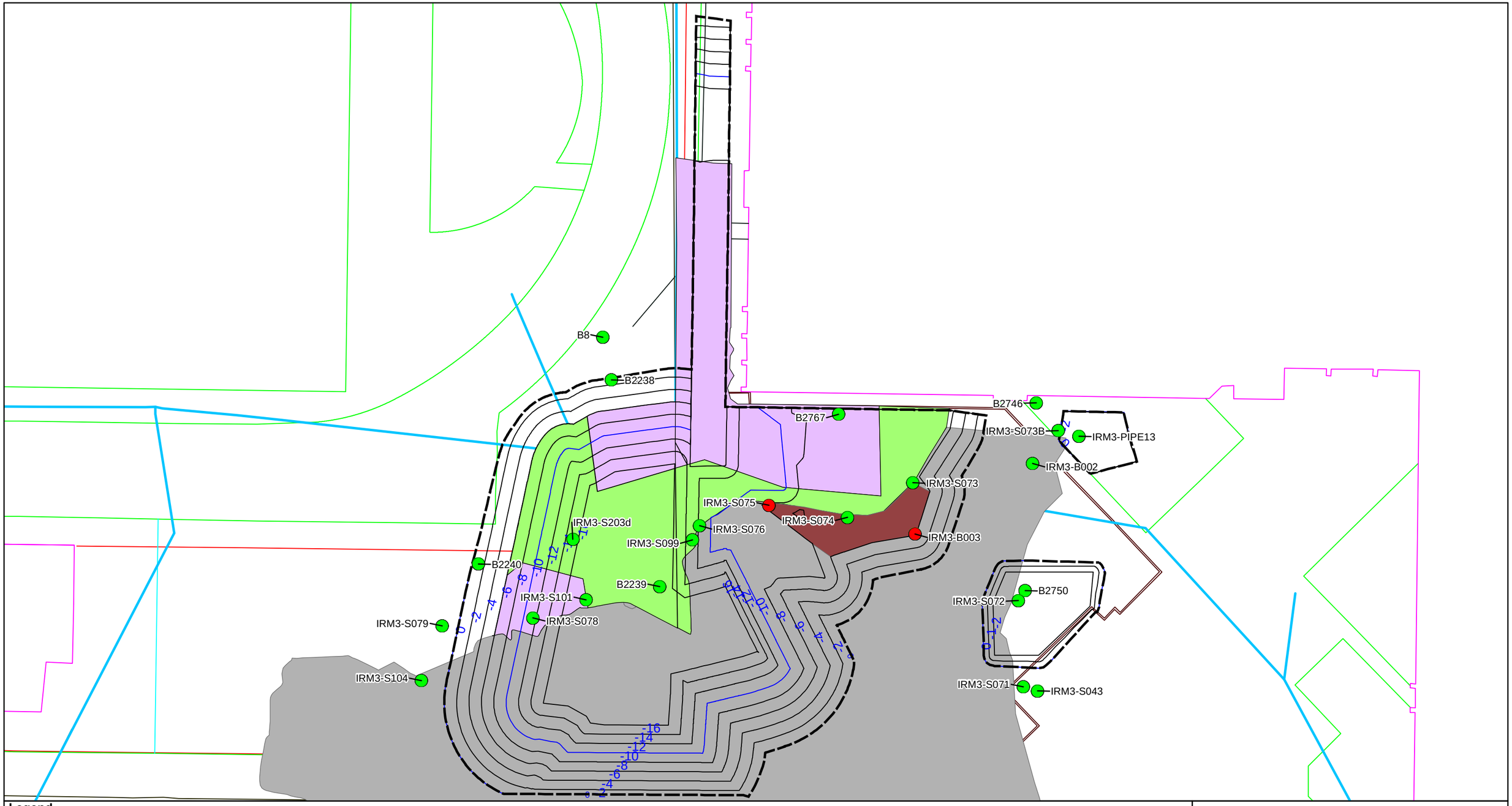
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 12

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 12 - Metals_2-4.mxd 2/10/2020 10:40:10 AM



Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg
- Metals-Driven

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes

Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
TCLP - Toxicity characteristic leaching protocol
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Extent of Metals in Soil – 4-6 ft bgs

IRM #4

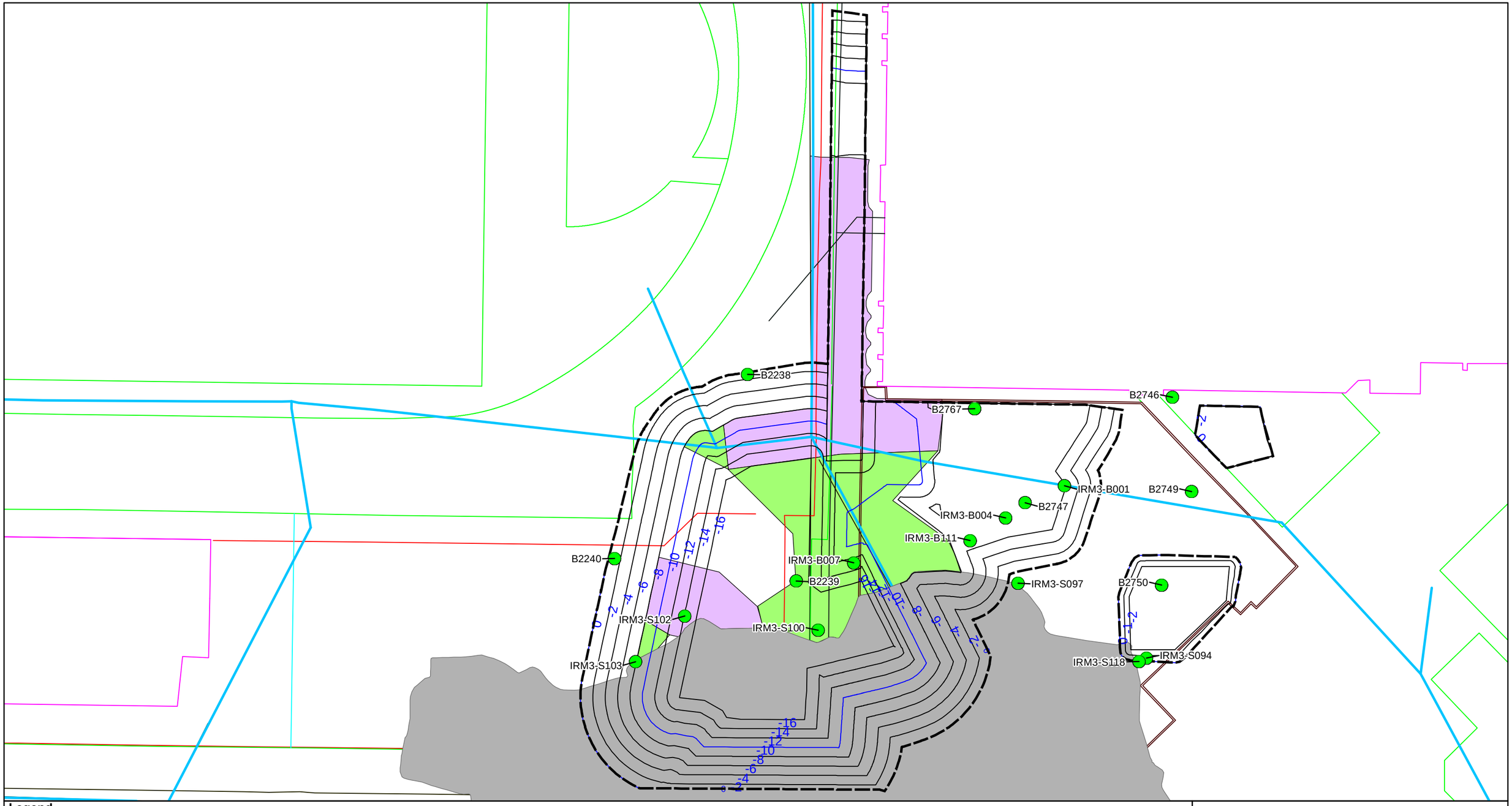
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 13

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 13 - Metals_4-6.mxd 2/10/2020 4:11:37 PM



Legend

Metals Exceedances
- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)
- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Aerial imagery provided by ArcGIS Online.

N
0 30 Feet

Extent of Metals in Soil – 6-8 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 14

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 14 - Metals_6-8.mxd 2/10/2020 10:48:10 AM

B2238
B2767
B2746
B2749
B2747
B2240
B2753
IRM3-S098
IRM3-B110
B2239
IRM3-S122
B2750
IRM3-S121
RIM3-S124
IRM3-S095
IRM3-S125
IRM3-S127
IRM3-S126

Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

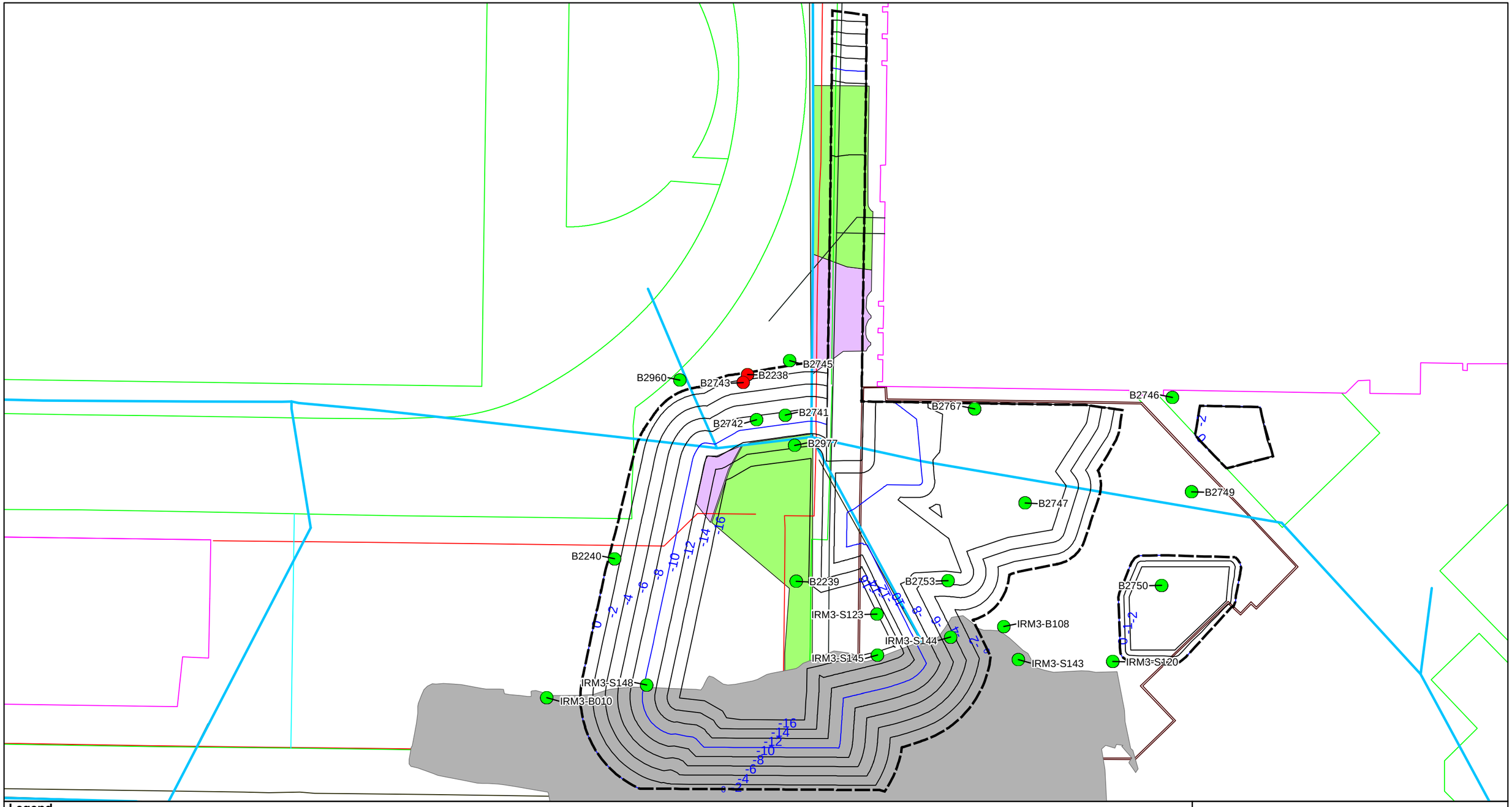
Extent of Metals in Soil – 8-10 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 15

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 14 - Metals_8-10.mxd 2/10/2020 10:51:00 AM



Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes

Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Extent of Metals in Soil – 10-12 ft bgs

IRM #4

Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 16

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 16 - Metals_10-12.mxd 2/10/2020 10:56:12 AM

B2238
B2767
B2746
B2977
B2749
B2747
B2240
B2239
B2753
B2750
IRM3-B109
IRM3-S162
IRM3-S161
IRM3-S146
IRM3-S147
B2748
IRM3-S149
IRM3-S165
1. IRM3-S164
2. IRM3-S168
IRM3-B020
IRM3-B021

Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Extent of Metals in Soil – 12-14 ft bgs
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 17

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 17 - Metals_12-14.mxd 2/10/2020 11:20:21 AM

IRM3-S188
IRM3-B014
IRM3-S166
IRM3-S202
IRM3-B015
IRM3-MH1B
IRM3-S187
IRM3-S179
IRM3-MH1A
IRM3-S167
IRM3-MH1C
IRM3-B103
IRM3-B102
IRM3-B025
IRM3-S177A
IRM3-S156B
IRM3-B016
IRM3-B027
IRM3-S177
IRM3-S156C
IRM3-S156A

1. IRM3-S163
2. IRM3-MH1DA
3. IRM3-S179A
4. IRM3-B024
5. IRM3-S178
6. IRM3-S201

Legend

Metals Exceedances

- Does Not Exceed Screening Criteria
- Exceeds Screening Criteria

- Limits of Excavation
- Excavated
- Excavation Contour (minor)
- Excavation Contour (major)

Excavation Classification (IRM 4)

- Areas with PCBs 1-10 mg/kg
- Areas with PCBs 10-50 mg/kg
- Areas with PCBs > 50 mg/kg

- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer

Notes
Only data within 15 feet of the Limits of Excavation are depicted
ft bgs - Feet below ground surface
Screening Criteria: 20x TCLP limits (200x for lead)
TCLP - Toxicity characteristic leaching protocol
IRM - Interim remedial measure
TCLP defined under 40 CFR § 261.24
Aerial imagery provided by ArcGIS Online.

N

0 30 Feet

Extent of Metals in Soil – 14-16 ft bgs

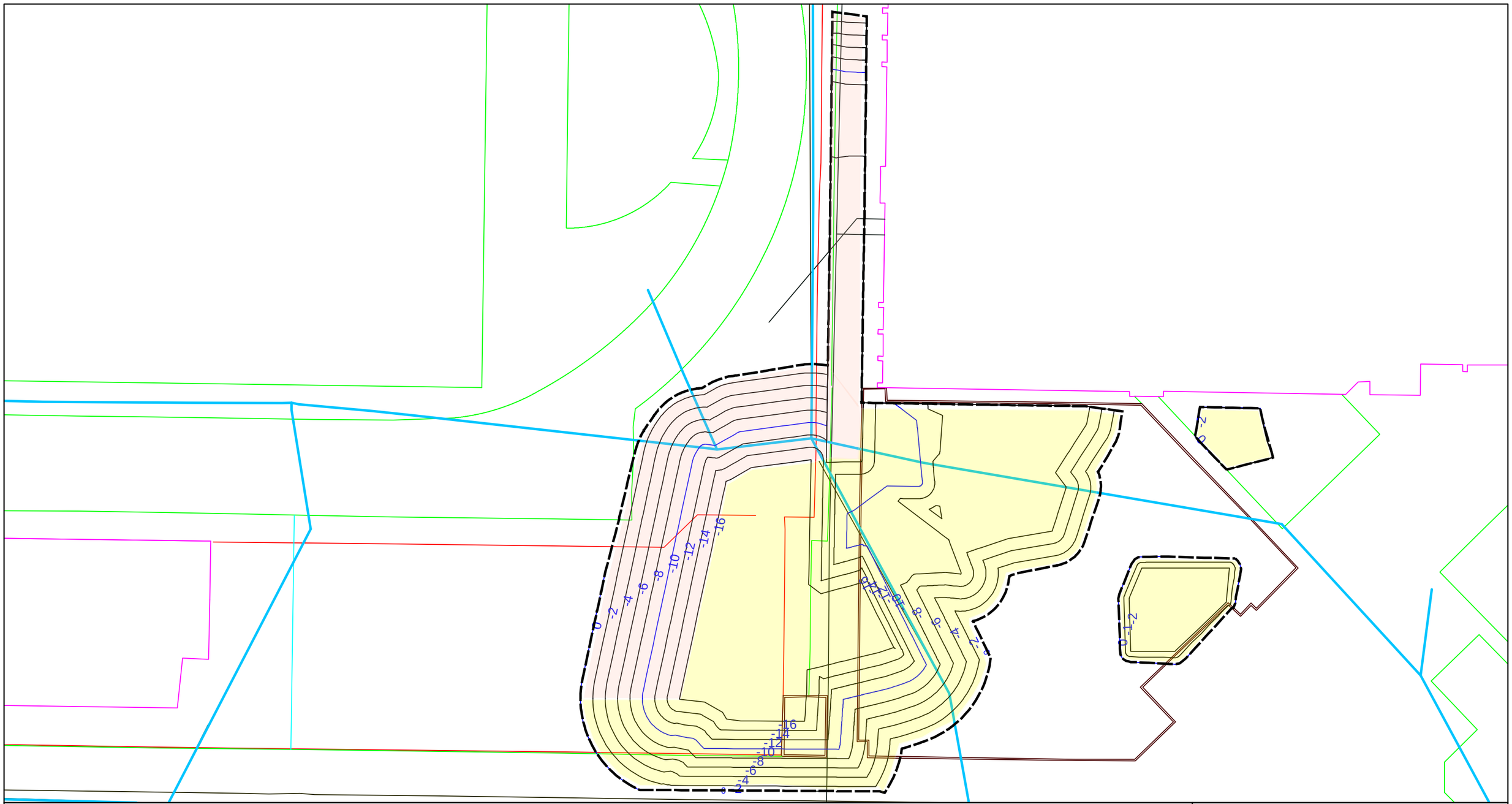
IRM #4
Former Sperry Remington - North Portion #808022
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 18

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 18 - Metals_14-16.mxd 2/10/2020 11:53:46 AM



Legend

- Limits of Excavation
- Excavation Contour (minor)
- Excavation Contour (major)
- Site Boundary
- Current EHS Storm Water Sewer (Post-1979)
- Former Combined Industrial Sewer (Pre-1979)
- Sanitary Sewer
- Confirmation Sampling Area
- Documentation Sampling Area

Notes

Documentation samples will be collected from the sides of the building as supports of excavation are installed.

N

0 30 Feet

Excavation Grading Plan

IRM #4

Former Sperry Remington - North Portion #808022

Elmira, New York

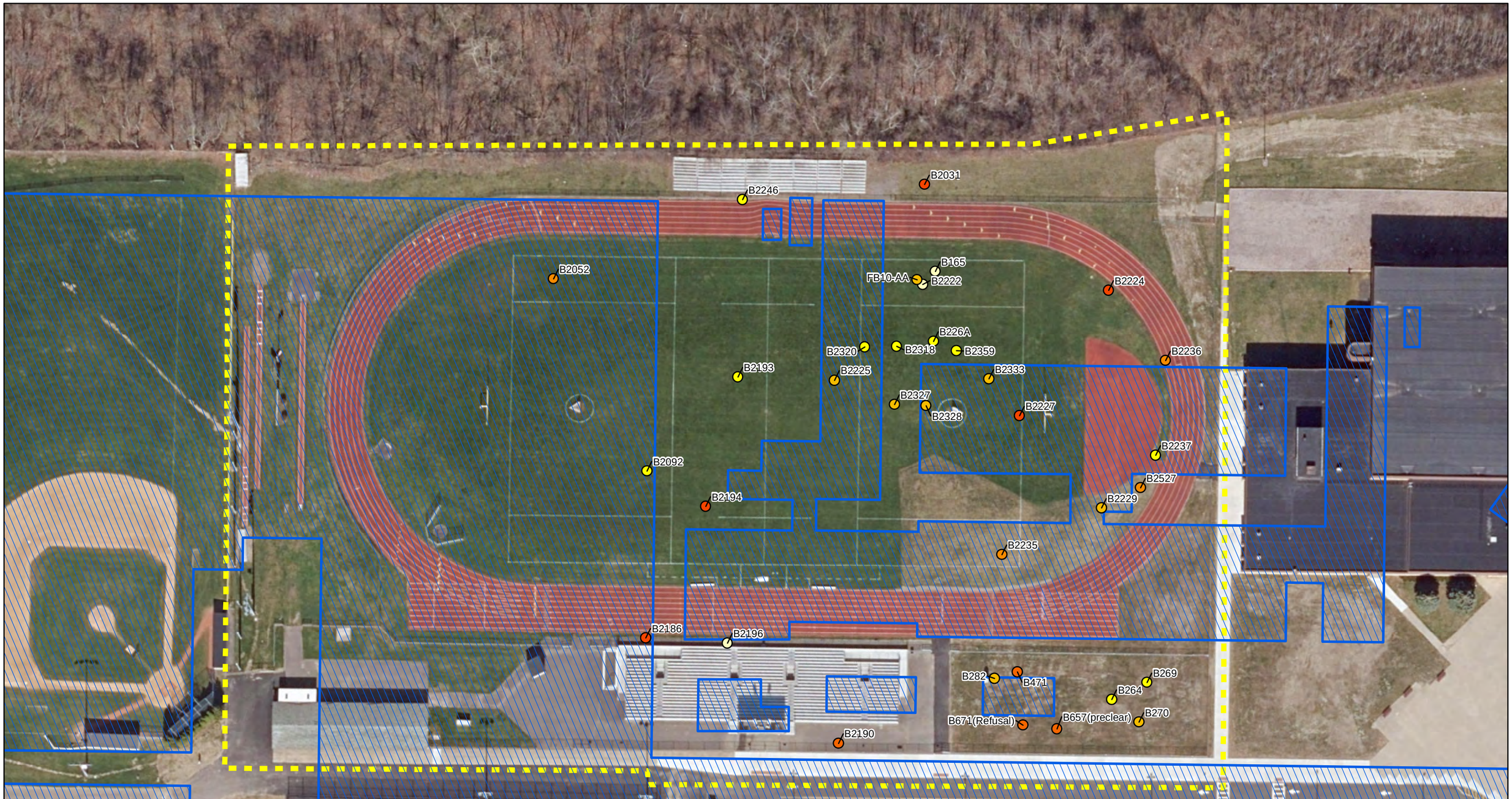
B&B Engineers & Geologists of new york, p.c.

an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure 19

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\IRM 4 figures\Figure 19 - Grading Plan.mxd 2/14/2020 10:53:24 AM



Legend

Boring Refusal Depth

- 2 ft bgs
- 4 ft bgs
- 6 ft bgs
- 8 ft bgs
- 10 ft bgs
- 12 ft bgs

- Football Field Complex Investigation Area
- Historical Structure

Notes
ft bgs - Feet below ground surface
"SSHS-" prefix removed from location IDs.
Aerial imagery provided by ArcGIS Online.

N

0 60 Feet

Boring Refusal and Historic Structures

Former Sperry Remington Site North Portion
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | January 2020

Figure 20

P:\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM_2018\FB_Field_2018\Figure 1 - Refusals 2018.mxd 1/14/2020 3:20:22 PM

SITE: See Inset Map

Legend

- Load Out for Off-Site Hazardous Waste Disposal
- Haul Route to/from MSA for Stockpiling
- Load Out for Off-Site Non-Hazardous Waste Disposal
- Site to Off-Site Disposal
- Material Staging Area (MSA)

Notes

The planned on-site journey management plan for the material which will be handled during the IRM has been discussed with the City of Elmira Traffic Engineering Department. Routes have been selected to avoid planned road construction in Elmira during the IRM, difficult traffic areas as well as to utilize routes with the most marked pedestrian crossings to ensure maximum safety. Truck traffic will not take place during student arrival/departure times. Left hand turns on to South Main Street will be controlled through a flagperson.

Aerial imagery and street map accessed via ArcGIS Online and provided by Microsoft on 13 February 2020.

0.25 0.125 0 0.25 Miles

Truck Haul Routes

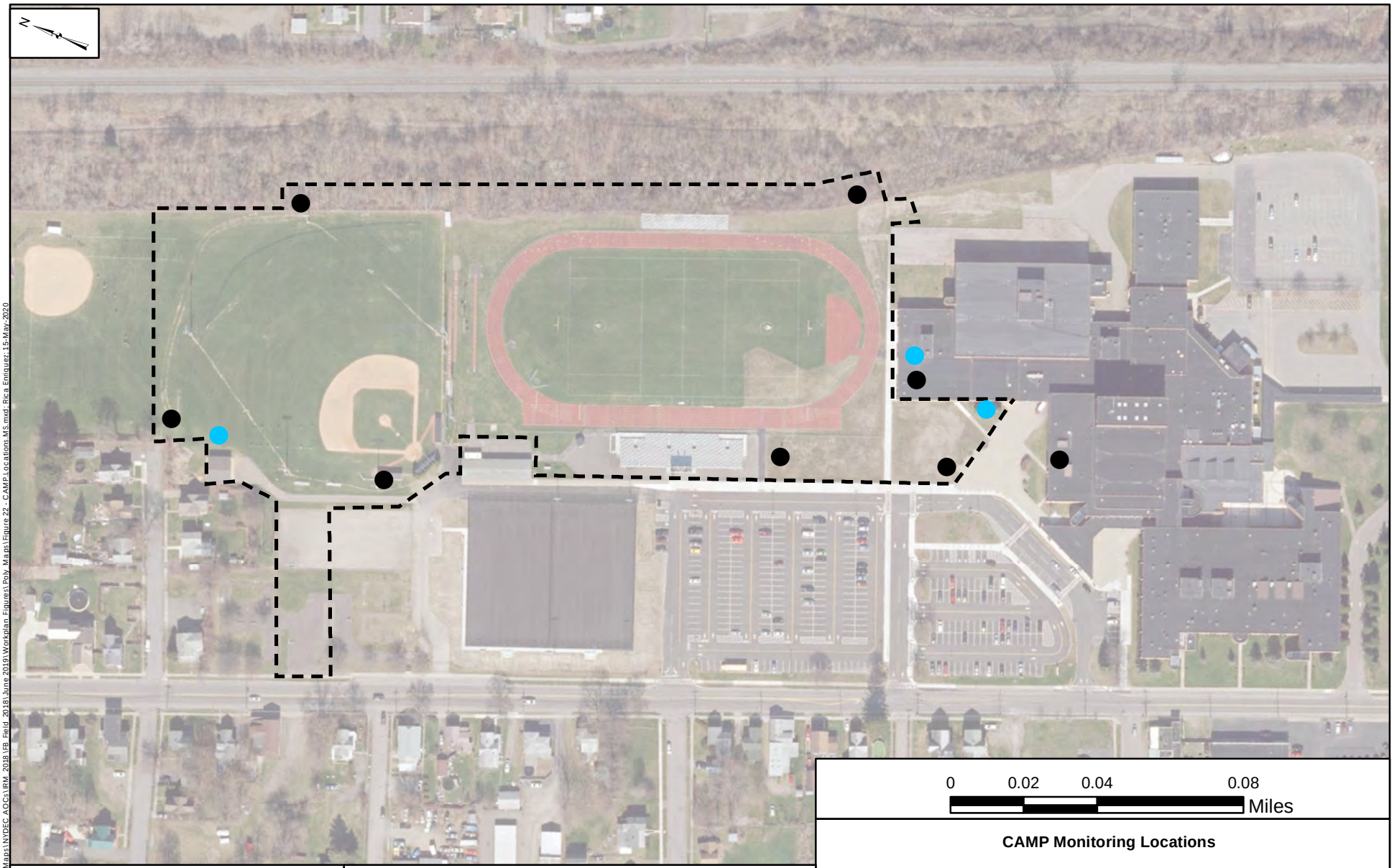
Former Sperry Remington - North Portion
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | February 2020

Figure **21**

P:\GIS\Elmira - MN0832\Maps\NYDEC AOC's\IRM 2018\FB Field 2018\June 2019\Workplan Figures\Poly Maps\Truck Route.mxd; Rica Enriquez; 13-Feb-2020



0 0.02 0.04 0.08 Miles

Legend

- TISCH Monitoring Locations
- CAMP Locations
- Limits of Disturbance/Temporary Fencing

Notes

CAMP monitoring locations are approximate and will be adjusted based on changes in wind direction, as necessary. At least one monitoring location will be upwind of the work area. Rooftop locations will remain in place.

Aerial imagery and street map accessed via ArcGIS Online and provided by Microsoft on 15 May 2020.

CAMP Monitoring Locations

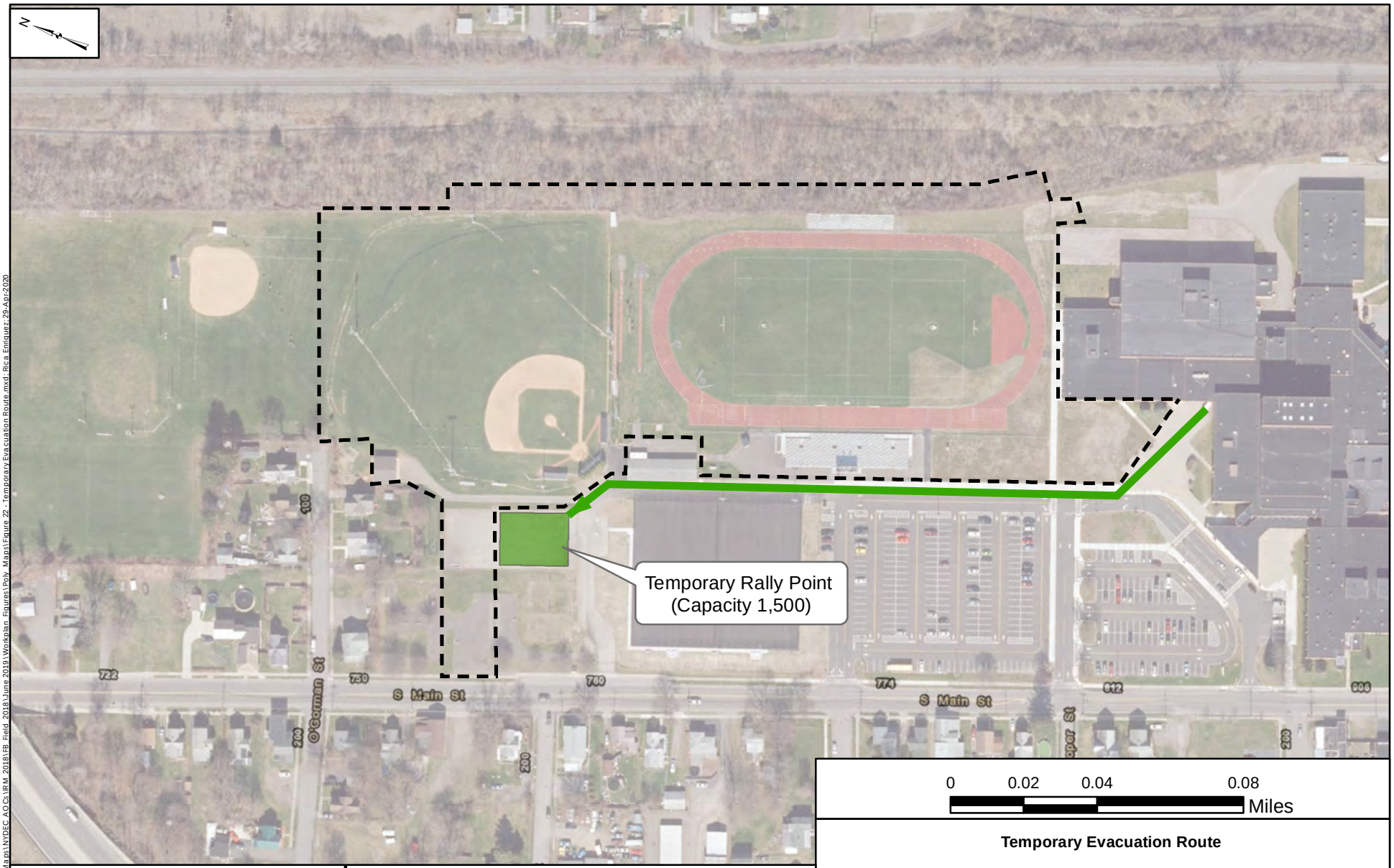
Former Sperry Remington - North Portion
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | May 2020

Figure **22**

\\minneapolis-01\DATA\GIS\Elmira - MN0832\Maps\NYDEC AOCs\FM_2018 VB_Field_2018\June 2019\Workplan Figures\Poly_Maps\Figure 22 - CAMP Locations MS.mxd; Rica Enriquez; 15-May-2020



0 0.02 0.04 0.08 Miles

Legend

- Temporary Evacuation Route
- Temporary Rally Point (Capacity 1,500)
- Limits of Disturbance/Temporary Fencing

Notes

The temporary rally point will consist of bleacher seating for 1,500 and temporary fencing.

Aerial imagery and street map accessed via ArcGIS Online and provided by Microsoft on 29 April 2020.

Temporary Evacuation Route

Former Sperry Remington - North Portion
Elmira, New York

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Columbia, Maryland | April 2020

Figure **23**

\\minneapolis-01\data\GIS\Elmira - MN0832\Maps\NYDEC AOCs\IRM 2018\FB_Field_2018\June 2019\Workplan_Figures\Poly_Maps\Figure 22 - Temporary Evacuation Route.mxd; Rica Enriquez; 29-Apr-2020

Appendix A
Construction Drawings

Appendix B
Construction Specifications

Appendix C
Support of Excavation Design Analysis

Appendix D
Stormwater Modeling

Appendix E
Quality Assurance Project Plan

Appendix F
Well Boring Logs and Production Well Flow Test Results

Appendix G
Soil/Dust Control and Monitoring Plan and NYSDOH Generic CAMP

Appendix H
ECSD Correspondence

Appendix I
Health and Safety Plan