



ENVIRONMENTAL MANAGEMENT PLAN

**Former Alcoa Eastalco Works – Initial Infrastructure Phase
Frederick, Maryland**

March 8, 2023

Submitted to:

**Maryland Department of the Environment
Land and Materials Administration**

1800 Washington Boulevard, Suite 625

Baltimore, Maryland 21230

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Prepared for:

Quantum Maryland, LLC

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Austin, Texas 78701

Attn: Ms. Sylvia Kang

Prepared by:

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GTA Project No: 31201536

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS



A Practicing Geoprofessional Business Association Member Firm

March 8, 2023

Quantum Maryland, LLC
500 E. 4th Street, Suite 333
Austin, Texas 78701

Attn: Ms. Sylvia Kang

Re: Environmental Management Plan
Former Alcoa Eastalco Works – Initial Infrastructure Phase
Frederick County, Maryland

Dear Ms. Kang:

In accordance with our agreement, Geo-Technology Associates, Inc. has prepared this Environmental Management Plan (EMP) for the planned development at the above referenced project (the "Site"). The Site currently contains vacant land. The Site consists of the initial infrastructure phase of construction for a larger data center development. This EMP has been prepared to address environmental impacts identified during prior evaluations in conjunction with the installation of utilities, roadways, and sediment erosion control basins at the Site.

We appreciate the continued opportunity to be of assistance on this project. Should you have any questions regarding this information, or should you require additional information, please contact our office at (410) 792-9446.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.

Colleen M. McMullen
Environmental Scientist

Paul H. Hayden, P.G., L.R.S., R.S.M.
Vice President

cc: Ms. Anuradha Mohanty / Maryland Department of the Environment,
Land and Materials Administration

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1.0 INTRODUCTION

1.1 Overview and Purpose

At the request of Quantum Maryland, LLC (Client), Geo-Technology Associates, Inc. (GTA) has prepared this Environmental Management Plan (EMP) for the initial infrastructure phase of the Former Alcoa Eastalco Works project (the “Site”). The Site is located on a larger property (“overall property”) that comprises over 2,200 acres. The central portion of the overall property formerly contained the Eastalco Aluminum Company. The remaining portions of the overall property were primarily used for agricultural purposes. Future development of the overall property will include the construction of multiple data center buildings and associated infrastructure. For the purpose of this EMP, the Site will consist of the initial phase of infrastructure that includes the construction/installation of two roadways and associated utilities, three sewer lines, two water lines, an electrical substation, a pump station, a fiber optic line, and five sediment basins so that future development of the overall property may occur. Additionally, the abandonment/removal of two water lines, a gas line, and a telecommunications line will occur.

In 2021, the project team requested that the Maryland Department of the Environment (MDE) Land and Materials Administration (LMA) participate in the review of the environmental conditions on the overall property and the proposed remedies. An expedited Inculpable Person (IP) was requested and was received by Quantum Maryland, LLC on June 22, 2021. On behalf of Quantum Maryland, LLC GTA submitted an application to the MDE Voluntary Cleanup Program (VCP) for the overall property on September 28, 2021. On May 4, 2022, GTA withdrew from the VCP and remedial oversight was engaged with the MDE Controlled Hazardous Substances (CHS) Enforcement Division. As part of the ongoing CHS oversight agreement between the project team and MDE, this EMP was prepared to establish a proposed remedy for soils and groundwater encountered during the planned installation of roadways, utilities, and sediment erosion control basins during the initial infrastructure phase of development. The proposed remedies included additional evaluation of the Site prior to the installation of roadways, utilities, and sediment erosion control basins; capping; general soil screening and management during excavation; removal of waste (if encountered); and the use of appropriate health and safety measures during construction. Once the EMP is approved, these remedial measures will be performed as part of the ongoing CHS oversight.

1.2 Limitations

This report was prepared by GTA for the sole and exclusive use of the Client (Quantum Maryland, LLC), under the terms and conditions of GTA’s contract with the Client. GTA understands that if authorized by the Client, this report may be used by the Client’s current and future direct and indirect affiliates (including Quantum Maryland, LLC), investors, partners, and lenders, and such use is subject to the applicable terms and conditions of GTA’s contract with the Client. GTA acknowledges that this document is being submitted to the MDE and will be part of the public record, and that the MDE is expected to use this report as part of its review process. However, use of this report by any unauthorized third party is at their sole risk. GTA is not responsible for any claims, damages, or liabilities

associated with unauthorized third-party use. Reliance on this report can be provided to other parties at the request of the Client, subject to the terms and conditions of GTA’s contract with the Client.

2.0 BACKGROUND

2.1 Site Description

The Site is located on a larger property (“overall property”) that comprises over 2,200 acres and is located southeast of Ballenger Creek Pike, north and south of Manor Woods Road, west of New Design Road, northwest of Mountville Road, and north of Adamstown Road. The Site consist of the initial phase of infrastructure that includes the construction/installation of two roadways and associated utilities, three sewer lines, two water lines, an electrical substation, a pump station, a fiber optic line, and five sediment basins so that future development of the overall property may occur. A Site Location Map is presented as Figure 1 and an aerial photograph is presented as Figure 2. These figures depict the approximate boundary of the overall property and the area in which the initial infrastructure work will be performed.

2.2 Environmental Site History

The central portion of the overall property was historically developed as an aluminum smelting plant (Alcoa Eastalco Works) that was in operation from 1969 through 2005. The plant was demolished between 2011 and 2016. Since 2005, the plant area has undergone extensive environmental evaluation and is currently subject to an Environmental Covenant (EC) and MDE-approved Site Management Plan (SMP). Historic plant operations resulted in impacts to groundwater, surface water, surface soils, and subsurface soils in the plant area. Contaminants primarily include fluoride in groundwater, cyanide in surface water, and polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) in soils.

The former plant area is subject to the EC due to environmental impacts associated with the historic use of the Site. The EC places restrictions on land and groundwater use within a portion of the Site (see Figure 2) and requires current and future property owners to follow an MDE-approved SMP. The EC applies to both the greater former plant area, and a Soil Management Area (SMA), which includes two closed, permitted industrial landfills, former waste disposal sites (WDS), and other areas containing constituents of potential concern (COPCs). Prior sampling efforts have indicated that on-site lands surrounding the former plant area have sustained limited impacts to soil by arsenic and several PAHs. The remainder of COPCs in soil and groundwater have been below their respective regulatory cleanup standards. The approximate boundaries of the EC and SMP are depicted on Figure 2 and Figure 3 (Proposed Lot Plan). The landfills and WDS also are depicted on Figures 3, 4 (Proposed Utility and Roadway Plan), and 5 (Utility Abandonment Plan).

Land use restrictions and maintenance requirements within the EC and SMA include the following:

- Land use is limited to restricted commercial (Tier 2B) and restricted industrial (Tier 3B) land uses.
- Groundwater use is prohibited.
- On-site activities shall meet the requirements of the SMP.
 - Incorporation of a presumptive soil remedy (an engineered cap) into the development strategy or conducting a Pre-Development Assessment (PDA).
- Engineered caps in the SMA must be maintained, and notification/maintenance requirements exist for repairs and penetrations of engineered caps.
- A 6' chain link fence shall be maintained surrounding the entirety of the SMA.
- Landfill areas must be maintained in accordance with the 2015 Closure and Post Closure Plan.
- Long term groundwater monitoring and groundwater monitoring well maintenance is required.
- A 30-day notification to the MDE is required for planned soil disturbances within the SMA.
- A Health and Safety Plan (HASP) must be prepared in accordance with the SMP and maintained on-site during site work.
- A HASP must also address areas where groundwater is proposed to be encountered.

Remaining areas of the Site and overall property consist of agricultural land and former farming operations. Railroad tracks were previously located in the eastern portion of the overall property and were recently removed (see Section 3.1). Soil sampling performed across surrounding lands indicated that fluoride, PAHs, Resource Conservation and Recovery Act (RCRA) metals, PCBs, herbicides, total petroleum hydrocarbons (TPH) diesel range organics (DRO) and TPH gasoline range organics (GRO) were detected at concentrations below the 2008 MDE Residential and Non-Residential Cleanup Standards (NRCS) and the United States Environmental Protection Agency (USEPA) Regional Screening Level (RSL) Residential and Industrial Soil Tables (TR = $1E^{-06}$, HQ=0.1).

GTA also recently performed sampling in accordance a Phase II ESA Work Plan – Initial Infrastructure Phase, as approved by MDE on September 28, 2022. This sampling plan was performed to evaluate the proposed utility and roadway corridors and utility abandonment areas. Sampling was conducted within the SMA, EC, and former agricultural areas of the Site and additional information concerning these sampling activities is presented in Section 3.2 and Tables 1 through 6. During this investigation one surface sample was collected from 0-1 foot depth. The sub-surface evaluation consisted of the collection and analysis of one composite sample from 1 foot thru up to 20 feet depth. Fill material was observed in all samples collected from within the SMP area but no biased samples were collected to characterize the fill since all of the excavated soil from the utility corridors is intended to be returned to the excavation pits as back fill.

GTA notes that limited excavations will be needed in selected railroad crossings as part of proposed utility corridor installations. Soil excavated in these areas will be handled as required under the SMP. Additional information concerning utility installations at railroad crossings is presented in Section 2.3.5.

2.3 Proposed Development

The overall property is planned to be developed with a data center campus. Proposed developments associated with this EMP will include the initial phase of infrastructure that includes the construction/installation of two roadways and associated utilities, three sewer lines, two water lines, an electrical substation, a pump station, a fiber optic line, and five sediment basins. These proposed developments are depicted on the Figures 3, 4, and 5. These utility and roadway installations are proposed in the EC area, SMA, and in outlying areas that currently consist of agricultural land. Proposed utilities and roadways are not proposed to traverse the existing and delineated WDS or closed industrial landfills (see Figures 4 and 5). A summary of proposed utilities is included in the table below.

Utility Name	Utility Type	Length/Area	Cut/Fill Range	Inside EC?	Inside SMA?	Groundwater Encounter Expected?
Line Phase 1A	24" Sewer	2,686 Linear Feet	11-17' Excavations	Yes	No	Yes
Line Phase 1B	24" Sewer	4,635 Linear Feet	9-18' Excavations	Yes	Yes	Yes
Line B	15" Sewer	3,427 Linear Feet	10-19' Excavations	Yes	Yes	Yes
Eastern Water/Potable Cooling Water Line	16" Water	Approximately 4,600 Linear Feet	Approximate 8' Excavations	Yes	No	No
Western Water/Potable Cooling Water Line	12" Water	Approximately 9,156 Linear Feet	Approximate 4.5' Excavations	Yes	Yes	No
Happy Landing Road	Roadway	Approximately 6,550 Linear Feet	5' Cut, 7' Fill	No	No	No
	Water Line		5' Cut	No	No	No
	Potable Cooling Water Line		10' Cut	No	No	No
	Force Main		3' Cut	No	No	No
	Gravity Sewer		12' Cut	No	No	No
Quantum Place South	Roadway	Approximately 4,418 Linear Feet	1' Cut, 7' Fill	Yes	No	No
	Water Line		5' Cut	Yes	No	No
	Potable Cooling Water Line		10' Cut	Yes	No	No

Utility Name	Utility Type	Length/Area	Cut/Fill Range	Inside EC?	Inside SMA?	Groundwater Encounter Expected?
Basin 1	Sediment Basin	Approximately 1.79 Acres	8' Cut	No	No	No
Basin 2	Sediment Basin	Approximately 1.59 Acres	14' Cut	No	No	No
Basin 3	Sediment Basin	Approximately 2.06 Acres	6' Cut	No	No	No
Basin DA-2	Sediment Basin	Approximately 0.94 Acres	16' Cut	Yes	No	No
Basin DA-11	Sediment Basin	Approximately 0.74 Acres	15' Cut	Yes	No	Yes
Outlot 1 Pump Station	Pump Station	Approximately 1.53 Acres	60' Cut	No	No	Yes
Electrical Substation	Electrical Substation	Approximately 19.42 Acres	Unknown at This Time	Yes	No	Unknown at This Time
AT&T Line	Fiber Optic	Approximately 11,003 Linear Feet	4' Excavation	No	No	No

The development plans that were provided to GTA by the Client, and to the MDE by GTA should be referenced with respect to specific infrastructure features. General information regarding the proposed site developments is presented below.

2.3.1 Utilities to be Installed

Sewer Line Phase 1A will extend from the southern overall property boundary, north 2,686 linear feet. Sewer Line Phase 1A is located within the EC area and will require excavations ranging from 11 to 17 feet. At the terminus of Sewer Line Phase 1A, two additional sewer lines are proposed: sewer line Phase 1B will extend to the northeast, and sewer line B will extend to the northwest. Sewer Line Phase 1A will not intersect with the existing WDSs or closed landfills.

Sewer Line Phase 1B will extend from the terminus of sewer line Phase 1A northeast to the eastern terminus of the proposed Quantum Place South roadway. Portions of Sewer Line Phase 1B will be located within the EC and SMA and will require excavations ranging from 9 to 18 feet. Sewer Line Phase 1B will not intersect with the existing WDSs or closed landfills.

Sewer Line B will extend from the terminus of sewer line Phase 1A northwest to the western terminus of the proposed Quantum Place South roadway. Sewer Line B will traverse Tuscarora Creek, and enter the EC and SMA, and will require excavations ranging from 10 to 19 feet. Sewer Line B will not intersect with the existing WDSs or closed landfills. Sewer Line B will intersect the former location of WDS-10. WDS-10 was excavated in 2016 and replaced with clean fill. It should be noted that the routing of Sewer Line B was recently reconfigured with the utility run shifting approximately 300 feet west of the original configuration. The new routing was

reconfigured to lessen the routing between the former WDS locations and environmentally sensitive features (in particular wetlands).

The eastern water/potable cooling water line will extend from the eastern terminus of the proposed Quantum Place South roadway to the northeast portion of the proposed Happy Landing roadway. Portions of the water/potable cooling water line will be located within the EC area and will require excavations of approximately 8 feet. The water/potable cooling water line will not intersect with the existing WDSs or closed landfills.

The western water/potable cooling water line will extend from the western terminus of Quantum Place South to the southwest terminating along Mountville Road. Portions of the water/potable cooling water line will be located within the EC and SMA and will require excavations of approximately 5 feet. The water/potable cooling water line will not intersect the existing WDSs or closed landfills.

A 12" water main will be installed below Happy Landing Road, approximately 10 feet below final grade, and a 16" potable cooling water line will be installed approximately 15 feet below final grade. A 10" force main will be installed approximately 8 feet below final grade, and a gravity sewer will be installed approximately 12 feet below final grade. A 12" water main will be installed below Quantum Place South, approximately 10 feet below final grade, and a 16" potable cooling water line will be installed approximately 15 feet below final grade. Utilities within the roadways will not extend outside of the proposed areas of disturbance associated with the roads (see below).

An AT&T fiber optic line will extend from the northwest portion of the Site, along Manor Woods Road to Happy Landing Road. The depth of excavation will be approximately 4 feet in depth. The proposed AT&T fiber optic line will not be located in the EC or SMA.

It should be noted that the above table and descriptions of the utilities to be installed at the Site summarizes the maximum cuts and fills in specific areas. The proposed areas of disturbance will generally be limited to the areas of the vertical excavation and the width of the excavation will be dependent on the excavation bucket size used at each location (e.g., 3 foot wide bucket in shallow excavations and 4 to 5 foot wide bucket in deeper excavations). However, deeper excavations may utilize trench boxes to support the excavation walls, or the excavations may be benched back for worker safety. A representative example of a utility excavation is presented as Figure 6.

2.3.2 Roadways

Happy Landing Road will extend from the southern property boundary to the northeast along the existing railroad tracks and terminate at a roundabout intersecting with New Design Road to the east. Grading within Happy Landing Road will require up to 5-foot cuts or the placement of up to 7 feet of fill within the roadway alignment. During the initial infrastructure phase of construction as described in this EMP, Happy Landing Road will consist of an approximate 12-

foot-wide access road for the proposed sewage pump station. In order to account for utility excavations that will be performed within Happy Landing Road, the area addressed within this EMP will consist of the 12-foot wide access road and a 6-foot buffer on each side of the road. Once finally constructed, Happy Landing Road is proposed to be 40 feet wide. Twenty-foot-wide drainage areas will extend from both sides of the roadway at the time of final construction. As such, the Happy Landing Road right-of-way will be approximately 80 feet wide. Development of additional portions of Happy Landing Road will depend on the proposed development schedule. A representative cross section of the Happy Landing Road, which depicts the area to be addressed in this EMP, is presented on Figure 7. Happy Landing Road will not enter the EC area and will not intersect with the existing WDSs or closed landfills.

Quantum Place South will extend from Manor Woods Road to the southwest. Quantum Place South will require up to 1-foot cuts and the placement of up to 7 feet of fill soil. Quantum Place South will be located in the EC area, however, it will not intersect with the existing WDSs or closed landfills. Quantum Place South is proposed to be 26 feet wide, with a two-foot shoulder and curb area (30 foot wide total). Sixteen-foot-wide drainage and planting areas will extend from both sides of the roadway. Nine and 14-foot easements will be located on either side of the roadway for sidewalk and walking path areas. As such, Quantum Place South will be approximately 73 feet wide. A representative cross section of the Quantum Place South is presented on Figure 8.

2.3.3 Sediment Basins

Five sediment basins are proposed. Basins 1, 2, and 3 are located in the eastern portion of the Site adjacent to the proposed Happy Landing Road, and require excavations of 8, 14, and 6 feet, respectively. Sediment basins 1, 2, and 3 will not be located in the EC area. Sediment basin DA-2 is proposed to be located adjacent south of Quantum Place South roadway inside the EC area and will require an excavation of 16 feet. Sediment basin DA-11 is proposed to be located adjacent north of the southern landfill and inside the EC area, in the location of existing rainwater pond 102. Rainwater pond 102 receives surficial drainage from areas to the north and not the landfill or SMA. The existing pond will be removed and replaced with sediment basin DA-11. Sediment basin DA-11 will overlap the southern landfill boundary but will not impact the landfill cap. The basin will require excavations of approximately 15 feet. Sediment basins will be lined with either an MDE approved clay material (minimum 15% passing the #200 sieve and a maximum permeability of 1×10^{-5} cm/sec) or a 30-mil polyethylene liner.

According to the 2005 Sitewide Investigation Report prepared by MFG, Inc., existing rainwater pond 102 is unlined and is underlain by bedrock. Based on current development plans, the existing bottom of rainwater pond 102 is also above historical groundwater elevations. Two groundwater monitoring wells are located adjacent and downgradient of the existing rainwater pond. MW-4 is an overburden monitoring well and MW-103 is a bedrock monitoring well. These monitoring wells are sampled on a semi-annual basis. Concentrations of fluoride in MW-4 were

below the MCL of 4 mg/L in December 2022. Concentrations of fluoride in MW-103 were detected at 4.5 mg/L in 2019.

Sediment and surface water from sediment basin DA-11 were analyzed as part of the September 2022 Phase II ESA – Initial Infrastructure Phase as described in Section 3.2. The Phase II ESA analyzed sediment and surface water in sediment basin DA-11. Sediment was analyzed for PAHs, PCBs, and Priority Pollutant (PP) Metals, and surface water was analyzed for fluoride and cyanide. All analytes were either reported below the laboratory’s reporting limit or below their respective regulatory standard. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables.

Permitting for the sediment basins are ongoing and once approved the management of the stormwater and groundwater, if encountered, within the DA-11 development area will be addressed in an EMP addendum. Soil and sediment will be removed during the DA-11 construction, stockpiled until dry, and re-used on site during future construction phases. Future reuse of the removed sediment will require MDE approval. Soil and sediment will be temporarily stockpiled in a proposed storage area located adjacent west of the proposed sediment basin DA-11. Sediment barriers including silt fencing and hay bales will surround the storage area to prevent runoff. Once the specific location of the proposed stockpile is determined, a plan depicting the proposed location will be submitted as an EMP addendum.

2.3.4 Sewage Pump Station and Substation

Outlot 1 Pump Station (sewage pump station) will be located in the southeastern portion of the Site, adjacent to the southwest terminus of Happy Landing Road. The pump station will receive flows via gravity trunkline from the overall property to the west, and a force main is planned to exit the pump station towards the east. Construction of the pump station will consist of a “wet well,” a “dry well,” and a generator pad. The pump station will require approximately 60-foot excavations, terminating in bedrock. It should be noted that bedrock in this area is between 15 to 20 feet below existing grades and rock blasting will be required. In addition, a temporary shoring system will be required to construct the pump station; however, details for the shoring system are currently not available. These details and approximate width and length of the excavation will be presented in an Addendum to this EMP. The excavation of Outlot 1 Pump Station will not be performed in the EC or SMA.

An electrical substation will be located west of the western terminus of Quantum Place South roadway. The depth of excavation has not yet been determined, but the area is roughly at grade. It is anticipated that the construction in this area will utilize standard slab and footing construction, with the footings extending 30 inches below grade. Construction details will be presented in an Addendum to this EMP. No work to the electrical substation will occur until the Addendum is approved. The electrical substation will be located in the EC area, but not in the SMA.

2.3.5 Railroad Crossings

Utility corridors associated with Sewer Lines 1B and B and the western water/potable cooling water line are proposed to cross a former railroad track located within the SMA. The railroad track was removed in August 2022 in accordance with an MDE-approved plan, as described in Section 3.1. Soils excavated within the vicinity of the former railroad track during utility installation will be segregated and stockpiled. This stockpile will be sampled in accordance with an MDE-approved sampling plan and handled in accordance with the SMP. The sampling plan will be presented in an Addendum to this EMP. The proposed railroad utility crossings are depicted on Figure 9.

2.3.6 Railroad Access Road

The remnant railroad bed associated with the removed railroad track described in Sections 2.3.5 and 3.1. will be utilized as a temporary access road. The railroad bed consists of remnant stone and supplemental stone placed following the railroad track removal. The existing stone will be smoothed and additional stone will be applied in order to provide a sufficient access road. The temporary access road will remain within the limits of the original railroad bed. No soil excavation and/or disturbance are proposed in association with the temporary access road. On-site personnel will provide periodic monitoring of the access road to ensure soil disturbance has not occurred.

If soil disturbance is proposed to occur in the future, GTA will submit an addendum and associated work plan. Soil disturbance will not occur without MDE approval.

2.4 Proposed Utility Abandonment

Several existing utilities are proposed to be abandoned during the initial phase of construction. A 24-inch water line and an 18-inch potable cooling water force main currently extend from the eastern site boundary to the northwest. These lines are not located within the EC or SMA and are planned to be removed from the ground. A 6-inch natural gas line runs parallel to the described water lines and extends to the northwest. Portions of this line enter the EC and SMA. The 6-inch natural gas line is planned to be abandoned in place. An AT&T fiber optic line extends from the eastern portion of the Site to the west and terminates at Cap Stine Road to the west. This line is planned to be abandoned in place. See Figure 5 for utilities proposed to be abandoned.

Aside from the water line abandonment, excavation is not planned in conjunction with the remaining utility abandonments. Removed water line utilities will be excavated and all structures associated with these utilities will be removed. During removal of these utilities, excavated soils will be stockpiled adjacent to the utility trench. Following utility removal, excavated soils will be backfilled into the utility trench and compacted. The remaining abandoned utilities will be decommissioned and remain in their respective conduits. No additional movement of excavated soils will occur.

As part of the Phase II ESA – Initial Infrastructure Phase, GTA sampled soil in the area of the utilities to be abandoned/removed. Utility lines to be removed are located outside of the EC and SMA. Surficial soils in the area of the utilities to be removed were analyzed for PAHs, PP Metals, and Pesticides/Herbicides. Subsurface soils in the area of the utilities to be removed were analyzed for PAHs and PP Metals. No exceedances of the NRCS and ATC Central were identified in the analyzed samples, with the exception of total chromium. Speciation of the total chromium soil samples for hexavalent chromium was performed and indicated that hexavalent chromium was not present. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables. See Figures 10 and 11 for Proposed and Abandoned Utilities and associated Phase II boring locations.

3.0 RECENT SITE ACTIVITIES

A summary of the recently completed or proposed additional site evaluations is presented in Sections 3.1 to 3.3 below.

3.1 Railroad Track Removal

Approximately 7,500 linear feet of railroad tracks extended from a rail line along New Design Road to the east, northwest to the former Eastalco Aluminum Company plant area located in the central portion of the overall property. Approximately 3,500 linear feet of the railroad tracks were located within the fenced SMA. The work involved the removal of railroad tracks, railroad ties, and other track materials (OTMs). A Railroad Track Removal Plan is included as Figure 12. This figure depicts the railroad track removal areas and the SMA and EC boundaries.

GTA provided notification of the proposed railroad track removal activities to MDE LMA on July 15, 2022. The MDE responded on July 20, 2022, requesting a brief work plan outlining the proposed work. This work plan and work schedule was submitted to the MDE on July 22, 2022. MDE provided comments on the work plan on August 1, 2022, and responses to these comments were provided on August 3 and 4, 2022.

Railroad track removal activities were performed by Amtrac Railroad Contractors of Maryland, Inc. (Amtrac) in July and August 2022. GTA personnel periodically visited the Site to document the railroad track removal activities. Removal activities in the SMA were generally performed after responses to the work plan were provided to the MDE. Soil beneath the railroad sub-base was not disturbed during these activities. Please refer to GTA's October 17, 2022 *Railroad Track Removal Summary* for specific details regarding the railroad track removal.

3.2 Utility and Roadway Alignment Evaluation

GTA performed a Phase II ESA of the Site to determine the proper management of material that will be excavated during roadway installation and utility installation/abandonment and to provide additional analytical data needed to generate this EMP. The Phase II ESA was also prepared in consideration of a Work Plan that was submitted to the MDE LMA for review and approval. The sampling locations and

sampling parameters were determined on September 1, 2022. The Work Plan was approved with some alterations and additional sampling parameters on September 28, 2022.

The Phase II ESA was conducted in September and August, 2022 and consisted of sediment, surface water, groundwater, and soil sampling on the Site. Sediment samples were obtained from the north and south sides of the existing rainwater pond 102 located in the proposed location of Sediment Basin DA-11. Surface water samples were obtained from three stream crossing locations and from the existing rainwater pond 102 located in the proposed location of Sediment Basin DA-11. Groundwater samples were collected from two temporary groundwater monitoring wells that were installed near proposed stream crossings. Soil samples were collected from 86 soil borings that were situated at approximate 600-foot intervals along the Site's roadway or utility alignments or within the Site's proposed sediment traps, sewage pumping station, and electrical sub-station. The approximate sample locations are depicted on Figures 10 and 11. It should be noted that the alignment for Sewer Line B was reconfigured after sampling occurred; however, soil samples for the Western Water Line and a utility vault were collected within 100 feet of the new Sewer Line B configuration.

The analytes that were requested for analysis were either not detected above the laboratory reporting limits or the applicable comparison values, except for the PAH benzo(a)pyrene that was detected in soil in one boring. This boring is located within the SMA. Please refer to GTA's October 11, 2022 *Phase II Environmental Site Assessment, Initial Infrastructure Phase* for specific details regarding the Phase II ESA. It should be noted that soil samples for the Western Water Line and a utility vault (SA7-K and SA10-A) were collected approximately 100 feet of the new Sewer Line B configuration and these samples did not detected contaminants above the laboratory reporting limits or the applicable comparison values.

4.0 EXPOSURE ASSESSMENT

4.1 Future Land Use

The Site will be developed with utility infrastructure and roadways. Future development associated with other portions of the Site will be addressed in other remedial plans such as an EMP or a Response Action Plan.

According to the development plans referenced in Section 2.0, the Site will require the construction/installation of two roadways and associated utilities, three sewer lines, two water lines, an electrical substation, a pump station, a fiber optic line, and five sediment basins so that future development of the overall property may occur. The proposed roadway construction will consist of a combination of cuts and fills, and the sediment basins will require cuts. On-site soils displaced by proposed utilities are anticipated to be reused on-site and placed as compacted fill as necessary. Excess soils generated during utility excavation will remain in its respective utility corridor. Soils displaced within the SMA must remain in the SMA. Capping within the SMA will eliminate the exposure pathway soil and groundwater impacts at the Site during future developments.

4.2 Contaminants of Potential Concern

4.2.1 Soil

Inside SMA

Prior evaluations, as summarized in the Environmental Background Summary of the SMP, indicated PAHs (including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene) and PCB (Aroclor 1016, Aroclor 1242, and Aroclor 1248) concentrations exceed the NRCS in the SMA. Prior evaluations also indicated that arsenic concentrations exceed the NRCS and the Anticipated Typical Concentration (ATCs) values in the SMA. However, these prior evaluations indicated the detections of arsenic are considered naturally occurring and do not pose a risk. Additionally, GTA's 2022 Phase II ESA – Initial Infrastructure Phase, identified benzo(a)pyrene at concentrations that exceeded the NRCS in the SMA. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables. As such, PAHs, PCBs, and arsenic are considered COPCs in the SMA.

Outside SMA

PAHs, PCBs, and arsenic are conservatively considered COPCs outside of the SMA; however, these COPCs were not detected above laboratory reporting limits and/or respective NRCS values outside the SMA as part of GTA's 2022 Phase II ESA – Initial Infrastructure Phase. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables.

4.2.2 Surface Water

Prior evaluations, as summarized in the Environmental Background Summary of the SMP, indicated low-level detections of cyanide that slightly exceeded the limit set forth by an Administrative Consent Order between Eastalco Aluminum Company and the MDE of 0.0052 mg/L. The USEPA maximum contaminant level (MCL) for cyanide is 0.2 mg/L and is orders of magnitude above the concentration of cyanide when it is detected in surface water. GTA's 2022 Phase II ESA – Initial Infrastructure Phase included surface water sampling in locations where utilities are proposed to cross surface waters and in existing rainwater pond 102. Sewer Line B crosses Tuscarora Creek on the eastern portion of the Site, and the western water/potable cooling water line crosses a tributary of Tuscarora Creek on the western portion of the Site. Existing rainwater pond 102 will be removed and replaced with sediment basin DA-11. One upstream and one downstream sample were collected from the tributary of Tuscarora Creek. Collected surface water samples did not identify cyanide concentrations above the USEPA MCL both within and outside of the SMA. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables. According to the SMP, "exposure by on-site workers and off-site receptors to surface water does not require mitigation." Conservatively, cyanide is considered a COPC in surface water at stream crossings and within the DA-11 of the proposed development.

4.2.3 Groundwater

Prior evaluations, as summarized in the Environmental Background Summary of the SMP, indicated that fluoride exceeded the USEPA MCL on portions of the Site, primarily within the SMA and EC. GTA’s 2022 Phase II ESA – Initial Infrastructure Phase included groundwater sampling in utility corridors where groundwater is expected to be encountered, including Sewer Line Phase 1A and the western water/potable cooling water line. Groundwater samples collected from these locations did not identify fluoride concentrations above the USEPA MCL outside of the SMA and EC. See Appendix B for Phase II ESA – Initial Infrastructure Phase data tables. Fluoride is considered a COPC in groundwater in the SMA and EC. These COPCs have not been detected in areas outside of the EC.

4.3 Exposure Pathway Evaluation

Based on the Phase II ESA performed on the initial infrastructure phase of construction and the existing SMP, potential environmental exposure risks to future occupants and construction workers may exist at the Site. The identified exposure pathways, potentially exposed populations, and COPCs are summarized in the table below. If additional contaminants are identified during the additional site assessment, the table below will be expanded appropriately.

POTENTIAL EXPOSURE PATHWAYS			
Media	Potential Exposed Population	Exposure Pathway	COPCs
Soil (SMA Only)	Adult On-Site Construction Worker Child Visitor Youth Visitor Adult Visitor Adult On-Site Worker	Dermal Exposure Incidental Ingestion Inhalation of Volatiles and Fugitive Dust	PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene), PCBs (Aroclor 1016, Aroclor 1242, and Aroclor 1248), and Arsenic
Groundwater	Adult On-Site Construction Worker	Dermal Exposure Incidental Ingestion	Fluoride
Surface Water	Adult On-Site Construction Worker	Dermal Exposure Incidental Ingestion	Cyanide

4.3.1 Direct Contact to Soil Contamination

There is a potential for site construction workers to come into contact with the COPCs. This contact will be limited by implementing a site-specific HASP. Future capping within the SMA will

eliminate the direct contact exposure risk to construction worker and future adult, youth, and child populations. The proposed remedies for the soil contamination (HASP and capping) are protective of human health, because they are designed to prevent exposure to contamination. Under the current conditions, construction worker and adult, youth, and child populations at the Site would be exposed to the COPCs; however, once this EMP and future remedial work or sampling is complete, all populations will be protected.

4.3.2 Exposure to Groundwater Contamination

Groundwater has generally been identified at elevations at the site ranging from 5 to 25 feet below bgs, with some apparent perched water conditions present on portions of the Site. In addition, groundwater at the site is not currently used. There is a potential for site construction workers to come into contact with the groundwater during utility excavations. This contact will be limited by implementing a site-specific HASP. The groundwater at the Site will be prohibited from being used for any purpose via restrictions recorded in the property deeds.

4.3.3 Inhalation of Fugitive Dust

During future construction activities, it is possible for soil impacted by COPCs to become airborne. There is a potential for site construction workers to breathe this fugitive dust. The inhalation of fugitive dust will be limited by implementing a site-specific HASP and construction practices that prevent dust generation (e.g., implementation of dust control methodologies).

Capping (e.g., soil or clean fill) at the proposed utility installation locations within the SMA will eliminate future exposure to inhalation of fugitive dust to future adult, youth, and child populations. The proposed remedy for inhalation of fugitive dust is protective of human health since exposure to contamination above regulatory limits will be prevented.

5.0 CLEANUP CRITERIA

The cleanup criteria for the Site are summarized in the table below. The cleanup criteria for the Site soil COPCs generally reflect the MDE NRCS values, which are the generic risk-based guidance values in MDE's *Cleanup Standards for Soil and Groundwater; October 2018; Interim Final Guidance (Update No. 3)*. MDE cleanup standards are derived from USEPA Region III RSLs, which assume a $1E^{-6}$ cancer risk; generally speaking, MDE modifies these values to reflect a $1E^{-5}$ cancer risk in the NRCS values. The cleanup criteria for fluoride and cyanide are derived from the USEPA *National Primary Drinking Water Regulations (NPWDR); May 2009*. The cleanup criteria for cyanide is derived from the Administrative Consent Order (dated 1992 and revised 1997, and 2007) between Eastalco Aluminum Company and the MDE.

CLEANUP CRITERIA			
Media	COPC	Cleanup Criteria	Basis
Soil	Benzo(a)anthracene	21 mg/kg	NRCS
	Benzo(a)pyrene	2.1 mg/kg	NRCS
	Benzo(b)fluoranthene	21 mg/kg	NRCS
	Benzo(k)fluoranthene	210 mg/kg	NRCS
	Dibenz(a,h)anthracene	2.1 mg/kg	NRCS
	Ideno(1,2,3-c,d)pyrene	21 mg/kg	NRCS
	Aroclor 1016	5.1 mg/kg	NRCS
	Aroclor 1242	0.95 mg/kg	NRCS
	Aroclor 1248	0.95 mg/kg	NRCS
	Arsenic	26.8 mg/kg	RCV
Groundwater	Fluoride	4.0 mg/L	NPWDR
Surface Water	Cyanide	0.2 mg/L	NPWDR

Arsenic is proposed to be compared to the risk-based comparison value (RCV) of 26.8 mg/kg for commercial properties, which GTA has used on sites where MDE is involved with arsenic-related contaminant assessment and remediation.

If other COPCs are identified, the cleanup criteria will be re-evaluated. Generally, the cleanup criteria that will be applied to any additional COPCs will be the published MDE NRCS values, or site-specific values calculated using the appropriate frequency exposure parameters, as the need arises.

6.0 REMEDIES AND INSTITUTIONAL CONTROLS

This EMP presents proposed remedial actions to protect against exposure to potentially contaminated soil, surface water, and groundwater in conjunction with future construction and improvement on the Site. Potentially complete exposure pathways have been identified between contaminated soil, surface water, and groundwater and future on-site worker, visitor, and construction worker populations at the Site. These exposure pathways will be eliminated through the preparation and implementation of a site-specific HASP, construction observation for health and safety measures, proper management of impacted materials encountered during development activities, and engineering and land use controls (e.g., capping and notifications prior to excavation in the SMA, deed restrictions on use of groundwater in the SMA and EC).

6.1 Site Security

The SMA portions of the Site are currently secured with fencing to prevent trespassing during non-working hours. Excavations in the SMA resulting from redevelopment work must be secured with perimeter fencing if they are to be left open for more than one workday. The existing fence is proposed to remain in place. Breaches to the fence required by construction activities must be re-secured at the

close of each workday. A detail identifying the existing fencing limits and the and any future revisions to the fencing boundary will be submitted as addendums to this EMP.

6.2 Health and Safety Measures

A site-specific HASP was prepared to reduce direct contact exposure to the identified soil, surface water, and groundwater contaminants during the performance of construction activities that could involve impacted media. The HASP provides recommended procedures to reduce the potential for over-exposure. The primary action taken to mitigate potential exposures to construction workers will be the avoidance of direct contact with potentially impacted soil, surface water, and groundwater, and the appropriate use of personal protective equipment during construction activities.

The HASP has been submitted to the Client under separate cover and will be provided to the contractors involved in construction activities potentially encountering impacted media, for their information. The contractors should independently assess the available information and implement appropriate measures to protect the health and safety of their employees and subcontractors. Information and recommendations contained in this plan should not in any way be construed as relieving the contractors or their subcontractors of their responsibilities for site health and safety. A copy of the HASP has been provided to LMA.

6.2.1 Dust Control

The potential for worker exposure to site contaminants is primarily via direct contact, ingestion, or inhalation of nuisance dust. The primary action taken to mitigate potential exposures to construction workers will be the avoidance of direct contact with potentially impacted soil and the appropriate use of standard construction site personal protective equipment (work gloves, safety glasses, etc.) during construction activities.

Using the maximum detected on-site concentrations of COPCs in soil, the OSHA Permissible Exposure Limits (PELs) for the individual COPCs could only be exceeded if the nuisance dust PEL is exceeded by several to many orders of magnitude. Therefore, airborne dust shall be used as a surrogate for potential exposure to contaminants.

Accordingly, the nuisance dust PEL of 15 mg/m³ can be used as a conservative guideline for air monitoring. The nuisance dust concentration of 15 mg/m³ can be visually identified without active dust monitoring equipment. If airborne dust is visually observed during activities involving known or potentially contaminated soils, dust suppression measures (e.g., wetting, misting, etc.) will be implemented. If such efforts do not effectively suppress visible dust, then dust monitoring will be initiated to ensure nuisance dust does not exceed the OSHA PEL of 15 mg/m³. The nuisance dust PEL of 15 mg/m³ will be used as a stop work action level, and earthwork will cease until dust is no longer visible and dust concentrations are below the 15 mg/m³ stop work action level.

Visual indications of dust will be observed and dust suppression activities will be implemented during earth moving activities at the Site.

6.2.2 Volatile Organic Vapors

If indications of petroleum impacts are encountered during construction, such as through soil staining, odors, etc., air monitoring for volatiles will be conducted using a portable photoionization detector (PID). The monitoring will be conducted in/around the excavation, as needed based on the nature and location of the impacted materials. If elevated PID readings are encountered, response actions, as defined in the HASP, will be implemented.

6.3 Construction-Related Soil Management

The current scope of work represents an interim use of the property. Soils excavated in the SMA and EC areas are subject to the requirements laid out in the recorded EC and MDE-approved SMP. According to the SMP, all excavated soil within the SMA must incorporate a presumptive soil remedy (an engineered cap) into the development strategy or a PDA must be conducted. For the purpose of this EMP, soil disturbed by utility installations and abandonments in the SMA, will be excavated, temporarily placed adjacent to the utility trench, and placed back into the excavation in a controlled manner. Capping of these utility alignments will occur in the **SMA only**. No excavated material from the SMA shall be utilized outside of the SMA.

Utility installations and abandonments are not currently proposed within the existing landfills or WDS. MDE will be notified sufficiently in advance prior to any utility routing changes that propose excavation and/or disturbance in the WDS areas within the SMA. MDE may have additional requirements including but not limited to WDS stabilization, buffer zone in utility corridor, and excavated soil disposal. Should incidental interaction with the WDS occur, MDE will be notified immediately by phone and through written communication within 24 hours. Any soil excavated within a WDS area must be returned to the WDS excavation of origin and capped, or characterized for proper off-site disposal. MDE will be notified in a similar manner if any impacted soil, fill, or waste is noted during the proposed utility installation activity.

During excavating activities and utility installation, GTA's environmental technician will be present on-site for screening, sampling, and evaluating soil conditions, to monitor for impacted soils/waste. GTA will also be available to respond if impacted soils/waste are reported by construction personnel.

MDE will be notified should any utility routing changes be made; excavations occur that result in disturbance to the WDS areas within the SMA; as well as if any impacted soil, fill, or waste is noted during the proposed utility installation activity. MDE will be notified should any utility routing changes be made that propose excavation in the WDS areas within the SMA.

If field observations, field screening, unusual odors, odd coloration, or other factors indicate heavy environmental impacts in significant quantities, or should incidental interaction with the WDS occur, the suspect wastes will be segregated from onsite soils so that additional characterization can be

performed. This soil will be placed on and covered with plastic sheeting. Soil samples will be collected from the suspect impacted materials to evaluate whether it should be classified as regulated and requiring off-site disposal.

Heavily impacted soils/waste may be disposed at an appropriate disposal facility. The potential disposal facilities will be contacted to establish the necessary sampling and analysis requirements. The likely facilities for disposal of soil include:

Soil Safe, Inc. (Soil Safe)	or	Clean Earth Inc. (Clean Earth)
16001 Mattawoman Drive		1469 Oak Ridge Place
Brandywine, Maryland 20613-3027		Hagerstown, Maryland 21740
(301) 782-3036		(215) 734-1400

Use of these facilities as an off-site disposal facility is contingent on additional waste characterization soil sampling based on parameters requested by the facility. If onsite soils are determined to be hazardous in a waste disposal scenario or have COPC concentrations above the acceptable levels in the facility's permit listed above, the soil will be transported to another selected licensed waste disposal facility. Additional/alternate disposal facilities may also be utilized in accordance with local, state, and federal regulations for waste handling and disposal. MDE will be notified of the designated disposal facility, and MDE approval will be obtained for the use of the designated facility prior to shipments.

If no conditions indicative of heavily impacted soils/waste are observed, the soils will be reused as backfill as part of the construction/installation of two roadways and associated utilities, three sewer lines, two water lines, an electrical substation, a pump station, a fiber optic line, and five sediment basins. Soils may also be reused as backfill following the abandonment and removal of two water lines, a gas line, and a telecommunications junction vault.

Should excess soils be generated during utility installation outside of the SMA, excess soils will be stockpiled and utilized for future use outside of the SMA. Should excess soils generated outside of the SMA be proposed for use inside the SMA, these soils will be sampled and analyzed in accordance with an MDE-approved sampling plan. Should excess soils be generated during utility installation inside of the SMA, excess soils will be stockpiled for future use inside of the SMA. Soils reused within the SMA will be placed under a MDE-approved clean fill cap. No movement of fill materials into or out of the SMA area may occur without prior MDE approval.

6.4 Off-Site Fill Materials

It is anticipated that some imported aggregate and stone will be required during utility installation. All imported materials will require MDE approval prior to being transported to the Site.

Aggregate and stone that are needed for utility backfill will be acquired from standard commercial providers using local quarry sources. A clean fill certification will be obtained for any such materials and provided to MDE for approval prior to being transported to the site.

6.5 Groundwater Management

A groundwater use restriction is recorded in the property deeds by way of the existing EC. As such, the use of public utilities is planned. Groundwater may be encountered during utility installation. During construction, temporary dewatering may be necessary for utility installation. If necessary, GTA will develop a dewatering contingency plan for when potentially contaminated groundwater is unexpectedly encountered in the EC and SMA areas. According to the SMP, in the event that intrusive activities encounter groundwater within excavations that must be dewatered, the groundwater will be sampled and analyzed for fluoride or other parameters based on the institutional knowledge and historical use of the location. If contaminant concentrations in the groundwater exceed the Cleanup Criteria, the water must be managed and disposed in accordance with applicable local, State, and federal laws and regulations. To prevent construction delays caused by groundwater analysis and evaluation, the site contractor may elect to containerize the water prior to characterization and disposal.

As discussed in Section 2.3.3, GTA collected groundwater samples from the proposed utility alignments. These groundwater samples were collected from areas outside of the SMA and EC where it is likely groundwater will be encountered during construction and the samples were analyzed for fluoride. Fluoride was not detected above the laboratory's reporting limits in either collected sample. If dewatering is required, site construction worker may come in contact with the groundwater during site development and appropriate health and safety precautions present in the HASP should be followed.

Proposed sediment basins (Basin 1, Basin 2, Basin 3, Basin DA-2, and Basin DA-11) are proposed to be constructed or converted into stormwater management ponds. GTA understands that the stormwater management ponds will be lined to prevent the infiltration of water into the onsite fill areas. The composition, lateral extent, depth, and permeability of the liner or lining material must be approved by the MDE prior to installation. Additional details on construction of the sediment basins are described in Section 2.3.3.

Sewer Line 1B crosses Tuscarora Creek on the eastern portion of the Site, and the western water/potable cooling water line crosses a tributary of Tuscarora Creek on the western portion of the Site. Quantum Place South crosses Tuscarora Creek on the northern portion of the Site. A bridge will be constructed over Tuscarora Creek to allow for the Quantum Place South crossing. Trenching installation will be utilized to allow for the Sewer Line 1B and the western water/potable cooling water line crossings. These stream crossings will be conducted in accordance to MDE-approved wetlands permitting. Once the permits for these activities are approved, the approved permits will be submitted as an addendum to this EMP. The wetlands permit information will also be incorporated into the EMP addendum for management of stormwater and groundwater.

6.6 Roadways

Two paved ingress/egress roadways will be constructed on the site as part of the site development. Happy Landing Road is located outside of the EC and SMA. Quantum Place South is located within the EC and outside of the SMA. Based on the nature of their construction, the roadways will be considered “capped” areas. However, based on the sampling summarized in Section 3.2 and the roadway locations outside of the SMA, capping is not required within the proposed roadways. The roadways are proposed to consist of a minimum of six inches of granular sub-base and 4-6 inches of asphalt over in-situ material or fill material. Fill materials needed within the roadways and originating from the existing on-site stockpile will be sampled in accordance to a Clean Fill Plan as discussed in Section 3.3.

6.7 Landscaped Areas/Soil Cover

A greenspace buffer is proposed along the Quantum Place South roadway and future roadway beds/peripheral green areas are proposed along Happy Landing Road. Happy Landing Road is located outside of the EC and SMA. Quantum Place South is located within the EC and outside of the SMA. However, based on the sampling summarized in Section 3.2 and the location of landscaped areas along the roadways outside of the SMA, capping is not required within the landscaped areas adjacent to the roadways.

The proposed utility runs within the **SMA only** will be capped with a minimum of two feet of MDE-approved commercial-grade clean fill over marker fabric. GTA understands that the future end user of the lots where utilities are to be installed within the SMA will be required to utilize a presumptive soil remedy (an engineered cap) into the development strategy or conduct a PDA. The previous capping within the utilities to be installed in the SMA will eliminate the direct contact exposure risk to future occupants or users of the Site once incorporated with the future end users presumptive soil remedy or the PDA indicates that soil capping is not required.

Utility capping will be underlain by a marker barriers. The marker barrier will be placed between the MDE-approved commercial-grade clean fill and underlying soils. Utilities will be installed in these areas prior to capping. Excavated materials generated during utility installation that are not used as backfill will be placed elsewhere onsite beneath a capped area. The property owner is responsible for ensuring the proper implementation of all recorded deed restrictions and land use controls, and maintenance requirements for site caps to reduce the risk to public health and the environment.

6.8 Land Use Controls

Land use controls currently exist in the form of an EC that includes the SMA, and closure documentation issued by the MDE LMA for the successful completion of EMP activities will also list land use controls. The existing land use controls include but are not limited to the maintenance of the cap, soil excavation restrictions, and restrictions on the use of groundwater beneath the property. These land use controls are recorded in the local land records.

6.9 Capping

Utility corridors located within the SMA will be capped with 2 feet of MDE-approved clean fill and marker fabric. Landscape and hardscape caps are not proposed in association with the utility corridors at this time.

7.0 CONTINGENCIES

If site conditions observed during construction and/or remediation differ substantially from those described herein, modifications to this EMP may be necessary. Such differing conditions may warrant an adjustment of sampling procedures, analytical methods, remedial activities, etc. and such modifications will be addressed in an addendum or revision to this EMP. MDE will be notified of any newly discovered contamination, proposed changes to this EMP, or citations from other regulatory agencies.

Specifically, if newly discovered contamination is identified during site development, the following contingency measures will be taken:

- Notify MDE within 24 hours (verbally and written/email);
- Postpone implementation of the EMP;
- Evaluate new site conditions identified; and
- Amend EMP to address new site conditions identified.

Notified departments will include:

MDE Land Restoration Program
Land and Materials Administration
1800 Washington Boulevard
Baltimore, Maryland 21230
(410) 537-3466
Attention: Anuradha Mohanty

In addition to the above, if there is evidence of an oil discharge at the Site in violations of applicable regulations, it must be reported within two hours as specified in COMAR 26.10.08.01, to the OCP (410-537-3442) or, if after normal business hours, to the 24-hour Spill Reporting Hotline (1-866-633-4646). The MDE will be verbally notified within 48 hours (72 hours in writing /email) of changes (planned or emergency) to the EMP implementation schedule, previously undiscovered contamination, and citations from regulatory entities related to health and safety practices. Notifications shall be made to the MDE project manager at 410-537-3466.

8.0 ADMINISTRATIVE

8.1 Schedule

The preliminary schedule to implement the EMP is presented below. Note that this preliminary schedule is subject to change based on unforeseen conditions that are beyond the development team’s control. Deviations from this proposed schedule will be communicated to MDE.

ESTIMATED CONSTRUCTION SCHEDULE RELATIVE TO EMP	
Milestone	Estimated Schedule
EMP Review/Approval	March 2023
Submission of Monthly EMP Progress Reports	Monthly following initiation of work (due the 15 th of each subsequent month)
Utility Installation Activities	April 2023
EMP Completion Report Submittal	August 2023
MDE review completed	September 2023

The MDE project manager will be notified in writing within five calendar days prior to the beginning of EMP implementation activities. Schedule updates will be provided when needed, during preparation of the progress reports discussed in *Section 8.2*.

Based on the information provided herein, the following EMP Addenda will be provided to the MDE once additional information is available or if observed site conditions dictate a particular addendum will be needed.

EMP Addenda		
Description	Applicable Report Section	Anticipated Submittal Dates
Stormwater and Groundwater Management Addendum	Section 2.3.3 and 6.5	March 2023
Sediment Basin Liner Design Details	Section 2.3.3	March 2023
DA-11 Sediment Stockpile Location Plan (Figure/Memo)	Section 2.3.3	March 2023
Outlot 1 Pump Station Construction Plans	Section 2.3.4	March 2023
Substation Construction Plans	Section 2.3.4	March 2023
Railroad Soil Management Plan	Section 2.3.5	When needed
Existing SMA Fencing Plan	Section 6.1	March 2023

EMP Addenda		
Plans Showing SMA Fencing Alterations	Section 6.1	When Needed
Plans Showing Utility Routing Changes	Section 6.3	When Needed
MDE-Approved Wetlands Permit	Section 6.5	March 2023

8.2 Documentation

During implementation of this EMP, GTA will prepare monthly progress reports summarizing the remedial activities occurring during that month. These monthly progress reports will be submitted to the Client and to MDE by the 15th day of the following month, to demonstrate implementation of this EMP. At the conclusion of EMP implementation, GTA will prepare an EMP Completion Report.

8.3 Maintenance

Soil capping of the utility areas of the Site will require periodic maintenance activities. The maintenance plan that will be implemented by future owners or occupants of the site is presented below.

Physical maintenance requirements will include maintenance of the capped areas to prevent degradation of the cap and unacceptable exposure to the underlying soil. Yearly inspections of the cap will be conducted. The property owner will be responsible to direct an Environmental Consultant to perform an annual inspection of the onsite cap, performing maintenance to the cap, and maintaining all cap inspection records. Maintenance records will include, at a minimum, the date of the inspection, name of the inspector, any noted issues, and subsequent resolution of the issues. A Cap Inspection Form is attached in Appendix A.

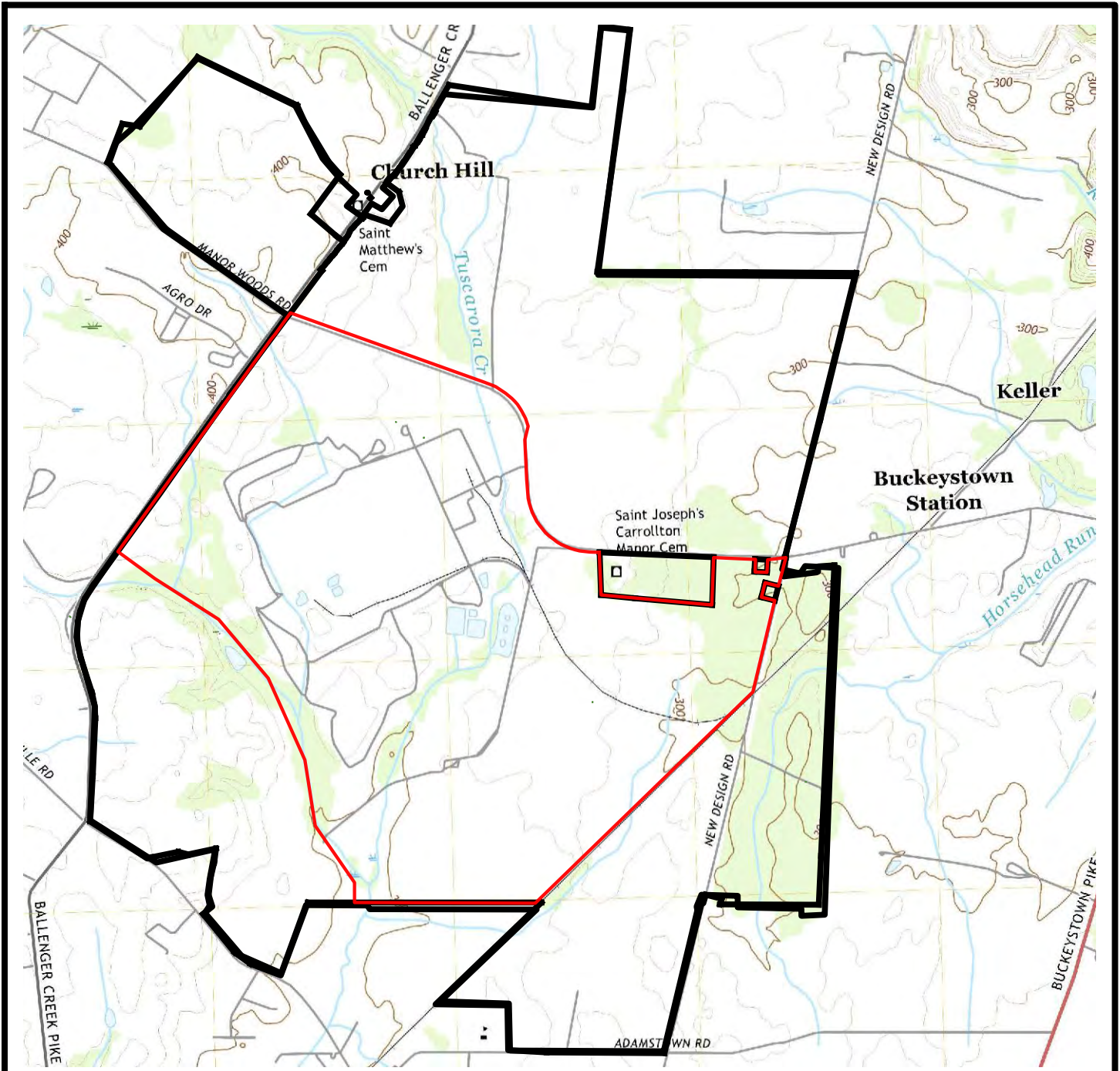
If construction or excavation is planned that will breach the cap within the SMA, the Site owner shall submit written notification to the MDE LRP at least 30 calendar days prior to any planned future excavation or intrusive activities on the Site. Such activities include any activity that breaches cap, including, but not limited to, borings for the purposes of geotechnical, soil, or groundwater sampling; landscaping activities; and utility installation or maintenance activities. Written notice of planned excavation activities will include the proposed date(s) for the excavation, location of the excavation(s), health and safety protocols (as required), MDE certified clean fill source and documentation (as required), and proposed characterization and disposal requirements (as required).

In the event of an unplanned emergency excavation on the Site, the Site owner shall follow all procedures set forth in this EMP and verbally or electronically notify the MDE within 24 hours following initiation of the emergency excavation activities. Within 10 calendar days following completion of an unplanned emergency excavation, the Site owner shall submit a detailed written report to the MDE.



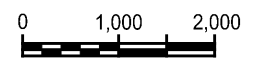
APPENDIX A

FIGURES



Legend

- Area in which initial infrastructure work is to be performed
- Approximate Boundary of the Former Eastalco Works Property



Approximate Scale
1 inch = 2,000 feet

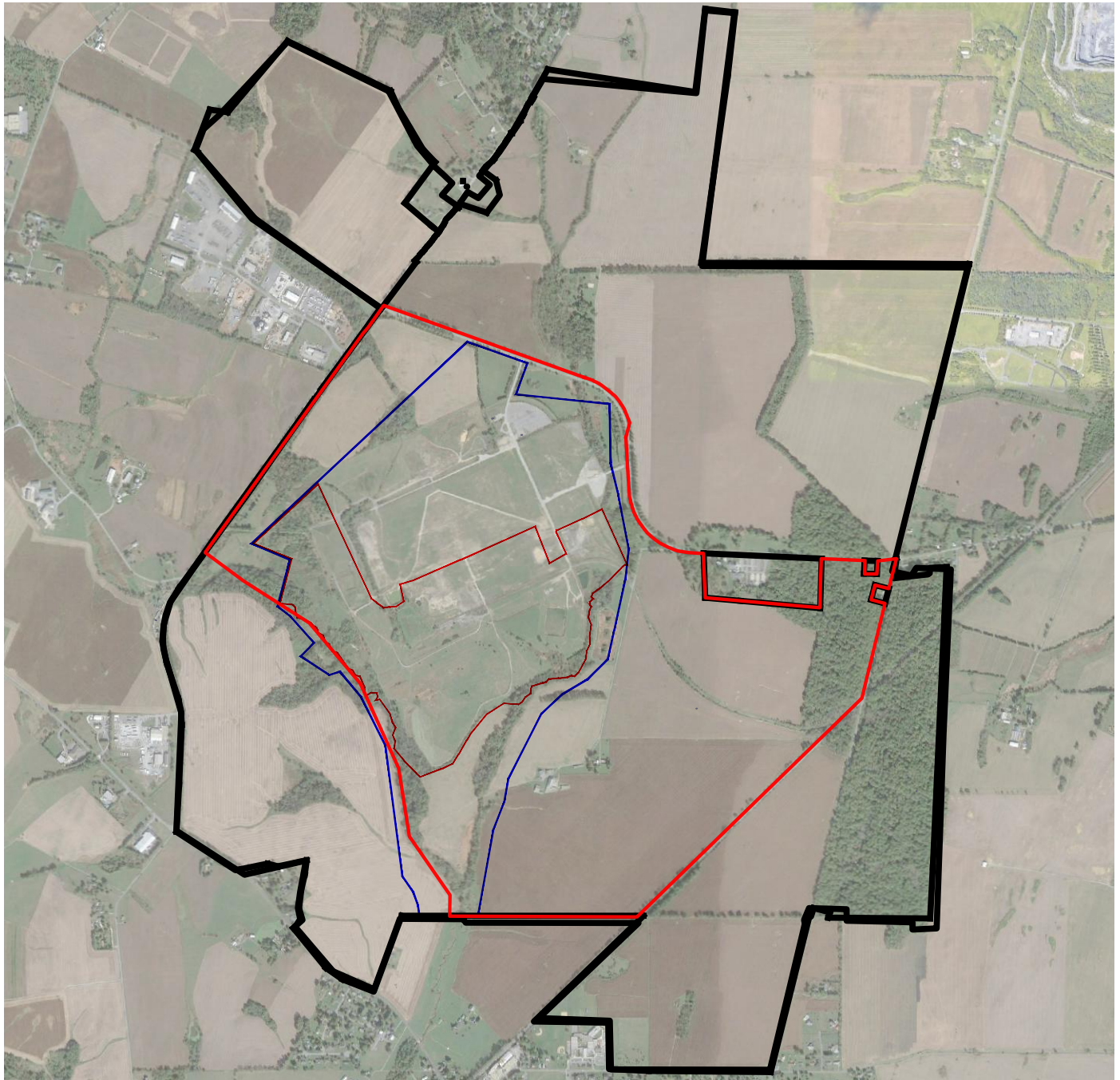
Notes

1. Based on USGS Buckeystown, MD 7.5 Minute Quadrangle Map.
2. Copyright 2013 MyTopo, Inc.



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**FORMER ALCOA EASTALCO WORKS
 INITIAL INFRASTRUCTURE PHASE**
 FREDERICK COUNTY, MARYLAND
SITE LOCATION MAP



Legend

- Area in which initial infrastructure work is to be performed
- Approximate boundary of the Former Alcoa Eastalco Works Property
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary

0 1,000 2,000



Approximate Scale
1 inch = 2,000 feet



Notes

Base image obtained from Google Earth Pro (Imagery date: 10/19/17).



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FORMER ALCOA EASTALCO WORKS
INITIAL INFRASTRUCUTRE PHASE

FREDERICK COUNTY, MARYLAND

SITE AERIAL

PROJECT: 201536

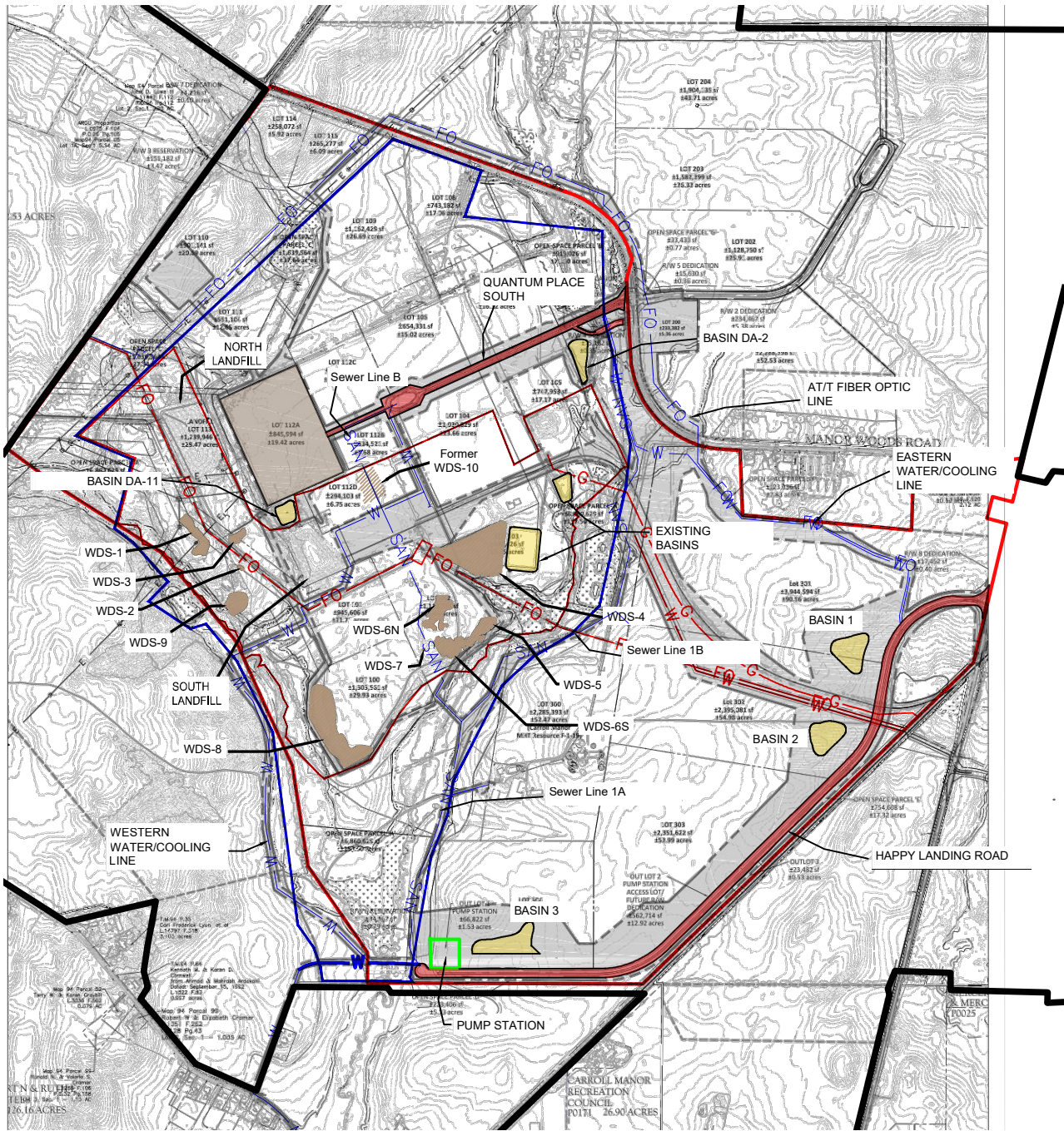
DATE: AUGUST 2022

SCALE: 1" = 2,000'

DRAWN BY: NMT

REVIEW BY: PHH

FIGURE: 2

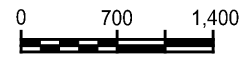


Notes

Base image obtained from "Quantum Frederick - Initial Infrastructure Grading Limits of Disturbance", drawn by Rodgers Consulting on 08-01-2022

Legend

- Area in which initial infrastructure work is to be performed
- Approximate boundary of the Former Alcoa Eastalco Works Property
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary
- Roadways
- Substation Pad
- Basins
- Limit of Disturbance
- Water Lines
- Sanitary Lines
- Gas Lines
- Dry Utilities
- Utilities to be installed
- Utilities to be abandoned



Approximate Scale
1 inch = 1,400 feet



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**FORMER ALCOA EASTALCO WORKS
INITIAL INFRASTRUCTURE PHASE**

FREDERICK COUNTY, MARYLAND

PROPOSED LOT PLAN

PROJECT: 201536

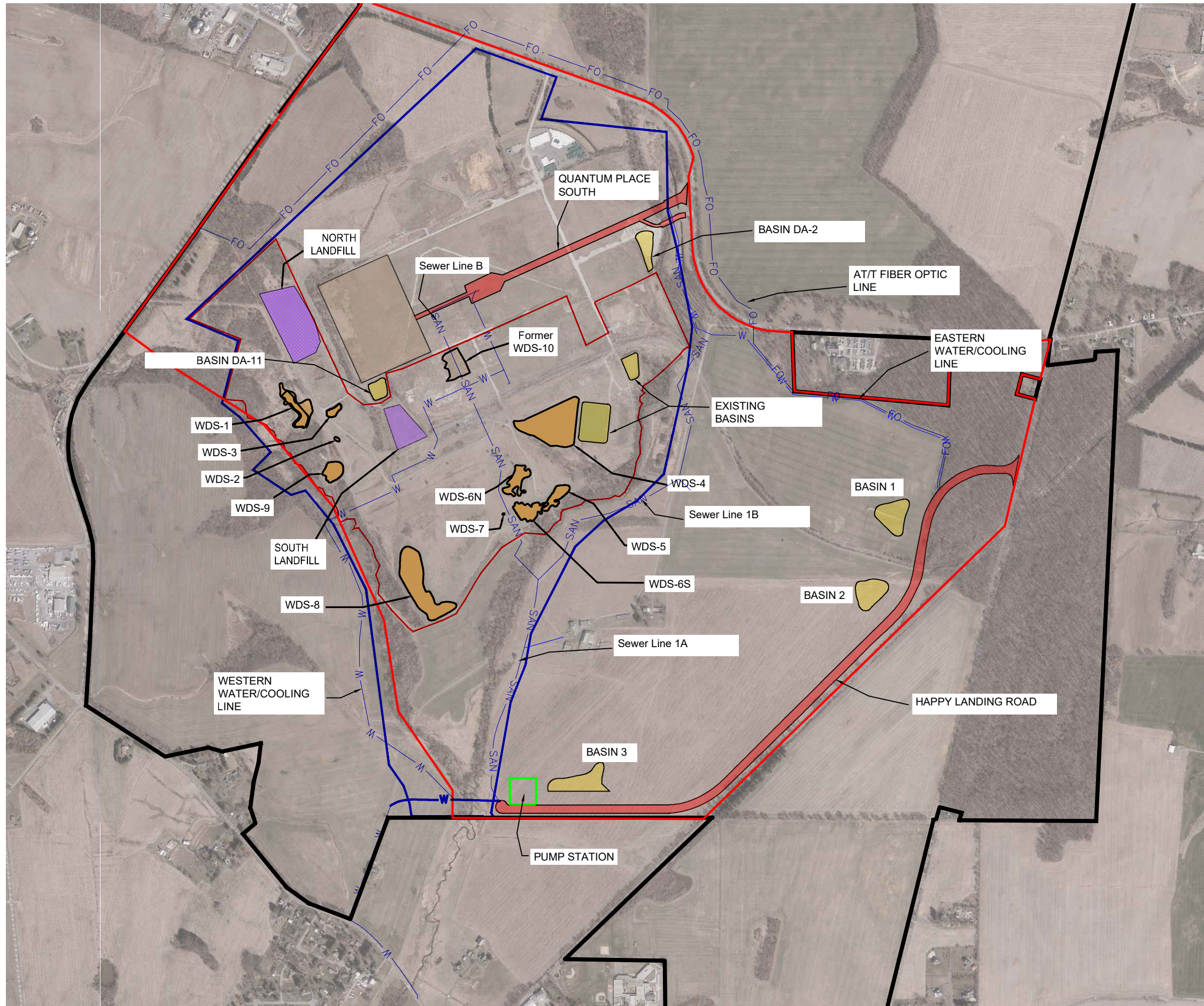
DATE: OCTOBER 2022

SCALE: 1" = 1,400'

DRAWN BY: CMM

REVIEW BY: PHH

FIGURE: 3

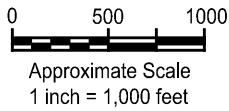


Legend

- Area in which initial infrastructure work is to be performed
- Approximate boundary of the Former Alcoa Eastalco Works Property
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary
- W — Water lines
- SAN — Sanitary Lines
- FO — Dry Utilities
- Roadways
- Substation Pad
- Limit of Disturbance
- Landfills
- Waste Disposal Sites
- Basins

Notes

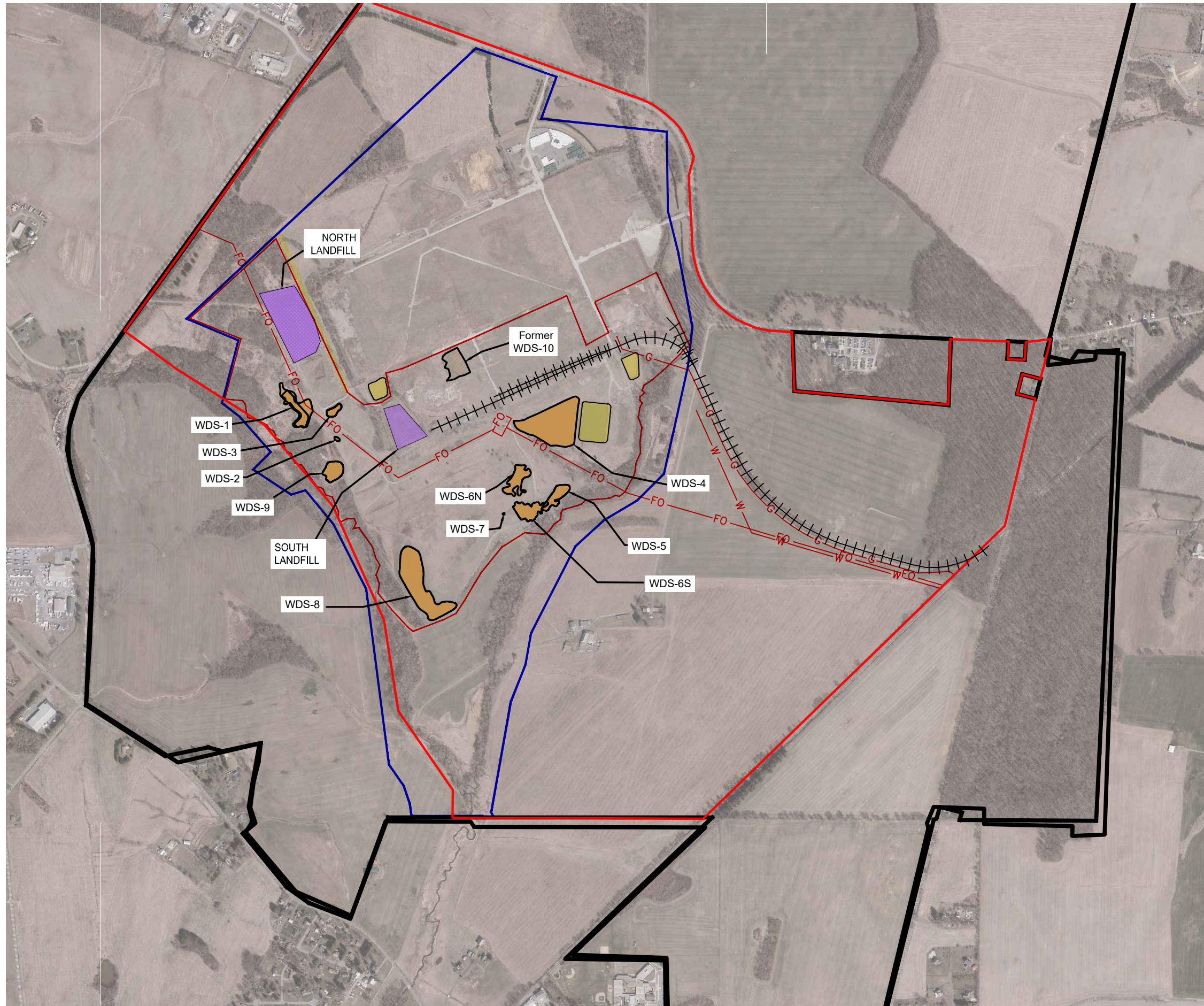
Base image sourced from Maryland Statewide Imagery Download Tool



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**FORMER ALCOA EASTALCO WORKS PROPERTY
 INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND
 PROPOSED UTILITIES AND
 ROADWAYS PLAN**

PROJECT: 201536	DATE: JANUARY 2023	SCALE: 1" = 1,000'
DRAWN BY: NMT	REVIEW BY: PHH	FIGURE: 4

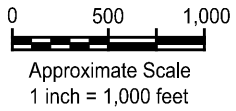


Legend

- Area in which initial infrastructure work is to be performed
- Approximate boundary of the Former Alcoa Eastalco Works Property
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary
- W — Water lines
- G — Gas Lines
- FO — Dry Utilities
- +++++ Railroads
- Landfills
- Waste Disposal Sites
- Rainwater pond

Notes

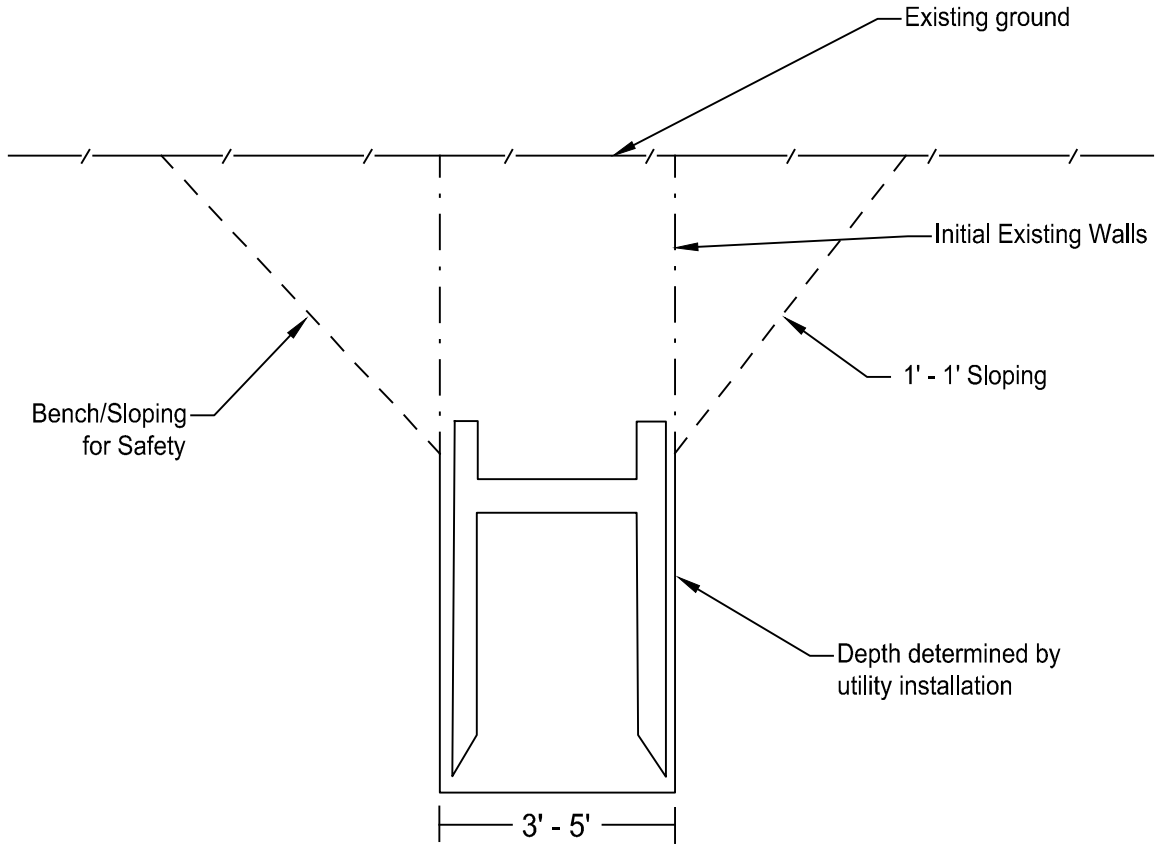
Base image sourced from Maryland Statewide Imagery Download Tool



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**FORMER ALCOA EASTALCO WORKS PROPERTY
 INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND
 UTILITY ABANDONMENT PLAN**

PROJECT: 201536	DATE: JANUARY 2023	SCALE: 1" = 1,000'
DRAWN BY: NMT	REVIEW BY: PHH	FIGURE: 5



Notes

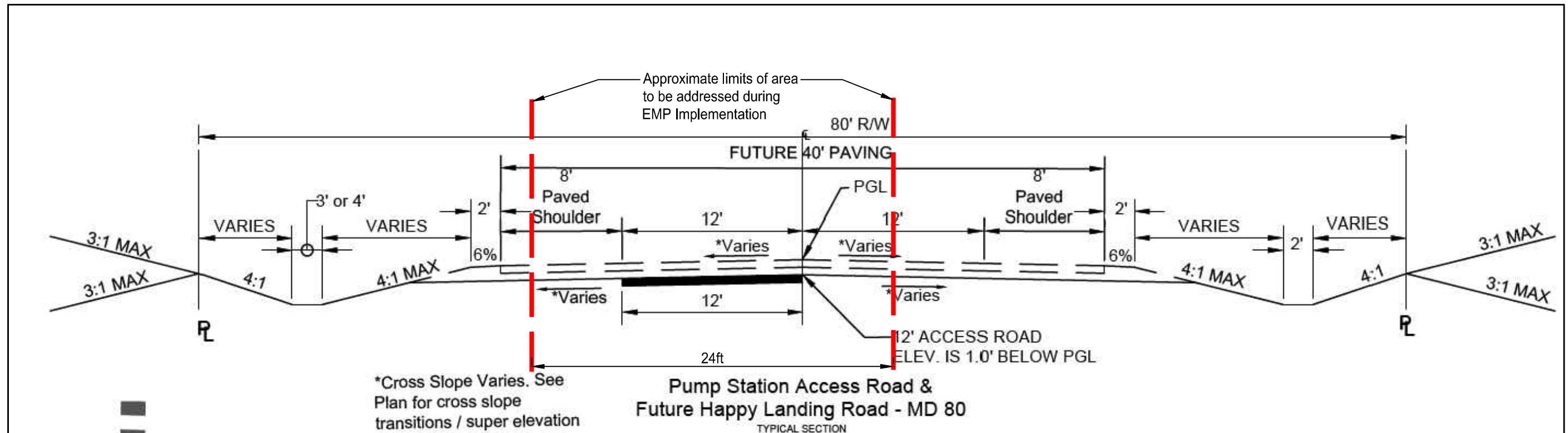
- 1. Drawing is not to scale.



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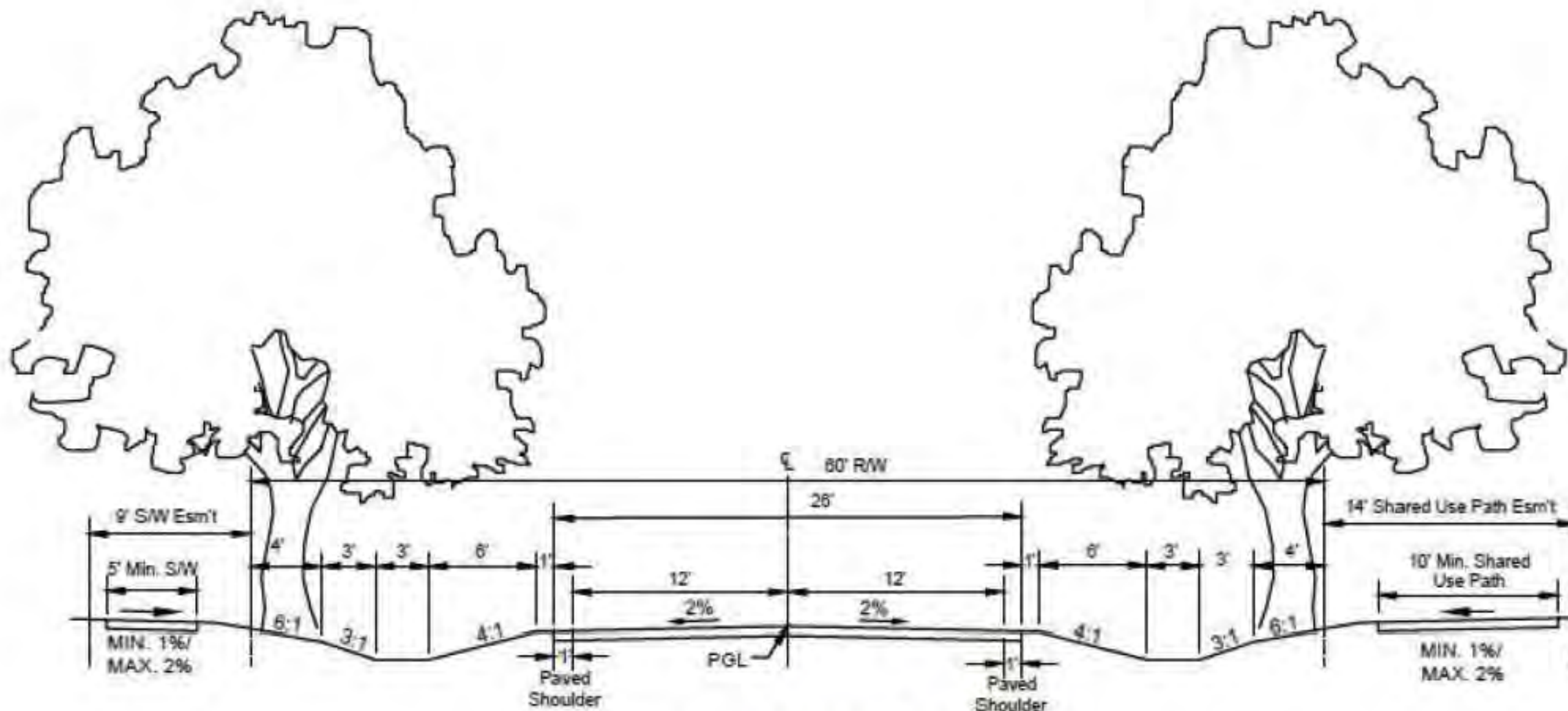
FORMER ALCOA EASTALCO WORKS
 INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND

UTILITY EXCAVATION PLAN



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FORMER ALCOA EASTALCO WORKS
 INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND
HAPPY LANDING ROAD
CROSS SECTION

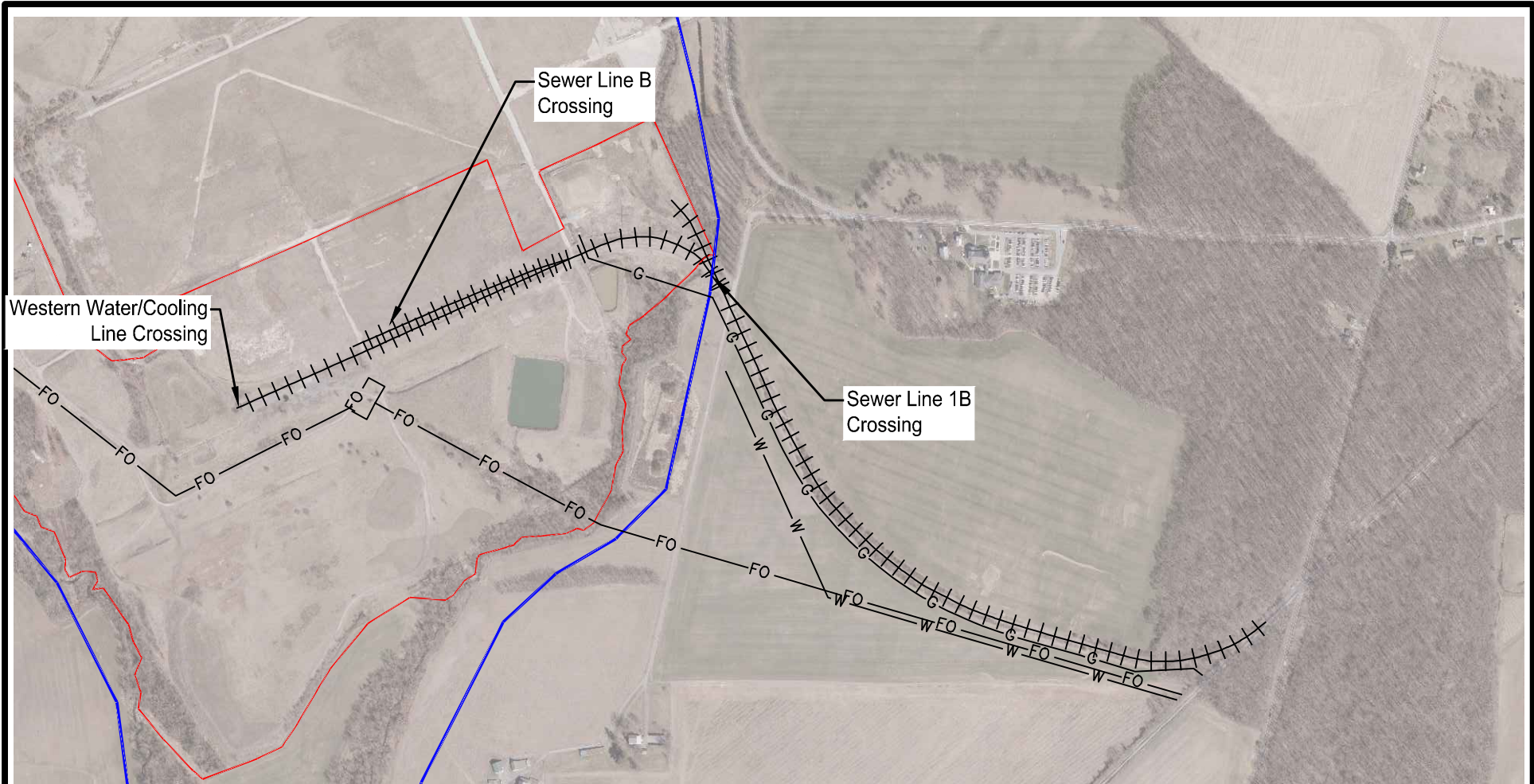


Quantum Place South
 FROM STATION 4+00 to 20+27
 TYPICAL SECTION



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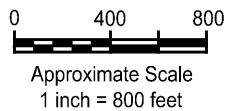
FORMER ALCOA EASTALCO WORKS
 INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND
QUANTUM PLACE SOUTH
CROSS SECTION



Legend

- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary

- W— Water lines
- G— Gas Lines
- FO— Dry Utilities
- SAN— Dry Utilities
- + + + + + Railroads



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FORMER ALCOA EASTALCO WORKS
INITIAL INFRASTRUCTURE PHASE
 FREDERICK COUNTY, MARYLAND
UTILITY CROSSING AT
RAILROADS

PROJECT: 31201536

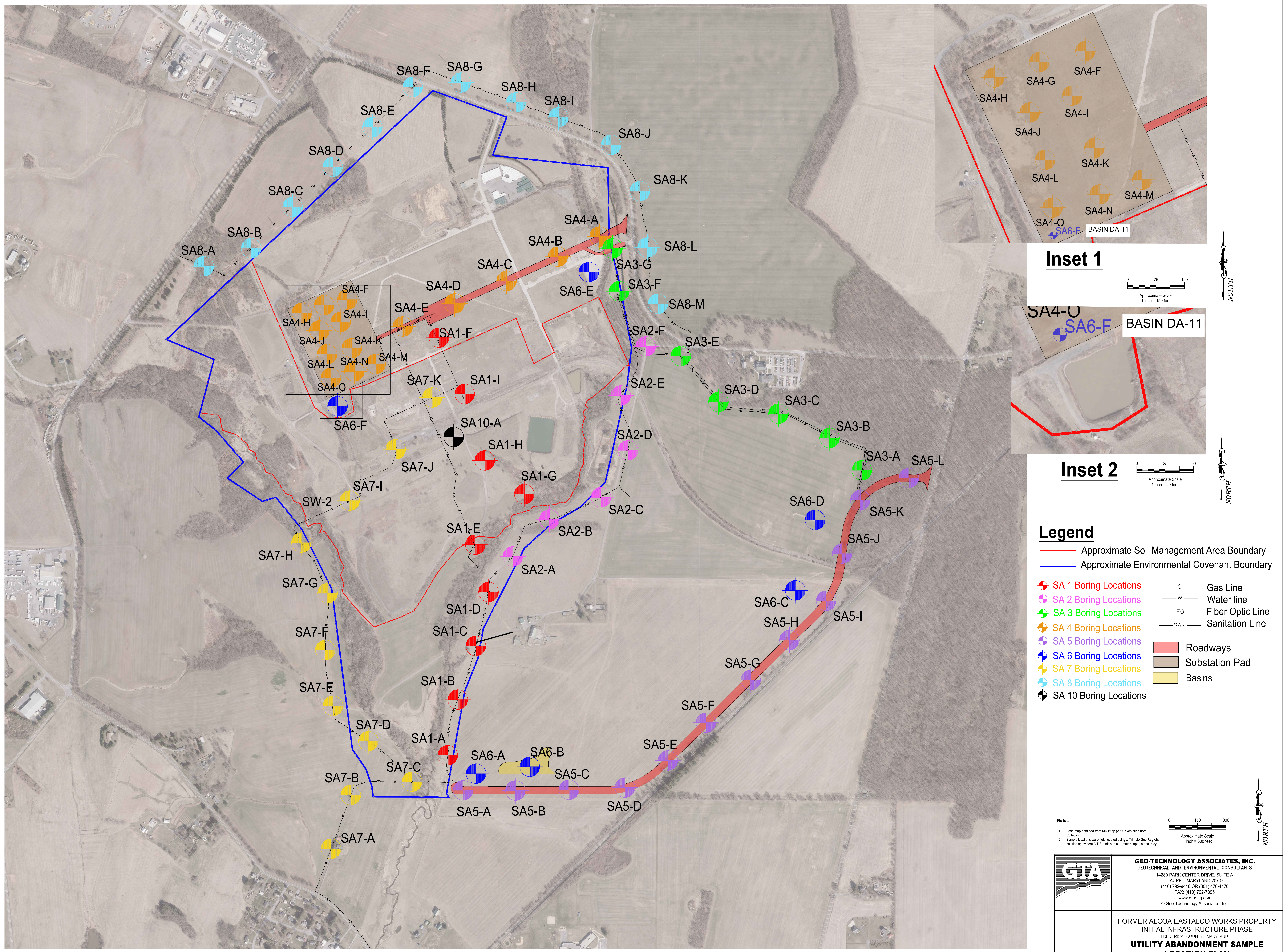
DATE: October 2022

SCALE: 1" = 800'

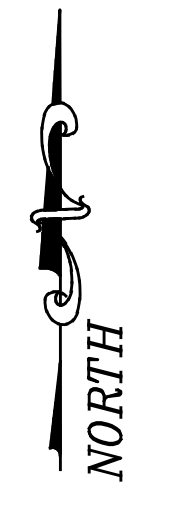
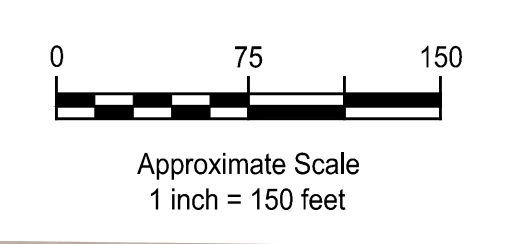
DESIGN BY: CMM

REVIEW BY: KPP

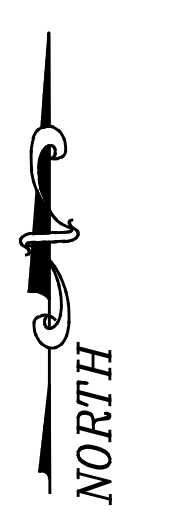
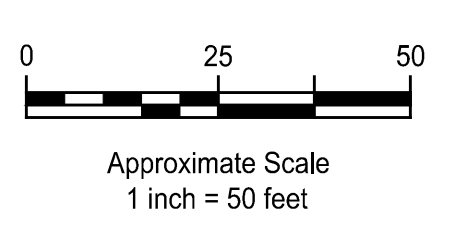
FIGURE: 9



Inset 1



Inset 2

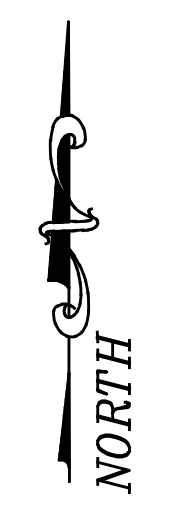
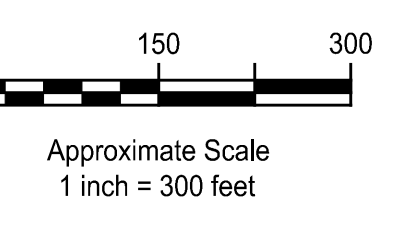


Legend

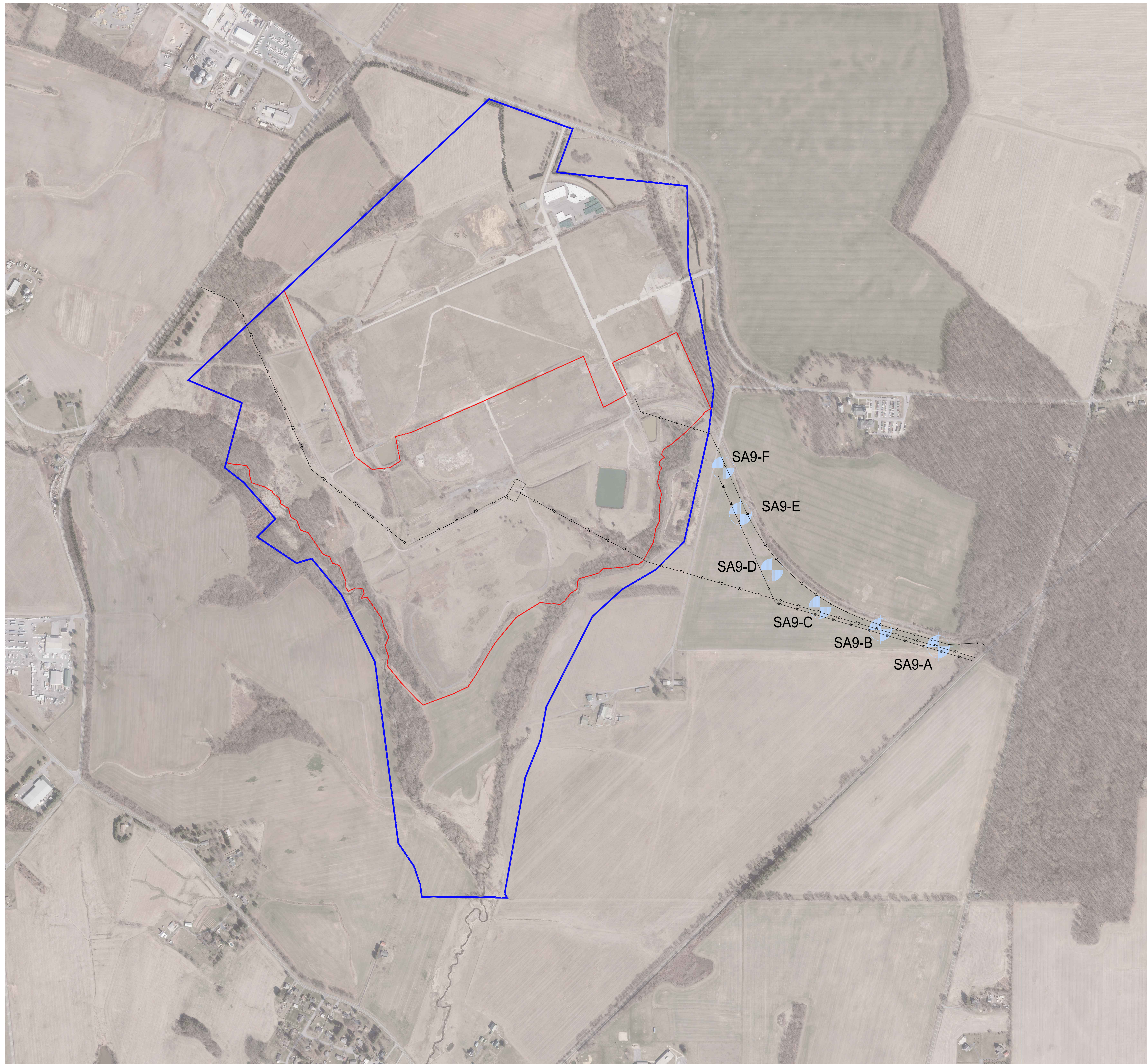
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary
- SA 1 Boring Locations
- SA 2 Boring Locations
- SA 3 Boring Locations
- SA 4 Boring Locations
- SA 5 Boring Locations
- SA 6 Boring Locations
- SA 7 Boring Locations
- SA 8 Boring Locations
- SA 10 Boring Locations
- Gas Line
- Water line
- FO — Fiber Optic Line
- SAN — Sanitation Line
- Roadways
- Substation Pad
- Basins

Notes

1. Base map obtained from MD Map (2000 Western Shore Collection).
2. Sample locations were field located using a Trimble Geo 7x global positioning system (GPS) unit with sub-meter capable accuracy.



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<p>FORMER ALCOA EASTALCO WORKS PROPERTY INITIAL INFRASTRUCTURE PHASE FREDERICK COUNTY, MARYLAND UTILITY ABANDONMENT SAMPLE LOCATION PLAN</p>	

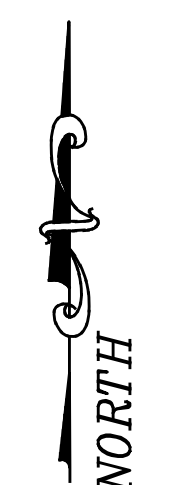
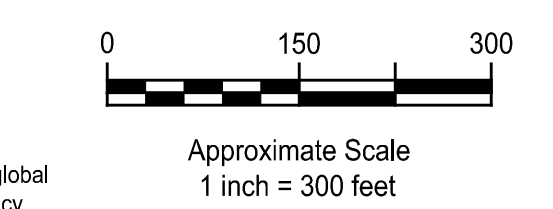


Legend

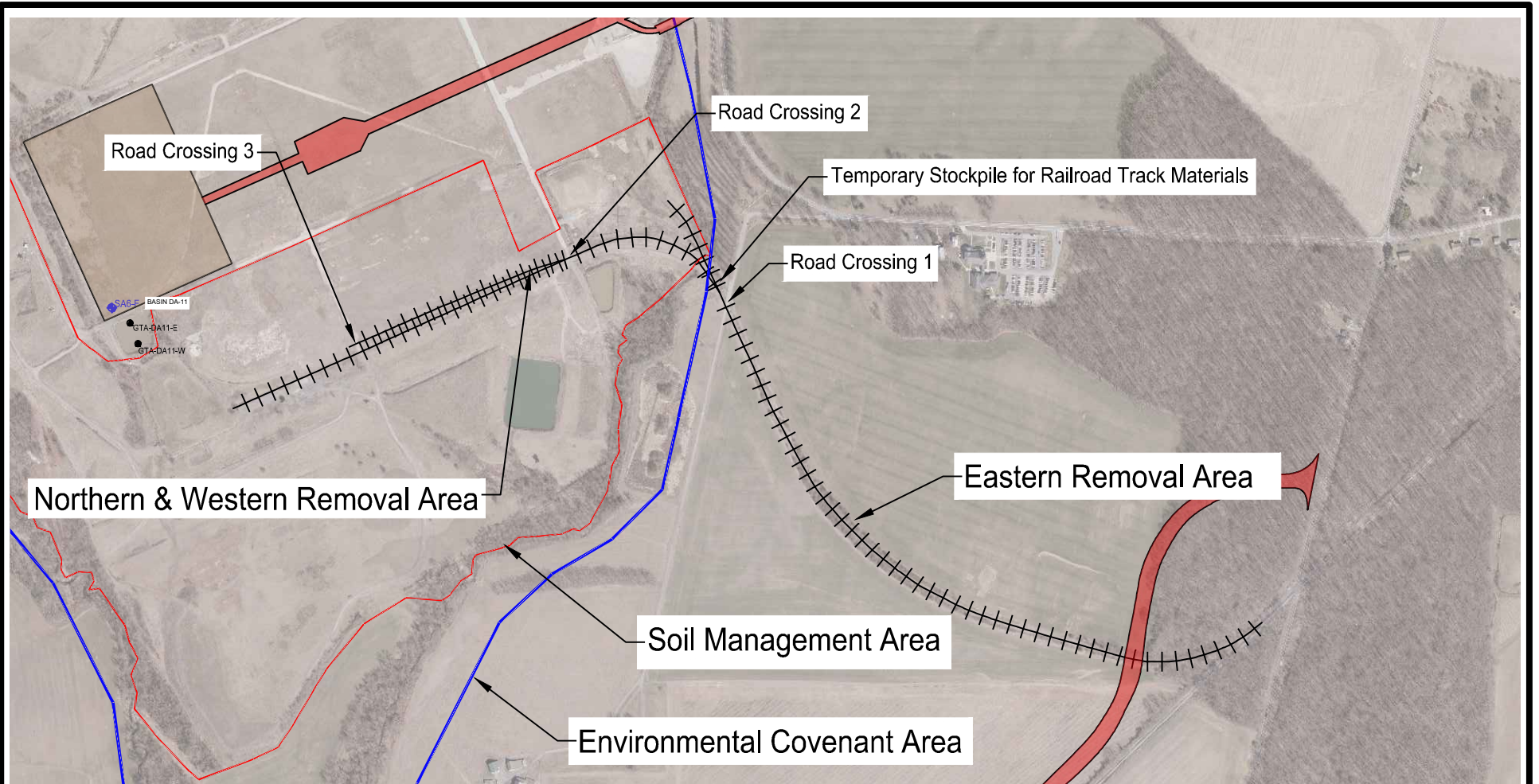
- Approximate Soil Management Area Boundary
- Approximate Environmental Covenant Boundary
- SA 9 Boring Locations
- G— Gas Line
- W— Water line
- FO— Fiber Optic Line

Notes

1. Base map obtained from MD Map (2000 Western Shore Collection).
2. Sample locations were field located using a Trimble Geo 7x global positioning system (GPS) unit with sub-meter capable accuracy.



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<p>FORMER ALCOA EASTLCO WORKS PROPERTY INITIAL INFRASTRUCTURE PHASE FREDERICK COUNTY, MARYLAND TO BE ABANDONED UTILITY AND BORING LOCATION PLAN</p>	



Approximate Scale
1 inch = 800 feet



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FORMER ALCOA EASTALCO WORKS
INITIAL INFRASTRUCTURE PHASE

FREDERICK COUNTY, MARYLAND

RAILROAD TRACK REMOVAL PLAN

PROJECT: 31201536

DATE: October 2022

SCALE: 1" = 800'

DESIGN BY: CMM

REVIEW BY: KPP

FIGURE: 12



APPENDIX B

TABLES

Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA1-A	GTA-SA1-A	GTA-SA1-B	GTA-SA1-B
			0-1	1-6.5	0-1	1-5.5
			Grab	Composite	Grab	Composite
			9/12/2022	9/12/2022	9/12/2022	9/12/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	<0.0097	<0.011	<0.010	<0.011
Acenaphthene	4,500	--	<0.0097	<0.011	<0.010	<0.011
Acenaphthylene	NE	--	<0.0097	<0.011	<0.010	<0.011
Anthracene	23,000	--	<0.0097	<0.011	<0.010	<0.011
Benzo(a)anthracene	21	--	<0.0097	<0.011	<0.010	<0.011
Benzo(a)pyrene	2	--	<0.0097	<0.011	<0.010	<0.011
Benzo(b)fluoranthene	21	--	<0.0097	<0.011	<0.010	<0.011
Benzo(g,h,i)perylene	NE	--	<0.0097	<0.011	<0.010	<0.011
Benzo(k)fluoranthene	210	--	<0.0097	<0.011	<0.010	<0.011
Chrysene	2,100	--	<0.0097	<0.011	<0.010	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.0097	<0.011	<0.010	<0.011
Fluoranthene	3,000	--	<0.0097	<0.011	<0.010	<0.011
Fluorene	3,000	--	<0.0097	<0.011	<0.010	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0097	<0.011	<0.010	<0.011
Naphthalene	17	--	<0.0097	<0.011	<0.010	<0.011
Phenanthrene	2,300	--	<0.0097	<0.011	<0.010	<0.011
Pyrene	2,300	--	<0.0097	<0.011	<0.010	<0.011
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<2.0	<2.3	<2.3	<2.6
Arsenic	3.0/26.8*	4.9	2.7	7.5	5.4	4.0
Beryllium	230	1.6	<0.39	2.4	1.5	1.8
Cadmium	98	1.1	<0.39	<0.46	<0.47	<0.52
Chromium ⁽³⁾	6.3	30	20	44	36	45
Copper	4,700	42	6.4	30	15	19
Lead	550	61	10	22	16	15
Mercury	4.6	0.14	<0.079	0.19	<0.094	<0.10
Nickel	2,200	22	8.1	52	25	37
Selenium	580	1.0	<0.39	<0.46	<0.47	<0.52
Silver	580	1.0	<0.39	<0.46	<0.47	<0.52
Thallium	1.2	1.5	<0.39	<0.46	<0.47	<0.52
Zinc	35,000	73	22	90	38	64
Organochlorine Pesticides						
4,4-DDD	2.5	--	<0.0047	--	<0.0049	--
4,4-DDE	9.3	--	<0.0047	--	<0.0049	--
4,4-DDT	8.5	--	<0.0047	--	<0.0049	--
Aldrin	0.18	--	<0.0047	--	<0.0049	--
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.12	--
Dieldrin	7.7	--	<0.0047	--	<0.0049	--
Endosulfan I	0.14	--	<0.0047	--	<0.0049	--
Endosulfan II	700	--	<0.0047	--	<0.0049	--
Endosulfan Sulfate	NE	--	<0.0047	--	<0.0049	--
Endrin	NE	--	<0.0047	--	<0.0049	--
Endrin Aldehyde	25	--	<0.0047	--	<0.0049	--
Endrin ketone	NE	--	<0.0047	--	<0.0049	--
Gamma-BHC (Lindane)	NE	--	<0.0047	--	<0.0049	--
Heptachlor	2.5	--	<0.0047	--	<0.0049	--
Heptachlor Epoxide	7.7	--	<0.0047	--	<0.0049	--
Methoxychlor	0.63	--	<0.0047	--	<0.0049	--
Toxaphene	0.33	--	<0.12	--	<0.12	--
alpha-BHC	410	--	<0.0047	--	<0.0049	--
beta-BHC	2.1	--	<0.0047	--	<0.0049	--
cis-Chlordane	0.36	--	<0.0047	--	<0.0049	--
delta-BHC	1.3	--	<0.0047	--	<0.0049	--
trans-Chlordane	NE	--	<0.0047	--	<0.0049	--
Chlorinated Herbicides						
2,4,5-T		--	<0.021	--	<0.023	--
2,4,5-TP (Silvex)		--	<0.021	--	<0.023	--
2,4-D		--	<0.21	--	<0.23	--
2,4-DB		--	<0.22	--	<0.24	--
Dalapon		--	<0.51	--	<0.56	--
Dicamba		--	<0.021	--	<0.023	--
Dichloroprop		--	<0.21	--	<0.23	--
Dinoseb		--	<0.11	--	<0.12	--
MCPA		--	<21	--	<23	--
MCPP		--	<21	--	<23	--
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See the report text for background information, assumptions, limitations, Samples collected Between September 8, 2022 and September 15, 2022

Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)

NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Standards for Soil and Groundwater; October 2018; Interim Final Guidan

ATC = Anticipated Typical Concentration for soils in Eastern Maryland

Shaded and bold values represent exceedance of MDE RCS

NA = Not applicable

NE = MDE standard not established

* = Risk-based calculated value

The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA1-C	GTA-SA1-C	GTA-SA1-D	GTA-SA1-D
			0-1	1-7	0-1	1-7
			Grab	Composite	Grab	Composite
			9/12/2022	9/12/2022	9/12/2022	9/12/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	<0.010	<0.0098	<0.010	<0.010
Acenaphthene	4,500	--	<0.010	<0.0098	<0.010	<0.010
Acenaphthylene	NE	--	<0.010	<0.0098	<0.010	<0.010
Anthracene	23,000	--	<0.010	<0.0098	<0.010	<0.010
Benzo(a)anthracene	21	--	<0.010	<0.0098	<0.010	<0.010
Benzo(a)pyrene	2	--	<0.010	<0.0098	<0.010	<0.010
Benzo(b)fluoranthene	21	--	<0.010	<0.0098	<0.010	<0.010
Benzo(g,h,i)perylene	NE	--	<0.010	<0.0098	<0.010	<0.010
Benzo(k)fluoranthene	210	--	<0.010	<0.0098	<0.010	<0.010
Chrysene	2,100	--	<0.010	<0.0098	<0.010	<0.010
Dibenz(a,h)Anthracene	2.1	--	<0.010	<0.0098	<0.010	<0.010
Fluoranthene	3,000	--	<0.010	<0.0098	<0.010	<0.010
Fluorene	3,000	--	<0.010	<0.0098	<0.010	<0.010
Indeno(1,2,3-c,d)Pyrene	21	--	<0.010	<0.0098	<0.010	<0.010
Naphthalene	17	--	<0.010	<0.0098	<0.010	<0.010
Phenanthrene	2,300	--	<0.010	<0.0098	<0.010	<0.010
Pyrene	2,300	--	<0.010	<0.0098	<0.010	<0.010
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<3.1	<2.6	<2.5	<2.9
Arsenic	3.0/26.8*	4.9	4.2	2.3	5.6	12
Beryllium	230	1.6	1.7	1.4	0.87	0.97
Cadmium	98	1.1	<0.62	<0.53	<0.51	<0.57
Chromium ⁽³⁾	6.3	30	38	31	39	33
Copper	4,700	42	18	13	10	17
Lead	550	61	14	13	19	25
Mercury	4.6	0.14	<0.12	<0.11	<0.10	<0.11
Nickel	2,200	22	29	19	13	25
Selenium	580	1.0	<0.62	<0.53	<0.51	<0.57
Silver	580	1.0	<0.62	<0.53	<0.51	<0.57
Thallium	1.2	1.5	<0.62	<0.53	<0.51	<0.57
Zinc	35,000	73	48	47	34	39
Organochlorine Pesticides						
4,4-DDD	2.5	--	<0.0050	--	<0.0050	--
4,4-DDE	9.3	--	<0.0050	--	<0.0050	--
4,4-DDT	8.5	--	<0.0050	--	<0.0050	--
Aldrin	0.18	--	<0.0050	--	<0.0050	--
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.13	--
Dieldrin	7.7	--	<0.0050	--	<0.0050	--
Endosulfan I	0.14	--	<0.0050	--	<0.0050	--
Endosulfan II	700	--	<0.0050	--	<0.0050	--
Endosulfan Sulfate	NE	--	<0.0050	--	<0.0050	--
Endrin	NE	--	<0.0050	--	<0.0050	--
Endrin Aldehyde	25	--	<0.0050	--	<0.0050	--
Endrin ketone	NE	--	<0.0050	--	<0.0050	--
Gamma-BHC (Lindane)	NE	--	<0.0050	--	<0.0050	--
Heptachlor	2.5	--	<0.0050	--	<0.0050	--
Heptachlor Epoxide	7.7	--	<0.0050	--	<0.0050	--
Methoxychlor	0.63	--	<0.0050	--	<0.0050	--
Toxaphene	0.33	--	<0.12	--	<0.13	--
alpha-BHC	410	--	<0.0050	--	<0.0050	--
beta-BHC	2.1	--	<0.0050	--	<0.0050	--
cis-Chlordane	0.36	--	<0.0050	--	<0.0050	--
delta-BHC	1.3	--	<0.0050	--	<0.0050	--
trans-Chlordane	NE	--	<0.0050	--	<0.0050	--
Chlorinated Herbicides						
2,4,5-T		--	<0.024	--	<0.024	--
2,4,5-TP (Silvex)		--	<0.024	--	<0.024	--
2,4-D		--	<0.23	--	<0.23	--
2,4-DB		--	<0.24	--	<0.24	--
Dalapon		--	<0.57	--	<0.56	--
Dicamba		--	<0.023	--	<0.023	--
Dichloroprop		--	<0.23	--	<0.23	--
Dinoseb		--	<0.12	--	<0.12	--
MCPA		--	<23	--	<23	--
MCPP		--	<23	--	<23	--
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See etc.
 Samples collected between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Stance (Update No. 3)
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA1-E	GTA-SA1-E	GTA-SA1-F	GTA-SA1-F
			0-1	1-8	0-1	1-17
			Grab	Composite	Grab	Composite
			9/15/2022	9/15/2022	9/9/2022	9/9/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	<0.011	<0.011	<0.0085	<0.0094
Acenaphthene	4,500	--	0.012	<0.011	<0.0085	<0.0094
Acenaphthylene	NE	--	<0.011	<0.011	<0.0085	<0.0094
Anthracene	23,000	--	0.015	<0.011	<0.0085	<0.0094
Benzo(a)anthracene	21	--	0.11	<0.011	<0.0085	<0.0094
Benzo(a)pyrene	2	--	0.15	<0.011	<0.0085	<0.0094
Benzo(b)fluoranthene	21	--	0.14	<0.011	<0.0085	<0.0094
Benzo(g,h,i)perylene	NE	--	0.11	<0.011	<0.0085	<0.0094
Benzo(k)fluoranthene	210	--	0.11	<0.011	<0.0085	<0.0094
Chrysene	2,100	--	0.13	<0.011	<0.0085	<0.0094
Dibenz(a,h)Anthracene	2.1	--	0.034	<0.011	<0.0085	<0.0094
Fluoranthene	3,000	--	0.16	<0.011	0.0092	<0.0094
Fluorene	3,000	--	<0.011	<0.011	<0.0085	<0.0094
Indeno(1,2,3-c,d)Pyrene	21	--	0.11	<0.011	<0.0085	<0.0094
Naphthalene	17	--	<0.011	<0.011	<0.0085	<0.0094
Phenanthrene	2,300	--	0.055	<0.011	<0.0085	<0.0094
Pyrene	2,300	--	0.16	<0.011	0.0088	<0.0094
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<2.9	<2.8	<2.1	<2.2
Arsenic	3.0/26.8*	4.9	7.9	7.0	2.7	4.8
Beryllium	230	1.6	1.5	1.3	<0.42	1.3
Cadmium	98	1.1	<0.57	<0.57	<0.42	<0.43
Chromium ⁽³⁾	6.3	30	26	27	14	33
Copper	4,700	42	25	24	6.6	18
Lead	550	61	19	14	4.9	8.5
Mercury	4.6	0.14	<0.11	<0.11	<0.085	<0.087
Nickel	2,200	22	37	37	16	38
Selenium	580	1.0	<0.57	<0.57	<0.42	<0.43
Silver	580	1.0	<0.57	<0.57	<0.42	<0.43
Thallium	1.2	1.5	<0.57	<0.57	<0.42	<0.43
Zinc	35,000	73	75	65	41	57
Organochlorine Pesticides						
4,4-DDD	2.5	--	<0.0059	--	<0.0042	--
4,4-DDE	9.3	--	<0.0059	--	<0.0042	--
4,4-DDT	8.5	--	<0.0059	--	<0.0042	--
Aldrin	0.18	--	<0.0059	--	<0.0042	--
Chlordane (n.o.s.)	7.7	--	<0.15	--	<0.10	--
Dieldrin	7.7	--	<0.0059	--	<0.0042	--
Endosulfan I	0.14	--	<0.0059	--	<0.0042	--
Endosulfan II	700	--	<0.0059	--	<0.0042	--
Endosulfan Sulfate	NE	--	<0.0059	--	<0.0042	--
Endrin	NE	--	<0.0059	--	<0.0042	--
Endrin Aldehyde	25	--	<0.0059	--	<0.0042	--
Endrin ketone	NE	--	--	--	<0.0042	--
Gamma-BHC (Lindane)	NE	--	<0.0059	--	<0.0042	--
Heptachlor	2.5	--	<0.0059	--	<0.0042	--
Heptachlor Epoxide	7.7	--	<0.0059	--	<0.0042	--
Methoxychlor	0.63	--	--	--	<0.0042	--
Toxaphene	0.33	--	<0.15	--	<0.10	--
alpha-BHC	410	--	<0.0059	--	<0.0042	--
beta-BHC	2.1	--	<0.0059	--	<0.0042	--
cis-Chlordane	0.36	--	<0.0059	--	<0.0042	--
delta-BHC	1.3	--	<0.0059	--	<0.0042	--
trans-Chlordane	NE	--	<0.0059	--	<0.0042	--
Chlorinated Herbicides						
2,4,5-T		--	<0.023	--	<0.020	--
2,4,5-TP (Silvex)		--	<0.023	--	<0.020	--
2,4-D		--	<0.23	--	<0.20	--
2,4-DB		--	<0.24	--	<0.21	--
Dalapon		--	<0.56	--	<0.49	--
Dicamba		--	<0.023	--	<0.020	--
Dichloroprop		--	<0.23	--	<0.20	--
Dinoseb		--	<0.12	--	<0.10	--
MCPA		--	<23	--	<20	--
MCPP		--	<23	--	<20	--
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:
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Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA1-G	GTA-SA1-G	GTA-SA1-H	GTA-SA1-H
			0-1	1-19	0-1	1-19
			Grab	Composite	Grab	Composite
			9/9/2022	9/9/2022	9/9/2022	9/9/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	1.0	<0.010	<0.0095	<0.011
Acenaphthene	4,500	--	2.2	<0.010	<0.0095	<0.011
Acenaphthylene	NE	--	<0.094	<0.010	<0.0095	<0.011
Anthracene	23,000	--	3.0	<0.010	<0.0095	<0.011
Benzo(a)anthracene	21	--	6.1	<0.010	0.013	<0.011
Benzo(a)pyrene	2	--	6.0	<0.010	0.015	<0.011
Benzo(b)fluoranthene	21	--	6.3	<0.010	0.014	<0.011
Benzo(g,h,i)perylene	NE	--	3.7	<0.010	0.011	<0.011
Benzo(k)fluoranthene	210	--	4.9	<0.010	0.012	<0.011
Chrysene	2,100	--	5.9	<0.010	0.012	<0.011
Dibenz(a,h)Anthracene	2.1	--	1.3	<0.010	<0.0095	<0.011
Fluoranthene	3,000	--	16	<0.010	0.016	<0.011
Fluorene	3,000	--	2.7	<0.010	<0.0095	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	3.7	<0.010	0.011	<0.011
Naphthalene	17	--	0.77	<0.010	<0.0095	<0.011
Phenanthrene	2,300	--	15	<0.010	<0.0095	<0.011
Pyrene	2,300	--	11	<0.010	0.016	<0.011
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<2.1	<2.6	<2.5	<2.9
Arsenic	3.0/26.8*	4.9	5.4	2.9	5.6	6.6
Beryllium	230	1.6	1.2	0.93	1.7	1.5
Cadmium	98	1.1	<0.41	<0.51	<0.49	<0.58
Chromium ⁽³⁾	6.3	30	33	46	32	16
Copper	4,700	42	20	21	20	22
Lead	550	61	12	14	12	11
Mercury	4.6	0.14	<0.083	<0.10	<0.099	<0.12
Nickel	2,200	22	37	40	40	34
Selenium	580	1.0	<0.41	<0.51	<0.49	<0.58
Silver	580	1.0	<0.41	<0.51	<0.49	<0.58
Thallium	1.2	1.5	<0.41	<0.51	<0.49	<0.58
Zinc	35,000	73	65	72	75	50
Organochlorine Pesticides						
4,4-DDD	2.5	--	<0.0044	--	<0.0044	--
4,4-DDE	9.3	--	<0.0044	--	<0.0044	--
4,4-DDT	8.5	--	<0.0044	--	<0.0044	--
Aldrin	0.18	--	<0.0044	--	<0.0044	--
Chlordane (n.o.s.)	7.7	--	<0.11	--	<0.11	--
Dieldrin	7.7	--	<0.0044	--	<0.0044	--
Endosulfan I	0.14	--	<0.0044	--	<0.0044	--
Endosulfan II	700	--	<0.0044	--	<0.0044	--
Endosulfan Sulfate	NE	--	<0.0044	--	<0.0044	--
Endrin	NE	--	<0.0044	--	<0.0044	--
Endrin Aldehyde	25	--	<0.0044	--	<0.0044	--
Endrin ketone	NE	--	<0.0044	--	<0.0044	--
Gamma-BHC (Lindane)	NE	--	<0.0044	--	<0.0044	--
Heptachlor	2.5	--	<0.0044	--	<0.0044	--
Heptachlor Epoxide	7.7	--	<0.0044	--	<0.0044	--
Methoxychlor	0.63	--	<0.0044	--	<0.0044	--
Toxaphene	0.33	--	<0.11	--	<0.11	--
alpha-BHC	410	--	<0.0044	--	<0.0044	--
beta-BHC	2.1	--	<0.0044	--	<0.0044	--
cis-Chlordane	0.36	--	<0.0044	--	<0.0044	--
delta-BHC	1.3	--	<0.0044	--	<0.0044	--
trans-Chlordane	NE	--	<0.0044	--	<0.0044	--
Chlorinated Herbicides						
2,4,5-T		--	<0.021	--	<0.022	--
2,4,5-TP (Silvex)		--	<0.021	--	<0.022	--
2,4-D		--	<0.20	--	<0.22	--
2,4-DB		--	<0.21	--	<0.23	--
Dalapon		--	<0.49	--	<0.54	--
Dicamba		--	<0.020	--	<0.022	--
Dichloroprop		--	<0.20	--	<0.22	--
Dinoseb		--	<0.10	--	<0.11	--
MCPA		--	<20	--	<22	--
MCPP		--	<20	--	<22	--
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA1-I	GTA-SA1-I	GTA-SA2-A	GTA-SA2-A	GTA-SA2-B	GTA-SA2-B	GTA-SA2-C
			0-1	1-12.5	0-1	1-18	0-1	1-18	0-1
			Grab	Composite	Grab	Composite	Grab	Composite	Grab
			9/9/2022	9/9/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022
Polycyclic Aromatic Hydrocarbons (PAHs)									
2-Methylnaphthalene	300	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Acenaphthene	4,500	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Acenaphthylene	NE	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Anthracene	23,000	--	0.013	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Benzo(a)anthracene	21	--	0.032	0.096	<0.010	<0.011	<0.0099	<0.012	<0.010
Benzo(a)pyrene	2	--	0.028	0.092	<0.010	<0.011	<0.0099	<0.012	<0.010
Benzo(b)fluoranthene	21	--	0.033	0.19	<0.010	<0.011	<0.0099	<0.012	<0.010
Benzo(g,h,i)perylene	NE	--	0.020	0.085	<0.010	<0.011	<0.0099	<0.012	<0.010
Benzo(k)fluoranthene	210	--	0.025	0.080	<0.010	<0.011	<0.0099	<0.012	<0.010
Chrysene	2,100	--	0.036	0.18	<0.010	<0.011	<0.0099	<0.012	<0.010
Dibenz(a,h)Anthracene	2.1	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Fluoranthene	3,000	--	0.075	0.081	<0.010	<0.011	<0.0099	<0.012	<0.010
Fluorene	3,000	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Indeno(1,2,3-c,d)Pyrene	21	--	0.019	0.074	<0.010	<0.011	<0.0099	<0.012	<0.010
Naphthalene	17	--	<0.0090	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Phenanthrene	2,300	--	0.070	<0.044	<0.010	<0.011	<0.0099	<0.012	<0.010
Pyrene	2,300	--	0.060	0.14	<0.010	<0.011	<0.0099	<0.012	<0.010
Priority Pollutant (PP) Metals									
Antimony	47	6.8	<2.5	<2.1	<2.6	<2.4	<2.1	<2.6	<2.4
Arsenic	3.0/26.8*	4.9	3.2	3.2	6.8	8.3	5.9	4.6	5.6
Beryllium	230	1.6	0.65	0.45	0.83	0.90	0.99	1.1	0.76
Cadmium	98	1.1	<0.51	<0.43	0.52	<0.48	<0.42	<0.53	<0.48
Chromium ⁽³⁾	6.3	30	24	18	43	26	33	16	31
Copper	4,700	42	13	13	19	16	17	31	17
Lead	550	61	18	27	16	22	16	11	15
Mercury	4.6	0.14	<0.10	<0.085	<0.10	<0.096	<0.084	<0.11	<0.095
Nickel	2,200	22	19	14	19	21	24	46	24
Selenium	580	1.0	<0.51	<0.43	<0.52	<0.48	<0.42	<0.53	<0.48
Silver	580	1.0	<0.51	<0.43	<0.52	<0.48	<0.42	<0.53	<0.48
Thallium	1.2	1.5	<0.51	<0.43	<0.52	<0.48	<0.42	<0.53	<0.48
Zinc	35,000	73	53	41	46	36	50	50	43
Organochlorine Pesticides									
4,4-DDD	2.5	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
4,4-DDE	9.3	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
4,4-DDT	8.5	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Aldrin	0.18	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Chlordane (n.o.s.)	7.7	--	<0.11	--	<0.12	--	<0.12	--	<0.12
Dieldrin	7.7	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endosulfan I	0.14	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endosulfan II	700	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endosulfan Sulfate	NE	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endrin	NE	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endrin Aldehyde	25	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Endrin ketone	NE	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Gamma-BHC (Lindane)	NE	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Heptachlor	2.5	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Heptachlor Epoxide	7.7	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Methoxychlor	0.63	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Toxaphene	0.33	--	<0.11	--	<0.12	--	<0.12	--	<0.12
alpha-BHC	410	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
beta-BHC	2.1	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
cis-Chlordane	0.36	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
delta-BHC	1.3	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
trans-Chlordane	NE	--	<0.0043	--	<0.0050	--	<0.0048	--	<0.0048
Chlorinated Herbicides									
2,4,5-T	--	--	<0.020	--	<0.023	--	<0.022	--	<0.023
2,4,5-TP (Silvex)	--	--	<0.020	--	<0.023	--	<0.022	--	<0.023
2,4-D	--	--	<0.20	--	<0.23	--	<0.22	--	<0.23
2,4-DB	--	--	<0.20	--	<0.23	--	<0.22	--	<0.24
Dalapon	--	--	<0.48	--	<0.55	--	<0.53	--	<0.56
Dicamba	--	--	<0.020	--	<0.023	--	<0.022	--	<0.023
Dichloroprop	--	--	<0.20	--	<0.23	--	<0.22	--	<0.23
Dinoseb	--	--	<0.099	--	<0.12	--	<0.11	--	<0.12
MCPA	--	--	<19	--	<23	--	<22	--	<23
MCPA	--	--	<20	--	<23	--	<22	--	<23
Total Petroleum Hydrocarbons (TPH)									
TPH DRO	620	--	--	--	--	--	--	--	--

Notes:
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Samples collected between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA2-C	GTA-SA2-D	GTA-SA2-D	GTA-SA2-E	GTA-SA2-E	
			1-18	0-1	1-5	0-1	1-5	
			Composite	Grab	Composite	Grab	Composite	
			9/12/2022	9/12/2022	9/12/2022	9/9/2022	9/9/2022	
Polycyclic Aromatic Hydrocarbons (PAHs)								
2-Methylnaphthalene	300	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Acenaphthene	4,500	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Acenaphthylene	NE	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Anthracene	23,000	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Benzo(a)anthracene	21	--	<0.011	0.086	<0.010	<0.011	<0.011	
Benzo(a)pyrene	2	--	<0.011	0.11	<0.010	<0.011	<0.011	
Benzo(b)fluoranthene	21	--	<0.011	0.096	<0.010	<0.011	<0.011	
Benzo(g,h,i)perylene	NE	--	<0.011	0.077	<0.010	<0.011	<0.011	
Benzo(k)fluoranthene	210	--	<0.011	0.082	<0.010	<0.011	<0.011	
Chrysene	2,100	--	<0.011	0.090	<0.010	<0.011	<0.011	
Dibenz(a,h)Anthracene	2.1	--	<0.011	0.021	<0.010	<0.011	<0.011	
Fluoranthene	3,000	--	<0.011	0.12	<0.010	<0.011	<0.011	
Fluorene	3,000	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	0.071	<0.010	<0.011	<0.011	
Naphthalene	17	--	<0.011	<0.011	<0.010	<0.011	<0.011	
Phenanthrene	2,300	--	<0.011	0.043	<0.010	<0.011	<0.011	
Pyrene	2,300	--	<0.011	0.12	<0.010	<0.011	<0.011	
Priority Pollutant (PP) Metals								
Antimony	47	6.8	<3.1	<3.1	<2.7	<2.9	<2.9	
Arsenic	3.0/26.8*	4.9	2.3	8.1	8.3	7.6	9.6	
Beryllium	230	1.6	<0.61	1.4	1.8	1.5	2.3	
Cadmium	98	1.1	<0.61	<0.62	<0.54	<0.59	<0.58	
Chromium ⁽³⁾	6.3	30	6.4	36	37	29	29	
Copper	4,700	42	13	17	17	21	31	
Lead	550	61	7.2	19	18	19	17	
Mercury	4.6	0.14	<0.12	<0.12	<0.11	<0.12	<0.12	
Nickel	2,200	22	8.9	32	33	36	34	
Selenium	580	1.0	<0.61	<0.62	<0.54	<0.59	<0.58	
Silver	580	1.0	<0.61	<0.62	<0.54	<0.59	<0.58	
Thallium	1.2	1.5	<0.61	<0.62	<0.54	<0.59	<0.58	
Zinc	35,000	73	21	71	61	65	57	
Organochlorine Pesticides								
4,4-DDD	2.5	--	--	<0.0053	--	<0.0053	--	
4,4-DDE	9.3	--	--	<0.0053	--	<0.0053	--	
4,4-DDT	8.5	--	--	<0.0053	--	<0.0053	--	
Aldrin	0.18	--	--	<0.0053	--	<0.0053	--	
Chlordane (n.o.s.)	7.7	--	--	<0.13	--	<0.13	--	
Dieldrin	7.7	--	--	<0.0053	--	<0.0053	--	
Endosulfan I	0.14	--	--	<0.0053	--	<0.0053	--	
Endosulfan II	700	--	--	<0.0053	--	<0.0053	--	
Endosulfan Sulfate	NE	--	--	<0.0053	--	<0.0053	--	
Endrin	NE	--	--	<0.0053	--	<0.0053	--	
Endrin Aldehyde	25	--	--	<0.0053	--	<0.0053	--	
Endrin ketone	NE	--	--	<0.0053	--	<0.0053	--	
Gamma-BHC (Lindane)	NE	--	--	<0.0053	--	<0.0053	--	
Heptachlor	2.5	--	--	<0.0053	--	<0.0053	--	
Heptachlor Epoxide	7.7	--	--	<0.0053	--	<0.0053	--	
Methoxychlor	0.63	--	--	<0.0053	--	<0.0053	--	
Toxaphene	0.33	--	--	<0.13	--	<0.13	--	
alpha-BHC	410	--	--	<0.0053	--	<0.0053	--	
beta-BHC	2.1	--	--	<0.0053	--	<0.0053	--	
cis-Chlordane	0.36	--	--	<0.0053	--	<0.0053	--	
delta-BHC	1.3	--	--	<0.0053	--	<0.0053	--	
trans-Chlordane	NE	--	--	<0.0053	--	<0.0053	--	
Chlorinated Herbicides								
2,4,5-T	--	--	--	<0.024	--	<0.025	--	
2,4,5-TP (Silvex)	--	--	--	<0.024	--	<0.025	--	
2,4-D	--	--	--	<0.23	--	<0.24	--	
2,4-DB	--	--	--	<0.24	--	<0.25	--	
Dalapon	--	--	--	<0.57	--	<0.59	--	
Dicamba	--	--	--	<0.023	--	<0.024	--	
Dichloroprop	--	--	--	<0.23	--	<0.24	--	
Dinoseb	--	--	--	<0.12	--	<0.12	--	
MCPA	--	--	--	<23	--	<24	--	
MCPP	--	--	--	<23	--	<24	--	
Total Petroleum Hydrocarbons (TPH)								
TPH DRO	620	--	--	--	--	--	--	

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Sta
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA2-F	GTA-SA2-F	GTA-SA3-A	GTA-SA3-A
			0-1	1-7	0-1	1-7
			Grab	Composite	Grab	Composite
			9/9/2022	9/9/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	<0.0096	<0.0094	<0.011	<0.011
Acenaphthene	4,500	--	<0.0096	<0.0094	<0.011	<0.011
Acenaphthylene	NE	--	<0.0096	<0.0094	<0.011	<0.011
Anthracene	23,000	--	<0.0096	<0.0094	<0.011	<0.011
Benzo(a)anthracene	21	--	<0.0096	<0.0094	<0.011	<0.011
Benzo(a)pyrene	2	--	<0.0096	<0.0094	<0.011	<0.011
Benzo(b)fluoranthene	21	--	<0.0096	<0.0094	<0.011	<0.011
Benzo(g,h,i)perylene	NE	--	<0.0096	<0.0094	<0.011	<0.011
Benzo(k)fluoranthene	210	--	<0.0096	<0.0094	<0.011	<0.011
Chrysene	2,100	--	<0.0096	<0.0094	<0.011	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.0096	<0.0094	<0.011	<0.011
Fluoranthene	3,000	--	<0.0096	<0.0094	<0.011	<0.011
Fluorene	3,000	--	<0.0096	<0.0094	<0.011	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0096	<0.0094	<0.011	<0.011
Naphthalene	17	--	<0.0096	<0.0094	<0.011	<0.011
Phenanthrene	2,300	--	<0.0096	<0.0094	<0.011	<0.011
Pyrene	2,300	--	<0.0096	<0.0094	<0.011	<0.011
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<2.3	<2.4	<2.8	<2.7
Arsenic	3.0/26.8*	4.9	6.5	7.0	9.9	8.5
Beryllium	230	1.6	<0.47	1.1	2.2	3.7
Cadmium	98	1.1	<0.47	<0.47	<0.57	<0.54
Chromium ⁽³⁾	6.3	30	37	38	74	61
Copper	4,700	42	13	21	34	33
Lead	550	61	15	12	17	14
Mercury	4.6	0.14	<0.094	<0.094	0.19	0.16
Nickel	2,200	22	17	57	56	53
Selenium	580	1.0	<0.47	<0.47	<0.57	<0.54
Silver	580	1.0	<0.47	<0.47	<0.57	<0.54
Thallium	1.2	1.5	<0.47	<0.47	<0.57	<0.54
Zinc	35,000	73	48	73	77	81
Organochlorine Pesticides						
4,4-DDD	2.5	--	<0.0045	--	<0.0051	--
4,4-DDE	9.3	--	<0.0045	--	<0.0051	--
4,4-DDT	8.5	--	<0.0045	--	<0.0051	--
Aldrin	0.18	--	<0.0045	--	<0.0051	--
Chlordane (n.o.s.)	7.7	--	<0.11	--	<0.13	--
Dieldrin	7.7	--	<0.0045	--	<0.0051	--
Endosulfan I	0.14	--	<0.0045	--	<0.0051	--
Endosulfan II	700	--	<0.0045	--	<0.0051	--
Endosulfan Sulfate	NE	--	<0.0045	--	<0.0051	--
Endrin	NE	--	<0.0045	--	<0.0051	--
Endrin Aldehyde	25	--	<0.0045	--	<0.0051	--
Endrin ketone	NE	--	<0.0045	--	<0.0051	--
Gamma-BHC (Lindane)	NE	--	<0.0045	--	<0.0051	--
Heptachlor	2.5	--	<0.0045	--	<0.0051	--
Heptachlor Epoxide	7.7	--	<0.0045	--	<0.0051	--
Methoxychlor	0.63	--	<0.0045	--	<0.0051	--
Toxaphene	0.33	--	<0.11	--	<0.13	--
alpha-BHC	410	--	<0.0045	--	<0.0051	--
beta-BHC	2.1	--	<0.0045	--	<0.0051	--
cis-Chlordane	0.36	--	<0.0045	--	<0.0051	--
delta-BHC	1.3	--	<0.0045	--	<0.0051	--
trans-Chlordane	NE	--	<0.0045	--	<0.0051	--
Chlorinated Herbicides						
2,4,5-T		--	<0.022	--	<0.024	--
2,4,5-TP (Silvex)		--	<0.022	--	<0.024	--
2,4-D		--	<0.21	--	<0.23	--
2,4-DB		--	<0.22	--	<0.24	--
Dalapon		--	<0.52	--	<0.57	--
Dicamba		--	<0.021	--	<0.023	--
Dichloroprop		--	<0.21	--	<0.23	--
Dinoseb		--	<0.11	--	<0.12	--
MCPA		--	<21	--	<23	--
MCPP		--	<21	--	<23	--
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA3-B	GTA-SA3-B	GTA-SA3-C
			0-1	1-8	0-1
			Grab	Composite	Grab
			9/13/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)					
2-Methylnaphthalene	300	--	<0.010	<0.011	<0.010
Acenaphthene	4,500	--	<0.010	<0.011	<0.010
Acenaphthylene	NE	--	<0.010	<0.011	<0.010
Anthracene	23,000	--	<0.010	<0.011	<0.010
Benzo(a)anthracene	21	--	<0.010	<0.011	<0.010
Benzo(a)pyrene	2	--	<0.010	<0.011	<0.010
Benzo(b)fluoranthene	21	--	<0.010	<0.011	<0.010
Benzo(g,h,i)perylene	NE	--	<0.010	<0.011	<0.010
Benzo(k)fluoranthene	210	--	<0.010	<0.011	<0.010
Chrysene	2,100	--	<0.010	<0.011	<0.010
Dibenz(a,h)Anthracene	2.1	--	<0.010	<0.011	<0.010
Fluoranthene	3,000	--	<0.010	<0.011	<0.010
Fluorene	3,000	--	<0.010	<0.011	<0.010
Indeno(1,2,3-c,d)Pyrene	21	--	<0.010	<0.011	<0.010
Naphthalene	17	--	<0.010	<0.011	<0.010
Phenanthrene	2,300	--	<0.010	<0.011	<0.010
Pyrene	2,300	--	<0.010	<0.011	<0.010
Priority Pollutant (PP) Metals					
Antimony	47	6.8	<2.4	<3.2	<2.2
Arsenic	3.0/26.8*	4.9	7.5	12	6.3
Beryllium	230	1.6	1.2	1.7	0.99
Cadmium	98	1.1	<0.48	<0.63	<0.44
Chromium ⁽³⁾	6.3	30	36	40	31
Copper	4,700	42	24	32	18
Lead	550	61	19	18	16
Mercury	4.6	0.14	<0.097	<0.13	<0.088
Nickel	2,200	22	33	64	22
Selenium	580	1.0	<0.48	<0.63	<0.44
Silver	580	1.0	<0.48	<0.63	<0.44
Thallium	1.2	1.5	<0.48	<0.63	<0.44
Zinc	35,000	73	56	99	49
Organochlorine Pesticides					
4,4-DDD	2.5	--	<0.0048	--	<0.0048
4,4-DDE	9.3	--	<0.0048	--	<0.0048
4,4-DDT	8.5	--	<0.0048	--	<0.0048
Aldrin	0.18	--	<0.0048	--	<0.0048
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.12
Dieldrin	7.7	--	<0.0048	--	<0.0048
Endosulfan I	0.14	--	<0.0048	--	<0.0048
Endosulfan II	700	--	<0.0048	--	<0.0048
Endosulfan Sulfate	NE	--	<0.0048	--	<0.0048
Endrin	NE	--	<0.0048	--	<0.0048
Endrin Aldehyde	25	--	<0.0048	--	<0.0048
Endrin ketone	NE	--	<0.0048	--	<0.0048
Gamma-BHC (Lindane)	NE	--	<0.0048	--	<0.0048
Heptachlor	2.5	--	<0.0048	--	<0.0048
Heptachlor Epoxide	7.7	--	<0.0048	--	<0.0048
Methoxychlor	0.63	--	<0.0048	--	<0.0048
Toxaphene	0.33	--	<0.12	--	<0.12
alpha-BHC	410	--	<0.0048	--	<0.0048
beta-BHC	2.1	--	<0.0048	--	<0.0048
cis-Chlordane	0.36	--	<0.0048	--	<0.0048
delta-BHC	1.3	--	<0.0048	--	<0.0048
trans-Chlordane	NE	--	<0.0048	--	<0.0048
Chlorinated Herbicides					
2,4,5-T		--	<0.023	--	<0.024
2,4,5-TP (Silvex)		--	<0.023	--	<0.024
2,4-D		--	<0.23	--	<0.24
2,4-DB		--	<0.24	--	<0.25
Dalapon		--	<0.56	--	<0.58
Dicamba		--	<0.023	--	<0.024
Dichloroprop		--	<0.23	--	<0.24
Dinoseb		--	<0.12	--	<0.12
MCPA		--	<23	--	<24
MCPP		--	<23	--	<24
Total Petroleum Hydrocarbons (TPH)					
TPH DRO	620	--	--	--	--

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Sta
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 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA3-C	GTA-SA3-D	GTA-SA3-D	GTA-SA3-E
			1-8	0-1	1-8	0-1
			Composite	Grab	Composite	Grab
			9/13/2022	9/13/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)						
2-Methylnaphthalene	300	--	<0.011	<0.011	<0.011	<0.011
Acenaphthene	4,500	--	<0.011	<0.011	<0.011	<0.011
Acenaphthylene	NE	--	<0.011	<0.011	<0.011	<0.011
Anthracene	23,000	--	<0.011	<0.011	<0.011	<0.011
Benzo(a)anthracene	21	--	<0.011	<0.011	<0.011	<0.011
Benzo(a)pyrene	2	--	<0.011	<0.011	<0.011	<0.011
Benzo(b)fluoranthene	21	--	<0.011	<0.011	<0.011	<0.011
Benzo(g,h,i)perylene	NE	--	<0.011	<0.011	<0.011	<0.011
Benzo(k)fluoranthene	210	--	<0.011	<0.011	<0.011	<0.011
Chrysene	2,100	--	<0.011	<0.011	<0.011	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.011	<0.011	<0.011
Fluoranthene	3,000	--	<0.011	<0.011	<0.011	<0.011
Fluorene	3,000	--	<0.011	<0.011	<0.011	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.011	<0.011	<0.011
Naphthalene	17	--	<0.011	<0.011	<0.011	<0.011
Phenanthrene	2,300	--	<0.011	<0.011	<0.011	<0.011
Pyrene	2,300	--	<0.011	<0.011	<0.011	<0.011
Priority Pollutant (PP) Metals						
Antimony	47	6.8	<2.6	<2.7	<2.9	<2.5
Arsenic	3.0/26.8*	4.9	8.8	6.2	6.4	7.4
Beryllium	230	1.6	3.6	1.1	1.0	0.90
Cadmium	98	1.1	<0.53	<0.54	<0.59	<0.51
Chromium ⁽³⁾	6.3	30	24	19	16	36
Copper	4,700	42	30	28	30	18
Lead	550	61	23	16	17	18
Mercury	4.6	0.14	<0.11	<0.11	<0.12	<0.10
Nickel	2,200	22	42	31	36	20
Selenium	580	1.0	<0.53	<0.54	<0.59	<0.51
Silver	580	1.0	<0.53	<0.54	<0.59	<0.51
Thallium	1.2	1.5	<0.53	<0.54	<0.59	<0.51
Zinc	35,000	73	65	59	73	47
Organochlorine Pesticides						
4,4-DDD	2.5	--	--	<0.0052	--	<0.0051
4,4-DDE	9.3	--	--	<0.0052	--	<0.0051
4,4-DDT	8.5	--	--	<0.0052	--	<0.0051
Aldrin	0.18	--	--	<0.0052	--	<0.0051
Chlordane (n.o.s.)	7.7	--	--	<0.13	--	<0.13
Dieldrin	7.7	--	--	<0.0052	--	<0.0051
Endosulfan I	0.14	--	--	<0.0052	--	<0.0051
Endosulfan II	700	--	--	<0.0052	--	<0.0051
Endosulfan Sulfate	NE	--	--	<0.0052	--	<0.0051
Endrin	NE	--	--	<0.0052	--	<0.0051
Endrin Aldehyde	25	--	--	<0.0052	--	<0.0051
Endrin ketone	NE	--	--	<0.0052	--	<0.0051
Gamma-BHC (Lindane)	NE	--	--	<0.0052	--	<0.0051
Heptachlor	2.5	--	--	<0.0052	--	<0.0051
Heptachlor Epoxide	7.7	--	--	<0.0052	--	<0.0051
Methoxychlor	0.63	--	--	<0.0052	--	<0.0051
Toxaphene	0.33	--	--	<0.13	--	<0.13
alpha-BHC	410	--	--	<0.0052	--	<0.0051
beta-BHC	2.1	--	--	<0.0052	--	<0.0051
cis-Chlordane	0.36	--	--	<0.0052	--	<0.0051
delta-BHC	1.3	--	--	<0.0052	--	<0.0051
trans-Chlordane	NE	--	--	<0.0052	--	<0.0051
Chlorinated Herbicides						
2,4,5-T		--	--	<0.026	--	<0.024
2,4,5-TP (Silvex)		--	--	<0.026	--	<0.024
2,4-D		--	--	<0.26	--	<0.23
2,4-DB		--	--	<0.26	--	<0.24
Dalapon		--	--	<0.62	--	<0.57
Dicamba		--	--	<0.026	--	<0.023
Dichloroprop		--	--	<0.26	--	<0.23
Dinoseb		--	--	<0.13	--	<0.12
MCPA		--	--	<25	--	<23
MCPP		--	--	<26	--	<23
Total Petroleum Hydrocarbons (TPH)						
TPH DRO	620	--	--	--	--	--

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA3-E	GTA-SA3-F	GTA-SA3-F	GTA-SA3-G	GTA-SA3-G	GTA-SA4-A	GTA-SA4-A	GTA-SA4-B	GTA-SA4-B
			1-8	0-1	1-8	0-1	1-8	0-1	1-15	0-1	1-15
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/13/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Polycyclic Aromatic Hydrocarbons (PAHs)											
2-Methylnaphthalene	300	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Acenaphthene	4,500	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Acenaphthylene	NE	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Anthracene	23,000	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Benzo(a)anthracene	21	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Benzo(a)pyrene	2	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Benzo(b)fluoranthene	21	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Benzo(g,h,i)perylene	NE	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Benzo(k)fluoranthene	210	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Chrysene	2,100	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Fluoranthene	3,000	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Fluorene	3,000	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Naphthalene	17	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Phenanthrene	2,300	--	<0.011	<0.0097	<0.010	<0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Pyrene	2,300	--	<0.011	<0.0097	<0.010	0.010	<0.012	<0.010	<0.010	<0.0097	<0.011
Priority Pollutant (PP) Metals											
Antimony	47	6.8	<3.0	<2.5	<2.9	<3.0	<3.4	<2.7	<2.3	<2.8	<2.3
Arsenic	3.0/26.8*	4.9	7.1	6.7	5.4	6.7	9.2	5.8	7.0	7.0	8.9
Beryllium	230	1.6	3.4	0.82	0.69	0.63	1.7	1.0	0.73	0.83	1.7
Cadmium	98	1.1	<0.60	<0.49	<0.59	<0.59	<0.69	<0.53	<0.45	<0.56	<0.46
Chromium (3)	6.3	30	26	37	30	47	32	28	28	25	57
Copper	4,700	42	39	11	16	18	24	11	16	24	28
Lead	550	61	13	19	12	13	24	16	18	14	17
Mercury	4.6	0.14	<0.12	<0.098	<0.12	0.25	<0.14	<0.11	<0.090	<0.11	<0.092
Nickel	2,200	22	77	16	23	22	35	16	17	23	31
Selenium	580	1.0	<0.60	<0.49	<0.59	<0.59	<0.69	<0.53	<0.45	<0.56	<0.46
Silver	580	1.0	<0.60	<0.49	<0.59	<0.59	<0.69	<0.53	<0.45	<0.56	<0.46
Thallium	1.2	1.5	<0.60	<0.49	<0.59	<0.59	<0.69	<0.53	<0.45	<0.56	<0.46
Zinc	35,000	73	130	42	37	43	68	43	45	44	58
Organochlorine Pesticides											
4,4-DDD	2.5	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
4,4-DDE	9.3	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
4,4-DDT	8.5	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Aldrin	0.18	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.12	--	<0.12	--	<0.11	--
Dieldrin	7.7	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endosulfan I	0.14	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endosulfan II	700	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endosulfan Sulfate	NE	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endrin	NE	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endrin Aldehyde	25	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Endrin ketone	NE	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Gamma-BHC (Lindane)	NE	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Heptachlor	2.5	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Heptachlor Epoxide	7.7	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Methoxychlor	0.63	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Toxaphene	0.33	--	--	<0.12	--	<0.12	--	<0.12	--	<0.11	--
alpha-BHC	410	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
beta-BHC	2.1	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
cis-Chlordane	0.36	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
delta-BHC	1.3	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
trans-Chlordane	NE	--	--	<0.0048	--	<0.0049	--	<0.0047	--	<0.0046	--
Chlorinated Herbicides											
2,4,5-T	--	--	--	<0.023	--	<0.023	--	<0.022	--	<0.022	--
2,4,5-TP (Silvex)	--	--	--	<0.023	--	<0.023	--	<0.022	--	<0.022	--
2,4-D	--	--	--	<0.23	--	<0.23	--	<0.22	--	<0.22	--
2,4-DB	--	--	--	<0.23	--	<0.23	--	<0.22	--	<0.22	--
Dalapon	--	--	--	<0.55	--	<0.55	--	<0.53	--	<0.53	--
Dicamba	--	--	--	<0.023	--	<0.023	--	<0.022	--	<0.022	--
Dichloroprop	--	--	--	<0.23	--	<0.23	--	<0.22	--	<0.22	--
Dinoseb	--	--	--	<0.12	--	<0.11	--	<0.11	--	<0.11	--
MCPA	--	--	--	<23	--	<22	--	<22	--	<22	--
MCPP	--	--	--	<23	--	<23	--	<22	--	<22	--
Total Petroleum Hydrocarbons (TPH)											
TPH DRO	620	--	--	--	--	--	--	--	--	--	--

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA4-C	GTA-SA4-C	GTA-SA4-D	GTA-SA4-D	GTA-SA4-E	GTA-SA4-E	GTA-SA4-F	GTA-SA4-F	GTA-SA4-G	
			0-1	1-5.5	0-1	1-6	0-1	1-15	0-1	1-15	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	<0.010	<0.0099	
Acenaphthene	4,500	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	<0.010	<0.0099	
Acenaphthylene	NE	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	<0.010	<0.0099	
Anthracene	23,000	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.014	<0.0099	
Benzo(a)anthracene	21	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.046	0.013	
Benzo(a)pyrene	2	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.048	0.013	
Benzo(b)fluoranthene	21	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.033	<0.0099	
Benzo(g,h,i)perylene	NE	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.049	0.015	
Benzo(k)fluoranthene	210	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.064	0.016	
Chrysene	2,100	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.048	0.011	
Dibenz(a,h)Anthracene	2.1	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.046	0.013	
Fluoranthene	3,000	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.033	<0.0099	
Fluorene	3,000	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	<0.010	<0.0099	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.052	0.015	
Naphthalene	17	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	<0.010	<0.0099	
Phenanthrene	2,300	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.013	<0.0099	
Pyrene	2,300	--	<0.0098	<0.012	<0.0093	<0.0099	<0.0091	<0.010	<0.50	0.039	<0.0099	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.6	<2.8	<2.4	<2.2	<1.9	<2.5	<2.3	<2.1	<2.4	
Arsenic	3.0/26.8*	4.9	4.9	7.8	2.7	4.1	3.2	6.0	6.7	4.0	5.1	
Beryllium	230	1.6	0.74	2.4	0.59	0.75	1.2	2.4	1.8	1.2	3.9	
Cadmium	98	1.1	<0.52	<0.57	<0.48	<0.43	<0.38	<0.49	<0.46	<0.42	<0.48	
Chromium ⁽³⁾	6.3	30	26	30	17	23	37	29	27	28	30	
Copper	4,700	42	21	32	8.1	13	14	25	28	9.3	12	
Lead	550	61	9.7	15	8.5	10	13	16	12	8.6	9.7	
Mercury	4.6	0.14	<0.10	<0.11	<0.095	<0.087	<0.077	<0.098	<0.093	<0.083	<0.096	
Nickel	2,200	22	32	49	14	24	29	44	40	36	54	
Selenium	580	1.0	<0.52	<0.57	<0.48	<0.43	<0.38	<0.49	<0.46	<0.42	<0.48	
Silver	580	1.0	<0.52	<0.57	<0.48	<0.43	<0.38	<0.49	<0.46	<0.42	<0.48	
Thallium	1.2	1.5	<0.52	<0.57	<0.48	<0.43	<0.38	<0.49	<0.46	<0.42	<0.48	
Zinc	35,000	73	58	86	33	83	71	78	70	69	75	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
4,4-DDE	9.3	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
4,4-DDT	8.5	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Aldrin	0.18	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Chlordane (n.o.s.)	7.7	--	<0.11	--	<0.11	--	<0.11	--	<0.11	--	<0.12	
Dieldrin	7.7	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endosulfan I	0.14	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endosulfan II	700	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endosulfan Sulfate	NE	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endrin	NE	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endrin Aldehyde	25	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Endrin ketone	NE	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Gamma-BHC (Lindane)	NE	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Heptachlor	2.5	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Heptachlor Epoxide	7.7	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Methoxychlor	0.63	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Toxaphene	0.33	--	<0.11	--	<0.11	--	<0.11	--	<0.11	--	<0.12	
alpha-BHC	410	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
beta-BHC	2.1	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
cis-Chlordane	0.36	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
delta-BHC	1.3	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
trans-Chlordane	NE	--	<0.0045	--	<0.0045	--	<0.0042	--	<0.0046	--	<0.0046	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.022	--	<0.021	--	<0.021	--	<0.023	--	<0.023	
2,4,5-TP (Silvex)	--	--	<0.022	--	<0.021	--	<0.021	--	<0.023	--	<0.023	
2,4-D	--	--	<0.22	--	<0.21	--	<0.21	--	<0.23	--	<0.23	
2,4-DB	--	--	<0.22	--	<0.21	--	<0.21	--	<0.23	--	<0.23	
Dalapon	--	--	<0.52	--	<0.50	--	<0.50	--	<0.55	--	<0.55	
Dicamba	--	--	<0.022	--	<0.021	--	<0.021	--	<0.023	--	<0.023	
Dichloroprop	--	--	<0.22	--	<0.21	--	<0.21	--	<0.23	--	<0.23	
Dinoseb	--	--	<0.11	--	<0.10	--	<0.10	--	<0.11	--	<0.11	
MCPA	--	--	<21	--	<20	--	<21	--	<22	--	<22	
MCPP	--	--	<22	--	<21	--	<21	--	<23	--	<23	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
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 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA4-G	GTA-SA4-H	GTA-SA4-I	GTA-SA4-I	GTA-SA4-I	GTA-SA4-J	GTA-SA4-J	GTA-SA4-K	GTA-SA4-K
			1-15	0-1	1-11	0-1	1-15	0-1	1-9	0-1	1-15
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Polycyclic Aromatic Hydrocarbons (PAHs)											
2-Methylnaphthalene	300	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	<0.011
Acenaphthene	4,500	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.012
Acenaphthylene	NE	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	<0.011
Anthracene	23,000	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.023
Benzo(a)anthracene	21	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.024
Benzo(a)pyrene	2	--	<0.011	<0.010	<0.011	<0.0087	<0.011	0.010	<0.011	<0.0087	0.018
Benzo(b)fluoranthene	21	--	<0.011	<0.010	<0.011	<0.0087	<0.011	0.0093	<0.011	<0.0087	0.015
Benzo(g,h,i)perylene	NE	--	<0.011	<0.010	<0.011	<0.0087	<0.011	0.014	<0.011	<0.0087	<0.011
Benzo(k)fluoranthene	210	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.017
Chrysene	2,100	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.022
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	<0.011
Fluoranthene	3,000	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.069
Fluorene	3,000	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.019
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.010	<0.011	<0.0087	<0.011	0.011	<0.011	<0.0087	<0.011
Naphthalene	17	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	<0.011
Phenanthrene	2,300	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.085
Pyrene	2,300	--	<0.011	<0.010	<0.011	<0.0087	<0.011	<0.0093	<0.011	<0.0087	0.053
Priority Pollutant (PP) Metals											
Antimony	47	6.8	<2.3	<2.9	<3.2	<2.1	<2.9	<2.5	<3.0	<2.1	<3.3
Arsenic	3.0/26.8*	4.9	4.7	6.4	3.3	2.7	9.4	3.1	4.7	2.6	15
Beryllium	230	1.6	1.6	2.5	0.74	0.55	2.1	0.63	2.0	0.56	4.1
Cadmium	98	1.1	<0.46	<0.58	<0.63	<0.41	<0.59	<0.51	<0.59	<0.43	<0.66
Chromium ⁽³⁾	6.3	30	38	46	30	21	27	18	37	13	36
Copper	4,700	42	19	15	7.6	9.3	27	9.1	12	5.9	19
Lead	550	61	7.4	12	10	5.9	13	9.4	9.5	4.0	15
Mercury	4.6	0.14	<0.093	<0.12	<0.13	<0.083	<0.12	<0.10	<0.12	<0.085	<0.13
Nickel	2,200	22	53	54	40	19	75	17	40	12	89
Selenium	580	1.0	<0.46	<0.58	<0.63	<0.41	<0.59	<0.51	<0.59	<0.43	<0.66
Silver	580	1.0	<0.46	<0.58	<0.63	<0.41	<0.59	<0.51	<0.59	<0.43	<0.66
Thallium	1.2	1.5	<0.46	<0.58	<0.63	<0.41	<0.59	<0.51	<0.59	<0.43	<0.66
Zinc	35,000	73	85	100	67	35	120	54	70	24	170
Organochlorine Pesticides											
4,4-DDD	2.5	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
4,4-DDE	9.3	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
4,4-DDT	8.5	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Aldrin	0.18	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.10	--	<0.11	--	<0.11	--
Dieldrin	0.7	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endosulfan I	0.14	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endosulfan II	700	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endosulfan Sulfate	NE	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endrin	NE	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endrin Aldehyde	25	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Endrin ketone	NE	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Gamma-BHC (Lindane)	NE	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Heptachlor	2.5	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Heptachlor Epoxide	7.7	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Methoxychlor	0.63	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Toxaphene	0.33	--	--	<0.12	--	<0.10	--	<0.11	--	<0.11	--
alpha-BHC	410	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
beta-BHC	2.1	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
cis-Chlordane	0.36	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
delta-BHC	1.3	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
trans-Chlordane	NE	--	--	<0.0049	--	<0.0041	--	<0.0046	--	<0.0042	--
Chlorinated Herbicides											
2,4,5-T	--	--	--	<0.023	--	<0.020	--	<0.022	--	<0.020	--
2,4,5-TP (Silvex)	--	--	--	<0.023	--	<0.020	--	<0.022	--	<0.020	--
2,4-D	--	--	--	<0.23	--	<0.20	--	<0.21	--	<0.20	--
2,4-DB	--	--	--	<0.23	--	<0.20	--	<0.22	--	<0.21	--
Dalapon	--	--	--	<0.55	--	<0.47	--	<0.52	--	<0.49	--
Dicamba	--	--	--	<0.023	--	<0.020	--	<0.021	--	<0.020	--
Dichloroprop	--	--	--	<0.23	--	<0.20	--	<0.21	--	<0.20	--
Dinoseb	--	--	--	<0.12	--	<0.099	--	<0.11	--	<0.10	--
MCPA	--	--	--	<23	--	<19	--	<21	--	<20	--
MCPP	--	--	--	<23	--	<20	--	<21	--	<20	--
Total Petroleum Hydrocarbons (TPH)											
TPH DRO	620	--	--	--	--	--	--	--	--	--	--

Notes:
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 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
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 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA4-L	GTA-SA4-L	GTA-SA4-M
			0-1	1-15	0-1
			Grab	Composite	Grab
			9/8/2022	9/8/2022	9/8/2022
Polycyclic Aromatic Hydrocarbons (PAHs)					
2-Methylnaphthalene	300	--	<0.0100	<0.011	<0.0094
Acenaphthene	4,500	--	<0.0100	<0.011	<0.0094
Acenaphthylene	NE	--	<0.0100	<0.011	<0.0094
Anthracene	23,000	--	<0.0100	<0.011	<0.0094
Benzo(a)anthracene	21	--	<0.0100	<0.011	<0.0094
Benzo(a)pyrene	2	--	<0.0100	<0.011	<0.0094
Benzo(b)fluoranthene	21	--	<0.0100	<0.011	<0.0094
Benzo(g,h,i)perylene	NE	--	<0.0100	<0.011	<0.0094
Benzo(k)fluoranthene	210	--	<0.0100	<0.011	<0.0094
Chrysene	2,100	--	<0.0100	<0.011	<0.0094
Dibenz(a,h)Anthracene	2.1	--	<0.0100	<0.011	<0.0094
Fluoranthene	3,000	--	<0.0100	<0.011	<0.0094
Fluorene	3,000	--	<0.0100	<0.011	<0.0094
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0100	<0.011	<0.0094
Naphthalene	17	--	<0.0100	<0.011	<0.0094
Phenanthrene	2,300	--	<0.0100	<0.011	<0.0094
Pyrene	2,300	--	<0.0100	<0.011	<0.0094
Priority Pollutant (PP) Metals					
Antimony	47	6.8	<2.9	<2.4	<2.5
Arsenic	3.0/26.8*	4.9	6.6	3.0	1.8
Beryllium	230	1.6	1.1	1.5	<0.49
Cadmium	98	1.1	<0.57	<0.48	<0.49
Chromium ⁽³⁾	6.3	30	33	21	8.5
Copper	4,700	42	18	14	6.2
Lead	550	61	17	8.5	3.9
Mercury	4.6	0.14	<0.11	<0.096	<0.099
Nickel	2,200	22	23	54	8.3
Selenium	580	1.0	<0.57	<0.48	<0.49
Silver	580	1.0	<0.57	<0.48	<0.49
Thallium	1.2	1.5	<0.57	<0.48	<0.49
Zinc	35,000	73	54	74	85
Organochlorine Pesticides					
4,4-DDD	2.5	--	<0.0046	--	<0.0044
4,4-DDE	9.3	--	<0.0046	--	<0.0044
4,4-DDT	8.5	--	<0.0046	--	<0.0044
Aldrin	0.18	--	<0.0046	--	<0.0044
Chlordane (n.o.s.)	7.7	--	<0.11	--	<0.11
Dieldrin	7.7	--	<0.0046	--	<0.0044
Endosulfan I	0.14	--	<0.0046	--	<0.0044
Endosulfan II	700	--	<0.0046	--	<0.0044
Endosulfan Sulfate	NE	--	<0.0046	--	<0.0044
Endrin	NE	--	<0.0046	--	<0.0044
Endrin Aldehyde	25	--	<0.0046	--	<0.0044
Endrin ketone	NE	--	<0.0046	--	<0.0044
Gamma-BHC (Lindane)	NE	--	<0.0046	--	<0.0044
Heptachlor	2.5	--	<0.0046	--	<0.0044
Heptachlor Epoxide	7.7	--	<0.0046	--	<0.0044
Methoxychlor	0.63	--	<0.0046	--	<0.0044
Toxaphene	0.33	--	<0.11	--	<0.11
alpha-BHC	410	--	<0.0046	--	<0.0044
beta-BHC	2.1	--	<0.0046	--	<0.0044
cis-Chlordane	0.36	--	<0.0046	--	<0.0044
delta-BHC	1.3	--	<0.0046	--	<0.0044
trans-Chlordane	NE	--	<0.0046	--	<0.0044
Chlorinated Herbicides					
2,4,5-T		--	<0.022	--	<0.022
2,4,5-TP (Silvex)		--	<0.022	--	<0.022
2,4-D		--	<0.21	--	<0.22
2,4-DB		--	<0.22	--	<0.22
Dalapon		--	<0.52	--	<0.53
Dicamba		--	<0.021	--	<0.022
Dichloroprop		--	<0.21	--	<0.22
Dinoseb		--	<0.11	--	<0.11
MCPA		--	<21	--	<22
MCPP		--	<21	--	<22
Total Petroleum Hydrocarbons (TPH)					
TPH DRO	620	--	--	--	--

Notes:

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Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Sta
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Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA4-M	GTA-SA4-N	GTA-SA4-N	GTA-SA4-O	GTA-SA4-O	GTA-SA5-A	GTA-SA5-A	
			1-15	0-1	1-15	0-1	1-15	0-1	1-7.5	
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/12/2022	9/12/2022	
Polycyclic Aromatic Hydrocarbons (PAHs)										
2-Methylnaphthalene	300	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Acenaphthene	4,500	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Acenaphthylene	NE	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Anthracene	23,000	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Benzo(a)anthracene	21	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Benzo(a)pyrene	2	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Benzo(b)fluoranthene	21	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Benzo(g,h,i)perylene	NE	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Benzo(k)fluoranthene	210	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Chrysene	2,100	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Fluoranthene	3,000	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Fluorene	3,000	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Naphthalene	17	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Phenanthrene	2,300	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Pyrene	2,300	--	<0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.011
Priority Pollutant (PP) Metals										
Antimony	47	6.8	<2.9	<2.7	<2.3	<3.0	<2.5	<2.3	<2.5	<2.5
Arsenic	3.0/26.8*	4.9	4.8	3.6	8.0	6.4	5.5	5.2	6.2	6.2
Beryllium	230	1.6	1.9	1.6	4.0	0.94	1.9	1.0	0.90	0.90
Cadmium	98	1.1	<0.58	<0.54	<0.47	<0.61	<0.51	<0.45	<0.50	<0.50
Chromium ⁽³⁾	6.3	30	21	25	22	33	30	28	30	30
Copper	4,700	42	13	64	25	28	26	18	15	15
Lead	550	61	13	12	7.9	18	12	14	15	15
Mercury	4.6	0.14	<0.12	<0.11	<0.093	0.21	<0.10	<0.090	<0.10	<0.10
Nickel	2,200	22	52	40	73	31	57	28	36	36
Selenium	580	1.0	<0.58	<0.54	<0.47	<0.61	<0.51	<0.45	<0.50	<0.50
Silver	580	1.0	<0.58	<0.54	<0.47	<0.61	<0.51	<0.45	<0.50	<0.50
Thallium	1.2	1.5	<0.58	<0.54	<0.47	<0.61	<0.51	<0.45	<0.50	<0.50
Zinc	35,000	73	110	69	120	53	110	60	52	52
Organochlorine Pesticides										
4,4-DDD	2.5	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
4,4-DDE	9.3	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
4,4-DDT	8.5	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Aldrin	0.18	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.12	--	<0.12	--	--
Dieldrin	7.7	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endosulfan I	0.14	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endosulfan II	700	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endosulfan Sulfate	NE	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endrin	NE	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endrin Aldehyde	25	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Endrin ketone	NE	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Gamma-BHC (Lindane)	NE	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Heptachlor	2.5	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Heptachlor Epoxide	7.7	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Methoxychlor	0.63	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Toxaphene	0.33	--	--	<0.12	--	<0.12	--	<0.12	--	--
alpha-BHC	410	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
beta-BHC	2.1	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
cis-Chlordane	0.36	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
delta-BHC	1.3	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
trans-Chlordane	NE	--	--	<0.0050	--	<0.0048	--	<0.0049	--	--
Chlorinated Herbicides										
2,4,5-T		--	--	<0.022	--	<0.025	--	<0.023	--	--
2,4,5-TP (Silvex)		--	--	<0.022	--	<0.025	--	<0.023	--	--
2,4-D		--	--	<0.22	--	<0.24	--	<0.23	--	--
2,4-DB		--	--	<0.23	--	<0.25	--	<0.23	--	--
Dalapon		--	--	<0.54	--	<0.59	--	<0.55	--	--
Dicamba		--	--	<0.022	--	<0.024	--	<0.023	--	--
Dichloroprop		--	--	<0.22	--	<0.24	--	<0.23	--	--
Dinoseb		--	--	<0.11	--	<0.12	--	<0.12	--	--
MCPA		--	--	<22	--	<24	--	<23	--	--
MCPA		--	--	<22	--	<24	--	<23	--	--
Total Petroleum Hydrocarbons (TPH)										
TPH DRO	620	--	--	--	--	--	--	<12	--	--

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Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA5-B	GTA-SA5-B	GTA-SA5-C	GTA-SA5-C	GTA-SA5-D	GTA-SA5-D	GTA-SA5-E	GTA-SA5-E	GTA-SA5-F	
			0-1	1-10.5	0-1	1-11.5	0-1	1-14.25	0-1	1-8	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Acenaphthene	4,500	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Acenaphthylene	NE	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Anthracene	23,000	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Benzo(a)anthracene	21	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Benzo(a)pyrene	2	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Benzo(b)fluoranthene	21	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Benzo(g,h,i)perylene	NE	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Benzo(k)fluoranthene	210	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Chrysene	2,100	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Dibenz(a,h)Anthracene	2.1	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Fluoranthene	3,000	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Fluorene	3,000	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Naphthalene	17	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Phenanthrene	2,300	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Pyrene	2,300	--	<0.010	<0.012	<0.011	<0.012	<0.0097	<0.011	<0.011	<0.011	<0.011	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.5	<3.1	<2.2	<2.5	<2.1	<2.7	<3.0	<2.5	<2.4	
Arsenic	3.0/26.8*	4.9	6.7	5.5	8.6	13	5.3	8.7	8.7	7.3	8.0	
Beryllium	230	1.6	1.1	1.9	1.4	2.6	1.2	1.5	1.5	1.9	3.2	
Cadmium	98	1.1	<0.49	<0.62	<0.44	<0.50	<0.43	<0.53	<0.60	<0.49	<0.48	
Chromium ⁽³⁾	6.3	30	37	43	41	36	44	52	44	58	58	
Copper	4,700	42	16	19	26	32	9.7	26	30	27	30	
Lead	550	61	20	12	13	18	20	12	16	12	14	
Mercury	4.6	0.14	<0.099	<0.12	0.089	0.15	<0.086	<0.11	<0.12	<0.099	0.17	
Nickel	2,200	22	18	40	32	57	20	51	36	64	46	
Selenium	580	1.0	<0.49	<0.62	<0.44	<0.50	<0.43	<0.53	<0.60	<0.49	<0.48	
Silver	580	1.0	<0.49	<0.62	<0.44	<0.50	<0.43	<0.53	<0.60	<0.49	<0.48	
Thallium	1.2	1.5	<0.49	<0.62	<0.44	<0.50	<0.43	<0.53	<0.60	<0.49	<0.48	
Zinc	35,000	73	46	79	59	72	48	89	61	94	71	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
4,4-DDE	9.3	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
4,4-DDT	8.5	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Aldrin	0.18	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.13	--	<0.12	--	<0.13	--	<0.13	
Dieldrin	7.7	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endosulfan I	0.14	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endosulfan II	700	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endosulfan Sulfate	NE	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endrin	NE	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endrin Aldehyde	25	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Endrin ketone	NE	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Gamma-BHC (Lindane)	NE	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Heptachlor	2.5	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Heptachlor Epoxide	7.7	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Methoxychlor	0.63	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Toxaphene	0.33	--	<0.12	--	<0.13	--	<0.12	--	<0.13	--	<0.13	
alpha-BHC	410	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
beta-BHC	2.1	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
cis-Chlordane	0.36	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
delta-BHC	1.3	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
trans-Chlordane	NE	--	<0.0049	--	<0.0051	--	<0.0047	--	<0.0053	--	<0.0050	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.023	--	<0.024	--	<0.023	--	<0.026	--	<0.024	
2,4,5-TP (Silvex)	--	--	<0.023	--	<0.024	--	<0.023	--	<0.026	--	<0.024	
2,4-D	--	--	<0.23	--	<0.24	--	<0.22	--	<0.25	--	<0.24	
2,4-DB	--	--	<0.23	--	<0.25	--	<0.23	--	<0.26	--	<0.24	
Dalapon	--	--	<0.56	--	<0.59	--	<0.54	--	<0.61	--	<0.58	
Dicamba	--	--	<0.023	--	<0.024	--	<0.022	--	<0.025	--	<0.024	
Dichloroprop	--	--	<0.23	--	<0.24	--	<0.22	--	<0.25	--	<0.24	
Dinoseb	--	--	<0.12	--	<0.12	--	<0.11	--	<0.13	--	<0.12	
MCPA	--	--	<23	--	<24	--	<22	--	<25	--	<24	
MCPP	--	--	<23	--	<24	--	<22	--	<25	--	<24	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	<12	--	<13	--	<12	--	<13	--	<13	

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA5-F	GTA-SA5-G	GTA-SA5-G	GTA-SA5-H	GTA-SA5-H	GTA-SA5-I	GTA-SA5-I	GTA-SA5-J	GTA-SA5-J
			1-9.8	0-1	1-9	0-1	1-15	0-1	1-13	0-1	1-8.5
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/12/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)											
2-Methylnaphthalene	300	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Acenaphthene	4,500	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Acenaphthylene	NE	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Anthracene	23,000	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Benzo(a)anthracene	21	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Benzo(a)pyrene	2	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Benzo(b)fluoranthene	21	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Benzo(g,h,i)perylene	NE	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Benzo(k)fluoranthene	210	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Chrysene	2,100	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Fluoranthene	3,000	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Fluorene	3,000	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Naphthalene	17	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Phenanthrene	2,300	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Pyrene	2,300	--	<0.011	<0.0090	<0.011	<0.010	<0.010	<0.011	<0.011	<0.0099	<0.011
Priority Pollutant (PP) Metals											
Antimony	47	6.8	<2.6	<2.7	<2.4	<2.1	<3.0	<3.0	<2.4	<2.0	<2.4
Arsenic	3.0/26.8*	4.9	14	12	13	8.3	10	8.8	8.4	3.9	7.7
Beryllium	230	1.6	5.3	6.8	5.0	1.9	3.7	2.0	2.7	1.3	2.2
Cadmium	98	1.1	<0.53	<0.54	<0.49	<0.43	<0.60	<0.60	<0.48	<0.40	<0.49
Chromium ⁽³⁾	6.3	30	29	43	63	38	42	45	64	24	56
Copper	4,700	42	29	22	29	25	29	29	27	12	21
Lead	550	61	15	15	16	15	12	13	12	16	10
Mercury	4.6	0.14	<0.11	<0.11	<0.098	0.12	<0.12	0.14	<0.095	<0.080	<0.098
Nickel	2,200	22	53	45	53	33	51	38	55	18	49
Selenium	580	1.0	<0.53	<0.54	<0.49	<0.43	<0.60	<0.60	<0.48	<0.40	<0.49
Silver	580	1.0	<0.53	<0.54	<0.49	<0.43	<0.60	<0.60	<0.48	<0.40	<0.49
Thallium	1.2	1.5	<0.53	<0.54	<0.49	<0.43	<0.60	<0.60	<0.48	<0.40	<0.49
Zinc	35,000	73	68	53	77	53	73	58	76	49	72
Organochlorine Pesticides											
4,4-DDD	2.5	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
4,4-DDE	9.3	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
4,4-DDT	8.5	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Aldrin	0.18	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Chlordane (n.o.s.)	7.7	--	--	<0.11	--	<0.13	--	<0.12	--	<0.12	--
Dieldrin	7.7	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endosulfan I	0.14	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endosulfan II	700	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endosulfan Sulfate	NE	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endrin	NE	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endrin Aldehyde	25	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Endrin ketone	NE	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Gamma-BHC (Lindane)	NE	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Heptachlor	2.5	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Heptachlor Epoxide	7.7	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Methoxychlor	0.63	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Toxaphene	0.33	--	--	<0.11	--	<0.13	--	<0.12	--	<0.12	--
alpha-BHC	410	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
beta-BHC	2.1	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
cis-Chlordane	0.36	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
delta-BHC	1.3	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
trans-Chlordane	NE	--	--	<0.0043	--	<0.0050	--	<0.0050	--	<0.0047	--
Chlorinated Herbicides											
2,4,5-T	--	--	--	<0.020	--	<0.023	--	<0.024	--	<0.024	--
2,4,5-TP (Silvex)	--	--	--	<0.020	--	<0.023	--	<0.024	--	<0.024	--
2,4-D	--	--	--	<0.20	--	<0.23	--	<0.24	--	<0.24	--
2,4-DB	--	--	--	<0.20	--	<0.24	--	<0.25	--	<0.24	--
Dalapon	--	--	--	<0.47	--	<0.56	--	<0.59	--	<0.57	--
Dicamba	--	--	--	<0.020	--	<0.023	--	<0.024	--	<0.024	--
Dichloroprop	--	--	--	<0.20	--	<0.23	--	<0.24	--	<0.24	--
Dinoseb	--	--	--	<0.099	--	<0.12	--	<0.12	--	<0.12	--
MCPA	--	--	--	<19	--	<23	--	<24	--	<23	--
MCPP	--	--	--	<20	--	<23	--	<24	--	<24	--
Total Petroleum Hydrocarbons (TPH)											
TPH DRO	620	--	--	<11	--	<13	--	<13	--	<12	--

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA5-K	GTA-SA5-K	GTA-SA5-L	GTA-SA5-L	GTA-SA6-A	GTA-SA6-A	GTA-SA6-B	GTA-SA6-B	GTA-SA6-C	
			0-1	1-5.5	0-1	1-9	0-1	1-20	0-1	1-15	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/13/2022	9/13/2022	9/15/2022	9/15/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Acenaphthene	4,500	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Acenaphthylene	NE	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Anthracene	23,000	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Benzo(a)anthracene	21	--	<0.010	<0.0098	0.024	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Benzo(a)pyrene	2	--	<0.010	<0.0098	0.030	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Benzo(b)fluoranthene	21	--	<0.010	<0.0098	0.024	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Benzo(g,h,i)perylene	NE	--	<0.010	<0.0098	0.022	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Benzo(k)fluoranthene	210	--	<0.010	<0.0098	0.023	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Chrysene	2,100	--	<0.010	<0.0098	0.025	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Dibenz(a,h)Anthracene	2.1	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Fluoranthene	3,000	--	<0.010	<0.0098	0.031	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Fluorene	3,000	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.010	<0.0098	0.021	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Naphthalene	17	--	<0.010	<0.0098	<0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Phenanthrene	2,300	--	<0.010	<0.0098	0.012	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Pyrene	2,300	--	<0.010	<0.0098	0.031	<0.010	<0.011	<0.012	<0.010	<0.012	<0.010	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.9	<2.5	<3.4	<2.4	<2.3	<3.1	<2.4	<2.6	<2.8	
Arsenic	3.0/26.8*	4.9	7.3	8.5	6.4	4.2	6.7	7.7	8.2	7.5	9.3	
Beryllium	230	1.6	2.6	3.8	1.6	0.66	1.2	2.0	1.2	2.2	2.5	
Cadmium	98	1.1	<0.58	<0.51	<0.68	<0.48	<0.46	<0.63	<0.48	<0.53	<0.57	
Chromium ⁽³⁾	6.3	30	48	47	21	20	28	12	38	29	52	
Copper	4,700	42	27	28	12	16	26	32	22	24	24	
Lead	550	61	17	13	23	12	17	21	15	12	18	
Mercury	4.6	0.14	0.14	<0.10	<0.14	<0.097	<0.092	<0.13	<0.097	<0.11	<0.11	
Nickel	2,200	22	46	56	35	19	32	38	38	47	42	
Selenium	580	1.0	<0.58	<0.51	<0.68	<0.48	<0.46	<0.63	0.59	<0.53	<0.57	
Silver	580	1.0	<0.58	<0.51	<0.68	<0.48	<0.46	<0.63	<0.48	<0.53	<0.57	
Thallium	1.2	1.5	<0.58	<0.51	<0.68	<0.48	<0.46	<0.63	<0.48	<0.53	<0.57	
Zinc	35,000	73	89	71	84	37	54	71	66	62	69	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
4,4-DDE	9.3	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
4,4-DDT	8.5	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Aldrin	0.18	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.15	--	<0.13	--	<0.13	--	<0.12	
Dieldrin	7.7	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endosulfan I	0.14	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endosulfan II	700	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endosulfan Sulfate	NE	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endrin	NE	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endrin Aldehyde	25	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Endrin ketone	NE	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Gamma-BHC (Lindane)	NE	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Heptachlor	2.5	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Heptachlor Epoxide	7.7	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Methoxychlor	0.63	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Toxaphene	0.33	--	<0.12	--	<0.15	--	<0.13	--	<0.13	--	<0.12	
alpha-BHC	410	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
beta-BHC	2.1	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
cis-Chlordane	0.36	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
delta-BHC	1.3	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
trans-Chlordane	NE	--	<0.0047	--	<0.0059	--	<0.0052	--	<0.0052	--	<0.0048	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.23	--	<0.27	--	<0.24	--	<0.23	--	<0.24	
2,4,5-TP (Silvex)	--	--	<0.23	--	<0.27	--	<0.24	--	<0.23	--	<0.24	
2,4-D	--	--	<0.23	--	<0.27	--	<0.23	--	<0.23	--	<0.24	
2,4-DB	--	--	<0.23	--	<0.27	--	<0.24	--	<0.23	--	<0.24	
Dalapon	--	--	<0.55	--	<0.64	--	<0.57	--	<0.55	--	<0.57	
Dicamba	--	--	<0.23	--	<0.27	--	<0.23	--	<0.23	--	<0.24	
Dichloroprop	--	--	<0.23	--	<0.27	--	<0.23	--	<0.23	--	<0.24	
Dinoseb	--	--	<0.12	--	<0.13	--	<0.12	--	<0.11	--	<0.12	
MCPA	--	--	<23	--	<26	--	<23	--	<22	--	<23	
MCPP	--	--	<23	--	<27	--	<23	--	<23	--	<24	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	<12	--	<14	--	--	--	--	--	--	

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA6-C	GTA-SA6-D	GTA-SA6-D	GTA-SA6-E	GTA-SA6-E	GTA-SA6-F	GTA-SA6-F	GTA-SA7-A	GTA-SA7-A
			1-8.5	0-1	1-8.8'	0-1	1-15	0-1	1-15	0-1	1-5
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/13/2022	9/13/2022	9/13/2022	9/8/2022	9/8/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022
Polycyclic Aromatic Hydrocarbons (PAHs)											
2-Methylnaphthalene	300	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Acenaphthene	4,500	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Acenaphthylene	NE	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Anthracene	23,000	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(a)anthracene	21	--	<0.011	<0.010	<0.011	0.11	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(a)pyrene	2	--	0.011	<0.010	<0.011	0.14	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(b)fluoranthene	21	--	<0.011	<0.010	<0.011	0.12	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(g,h,i)perylene	NE	--	<0.011	<0.010	<0.011	0.10	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(k)fluoranthene	210	--	<0.011	<0.010	<0.011	0.10	<0.010	<0.010	<0.010	<0.010	<0.010
Chrysene	2,100	--	<0.011	<0.010	<0.011	0.11	<0.010	<0.010	<0.010	<0.010	<0.010
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Fluoranthene	3,000	--	<0.011	<0.010	<0.011	0.14	<0.010	<0.010	<0.010	<0.010	<0.010
Fluorene	3,000	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.010	<0.011	0.097	<0.010	<0.010	<0.010	<0.010	<0.010
Naphthalene	17	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Phenanthrene	2,300	--	<0.011	<0.010	<0.011	<0.086	<0.010	<0.010	<0.010	<0.010	<0.010
Pyrene	2,300	--	0.011	<0.010	<0.011	0.14	<0.010	<0.010	<0.010	<0.010	<0.010
Priority Pollutant (PP) Metals											
Antimony	47	6.8	<2.6	<2.3	<3.3	<2.1	<2.6	<1.9	<2.9	<2.0	<2.9
Arsenic	3.0/26.8*	4.9	10	7.2	16	4.1	9.3	10	7.0	5.7	7.2
Beryllium	230	1.6	2.9	1.2	1.4	0.76	<0.52	1.1	2.0	0.84	1.1
Cadmium	98	1.1	<0.53	<0.46	<0.65	<0.42	<0.52	<0.39	<0.58	<0.41	<0.58
Chromium ⁽³⁾	6.3	30	53	38	120	27	41	35	26	44	34
Copper	4,700	42	26	21	23	15	29	40	14	20	85
Lead	550	61	20	15	34	20	17	28	9.5	18	24
Mercury	4.6	0.14	<0.11	<0.092	<0.13	<0.085	<0.10	0.19	<0.12	0.21	0.15
Nickel	2,200	22	43	28	37	19	27	44	58	25	34
Selenium	580	1.0	<0.53	<0.46	<0.65	<0.42	<0.52	0.53	<0.58	0.61	<0.58
Silver	580	1.0	<0.53	<0.46	<0.65	<0.42	<0.52	<0.39	<0.58	<0.41	<0.58
Thallium	1.2	1.5	<0.53	<0.46	<0.65	<0.42	<0.52	0.44	<0.58	<0.41	<0.58
Zinc	35,000	73	67	58	49	63	60	60	90	40	50
Organochlorine Pesticides											
4,4-DDD	2.5	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
4,4-DDE	9.3	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
4,4-DDT	8.5	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Aldrin	0.18	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.53	--	<0.12	--	<0.13	--
Dieldrin	7.7	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endosulfan I	0.14	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endosulfan II	700	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endosulfan Sulfate	NE	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endrin	NE	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endrin Aldehyde	25	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Endrin ketone	NE	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Gamma-BHC (Lindane)	NE	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Heptachlor	2.5	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Heptachlor Epoxide	7.7	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Methoxychlor	0.63	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Toxaphene	0.33	--	--	<0.12	--	<0.53	--	<0.12	--	<0.13	--
alpha-BHC	410	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
beta-BHC	2.1	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
cis-Chlordane	0.36	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
delta-BHC	1.3	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
trans-Chlordane	NE	--	--	<0.0049	--	<0.021	--	<0.0049	--	<0.0051	--
Chlorinated Herbicides											
2,4,5-T	--	--	--	<0.024	--	<0.019	--	<0.023	--	<0.023	--
2,4,5-TP (Silvex)	--	--	--	<0.024	--	<0.019	--	<0.023	--	<0.023	--
2,4-D	--	--	--	<0.24	--	<0.19	--	<0.23	--	<0.22	--
2,4-DB	--	--	--	<0.24	--	<0.19	--	<0.23	--	<0.23	--
Dalapon	--	--	--	<0.57	--	<0.46	--	<0.55	--	<0.54	--
Dicamba	--	--	--	<0.024	--	<0.019	--	<0.023	--	<0.022	--
Dichloroprop	--	--	--	<0.24	--	<0.19	--	<0.23	--	<0.22	--
Dinoseb	--	--	--	<0.12	--	<0.095	--	<0.12	--	<0.11	--
MCPA	--	--	--	<23	--	<19	--	<23	--	<22	--
MCPP	--	--	--	<24	--	<19	--	<23	--	<22	--
Total Petroleum Hydrocarbons (TPH)											
TPH DRO	620	--	--	--	--	--	--	--	--	--	--

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA7-B	GTA-SA7-B	GTA-SA7-C	GTA-SA7-C	GTA-SA7-D	GTA-SA7-D	GTA-SA7-E	GTA-SA7-E	GTA-SA7-F	
			0-1	1-5	0-1	1-5	0-1	1-5	0-1	1-5	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Acenaphthene	4,500	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Acenaphthylene	NE	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Anthracene	23,000	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Benzo(a)anthracene	21	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Benzo(a)pyrene	2	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Benzo(b)fluoranthene	21	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	0.0095	<0.0098	<0.010	
Benzo(g,h,i)perylene	NE	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Benzo(k)fluoranthene	210	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Chrysene	2,100	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Dibenz(a,h)Anthracene	2.1	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Fluoranthene	3,000	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Fluorene	3,000	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Naphthalene	17	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Phenanthrene	2,300	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	<0.0095	<0.0098	<0.010	
Pyrene	2,300	--	<0.0098	<0.011	<0.010	<0.0094	<0.011	<0.011	0.0095	<0.0098	<0.010	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.8	<2.5	<2.4	<2.5	<2.5	<2.9	<2.6	<2.3	<2.7	
Arsenic	3.0/26.8*	4.9	8.9	7.6	4.3	2.8	3.9	6.7	3.8	2.9	4.8	
Beryllium	230	1.6	0.63	1.1	1.3	0.92	1.6	1.7	1.2	1.3	0.97	
Cadmium	98	1.1	<0.56	<0.51	<0.48	<0.49	<0.50	<0.58	<0.52	<0.47	<0.54	
Chromium ⁽³⁾	6.3	30	45	32	24	31	26	51	32	27	46	
Copper	4,700	42	29	57	12	9.3	14	21	9.9	7.4	22	
Lead	550	61	24	18	17	13	21	19	16	11	21	
Mercury	4.6	0.14	<0.11	<0.10	<0.096	<0.098	<0.10	<0.12	<0.10	<0.093	<0.11	
Nickel	2,200	22	28	32	17	16	20	54	22	18	36	
Selenium	580	1.0	0.56	<0.51	<0.48	<0.49	<0.50	<0.58	<0.52	<0.47	<0.54	
Silver	580	1.0	<0.56	<0.51	<0.48	<0.49	<0.50	<0.58	<0.52	<0.47	<0.54	
Thallium	1.2	1.5	<0.56	<0.51	<0.48	<0.49	<0.50	<0.58	<0.52	<0.47	<0.54	
Zinc	35,000	73	51	52	44	47	65	92	55	43	77	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
4,4-DDE	9.3	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
4,4-DDT	8.5	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Aldrin	0.18	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.13	--	<0.13	--	<0.11	--	<0.13	
Dieldrin	7.7	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endosulfan I	0.14	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endosulfan II	700	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endosulfan Sulfate	NE	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endrin	NE	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endrin Aldehyde	25	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Endrin ketone	NE	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Gamma-BHC (Lindane)	NE	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Heptachlor	2.5	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Heptachlor Epoxide	7.7	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Methoxychlor	0.63	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Toxaphene	0.33	--	<0.12	--	<0.13	--	<0.13	--	<0.11	--	<0.13	
alpha-BHC	410	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
beta-BHC	2.1	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
cis-Chlordane	0.36	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
delta-BHC	1.3	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
trans-Chlordane	NE	--	<0.0048	--	<0.0051	--	<0.0054	--	<0.0045	--	<0.0051	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.023	--	<0.022	--	<0.025	--	<0.023	--	<0.024	
2,4,5-TP (Silvex)	--	--	<0.023	--	<0.022	--	<0.025	--	<0.023	--	<0.024	
2,4-D	--	--	<0.22	--	<0.22	--	<0.25	--	<0.23	--	<0.24	
2,4-DB	--	--	<0.23	--	<0.22	--	<0.25	--	<0.23	--	<0.25	
Dalapon	--	--	<0.54	--	<0.53	--	<0.60	--	<0.55	--	<0.58	
Dicamba	--	--	<0.022	--	<0.022	--	<0.025	--	<0.023	--	<0.024	
Dichloroprop	--	--	<0.22	--	<0.22	--	<0.25	--	<0.23	--	<0.24	
Dinoseb	--	--	<0.11	--	<0.11	--	<0.12	--	<0.11	--	<0.12	
MCPA	--	--	<22	--	<22	--	<24	--	<22	--	<24	
MCPP	--	--	<22	--	<22	--	<25	--	<23	--	<24	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
ATC = Anticipated Typical Concentration for soils in Eastern Maryland
Shaded and bold values represent exceedance of MDE RCS
NA = Not applicable
NE = MDE standard not established
* = Risk-based calculated value
The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA7-F	GTA-SA7-G	GTA-SA7-G	GTA-SA7-H	GTA-SA7-H	GTA-SA7-I	GTA-SA7-I	GTA-SA7-J	GTA-SA7-J
			1-5	0-1	1-5	0-1	1-5	0-1	1-5	0-1	
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	
			9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022
Polycyclic Aromatic Hydrocarbons (PAHs)											
2-Methylnaphthalene	300	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Acenaphthene	4,500	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Acenaphthylene	NE	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Anthracene	23,000	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Benzo(a)anthracene	21	--	<0.0094	0.029	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Benzo(a)pyrene	2	--	<0.0094	0.036	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Benzo(b)fluoranthene	21	--	<0.0094	0.034	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Benzo(g,h,i)perylene	NE	--	<0.0094	0.030	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Benzo(k)fluoranthene	210	--	<0.0094	0.029	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Chrysene	2,100	--	<0.0094	0.032	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Fluoranthene	3,000	--	<0.0094	0.038	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Fluorene	3,000	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0094	0.028	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Naphthalene	17	--	<0.0094	<0.010	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Phenanthrene	2,300	--	<0.0094	0.012	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Pyrene	2,300	--	<0.0094	0.040	<0.0095	<0.0097	<0.0098	<0.0098	<0.0096	<0.010	<0.011
Priority Pollutant (PP) Metals											
Antimony	47	6.8	<2.3	<2.3	<2.4	<2.4	<2.2	<2.3	<2.2	<2.2	<3.1
Arsenic	3.0/26.8*	4.9	3.2	3.5	3.2	4.5	5.9	5.4	4.4	5.5	5.1
Beryllium	230	1.6	0.92	1.1	1.0	1.8	1.9	1.5	1.6	1.4	0.99
Cadmium	98	1.1	<0.45	<0.46	<0.48	<0.47	<0.44	<0.47	<0.44	<0.44	<0.62
Chromium ⁽³⁾	6.3	30	29	35	44	56	55	22	28	21	17
Copper	4,700	42	12	11	8.7	18	24	27	22	31	27
Lead	550	61	15	16	13	22	24	11	11	7.9	8.3
Mercury	4.6	0.14	<0.091	<0.091	<0.096	<0.094	<0.087	<0.093	<0.089	<0.087	<0.12
Nickel	2,200	22	21	31	28	52	46	32	34	30	25
Selenium	580	1.0	<0.45	<0.46	<0.48	<0.47	<0.44	<0.47	<0.44	<0.44	<0.62
Silver	580	1.0	<0.45	<0.46	<0.48	<0.47	<0.44	<0.47	<0.44	<0.44	<0.62
Thallium	1.2	1.5	<0.45	<0.46	<0.48	<0.47	<0.44	<0.47	<0.44	<0.44	<0.62
Zinc	35,000	73	44	75	61	120	110	58	62	42	34
Organochlorine Pesticides											
4,4-DDD	2.5	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
4,4-DDE	9.3	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
4,4-DDT	8.5	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Aldrin	0.18	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Chlordane (n.o.s.)	7.7	--	--	<0.13	--	<0.12	--	<0.12	--	<0.13	--
Dieldrin	0.7	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endosulfan I	0.14	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endosulfan II	700	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endosulfan Sulfate	NE	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endrin	NE	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endrin Aldehyde	25	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Endrin ketone	NE	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Gamma-BHC (Lindane)	NE	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Heptachlor	2.5	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Heptachlor Epoxide	7.7	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Methoxychlor	0.63	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Toxaphene	0.33	--	--	<0.13	--	<0.12	--	<0.12	--	<0.13	--
alpha-BHC	410	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
beta-BHC	2.1	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
cis-Chlordane	0.36	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
delta-BHC	1.3	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
trans-Chlordane	NE	--	--	<0.0051	--	<0.0047	--	<0.0047	--	<0.0051	--
Chlorinated Herbicides											
2,4,5-T	--	--	--	<0.023	--	<0.021	--	<0.022	--	<0.023	--
2,4,5-TP (Silvex)	--	--	--	<0.023	--	<0.021	--	<0.022	--	<0.023	--
2,4-D	--	--	--	<0.23	--	<0.21	--	<0.22	--	<0.23	--
2,4-DB	--	--	--	<0.23	--	<0.21	--	<0.22	--	<0.23	--
Dalapon	--	--	--	<0.55	--	<0.51	--	<0.53	--	<0.55	--
Dicamba	--	--	--	<0.023	--	<0.021	--	<0.022	--	<0.023	--
Dichloroprop	--	--	--	<0.23	--	<0.21	--	<0.22	--	<0.23	--
Dinoseb	--	--	--	<0.12	--	<0.11	--	<0.11	--	<0.12	--
MCPA	--	--	--	<23	--	<21	--	<22	--	<23	--
MCPP	--	--	--	<23	--	<21	--	<22	--	<23	--
Total Petroleum Hydrocarbons (TPH)											
TPH DRO	620	--	--	--	--	--	--	--	--	--	--

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA7-K	GTA-SA7-K	GTA-SA8-A	GTA-SA8-A	GTA-SA8-B	GTA-SA8-B	GTA-SA8-C	GTA-SA8-C	GTA-SA8-D	
			0-1	1-11	0-1	1-4	0-1	1-4	0-1	1-4	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/9/2022	9/9/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.0091	<0.011	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Acenaphthene	4,500	--	<0.0091	<0.011	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Acenaphthylene	NE	--	<0.0091	<0.011	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Anthracene	23,000	--	<0.0091	0.036	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Benzo(a)anthracene	21	--	0.050	0.030	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Benzo(a)pyrene	2	--	0.043	0.022	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Benzo(b)fluoranthene	21	--	0.11	0.018	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Benzo(g,h,i)perylene	NE	--	0.049	0.014	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Benzo(k)fluoranthene	210	--	0.055	0.021	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Chrysene	2,100	--	0.085	0.028	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Dibenz(a,h)Anthracene	2.1	--	0.012	<0.011	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Fluoranthene	3,000	--	0.048	0.079	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Fluorene	3,000	--	<0.0091	0.020	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Indeno(1,2,3-c,d)Pyrene	21	--	0.039	0.014	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Naphthalene	17	--	<0.0091	<0.011	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Phenanthrene	2,300	--	0.015	0.10	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Pyrene	2,300	--	0.048	0.063	<0.0099	<0.0095	<0.0097	<0.0093	<0.0097	<0.0094	<0.0097	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.5	<2.3	<2.4	<2.8	<2.4	<2.1	<2.2	<2.2	<2.8	
Arsenic	3.0/26.8*	4.9	4.3	11	3.4	4.3	2.9	2.9	4.5	4.1	4.3	
Beryllium	230	1.6	1.0	2.5	1.1	1.00	1.3	1.5	1.9	1.5	1.8	
Cadmium	98	1.1	<0.50	<0.46	<0.49	<0.56	<0.49	<0.42	<0.44	<0.44	<0.56	
Chromium ⁽³⁾	6.3	30	21	31	37	30	61	79	50	52	43	
Copper	4,700	42	13	25	8.4	8.2	16	19	13	20	14	
Lead	550	61	20	22	16	13	14	23	22	20	20	
Mercury	4.6	0.14	<0.10	<0.093	<0.097	<0.11	<0.097	<0.084	<0.088	<0.089	<0.11	
Nickel	2,200	22	21	44	26	17	47	59	41	42	36	
Selenium	580	1.0	<0.50	<0.46	<0.49	<0.56	<0.49	<0.42	<0.44	<0.44	<0.56	
Silver	580	1.0	<0.50	<0.46	<0.49	<0.56	<0.49	<0.42	<0.44	<0.44	<0.56	
Thallium	1.2	1.5	<0.50	<0.46	<0.49	<0.56	<0.49	<0.42	<0.44	<0.44	<0.56	
Zinc	35,000	73	71	70	70	52	96	130	100	92	94	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
4,4-DDE	9.3	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
4,4-DDT	8.5	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Aldrin	0.18	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Chlordane (n.o.s.)	7.7	--	<0.53	--	<0.12	--	<0.11	--	<0.11	--	<0.11	
Dieldrin	7.7	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endosulfan I	0.14	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endosulfan II	700	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endosulfan Sulfate	NE	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endrin	NE	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endrin Aldehyde	25	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Endrin ketone	NE	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Gamma-BHC (Lindane)	NE	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Heptachlor	2.5	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Heptachlor Epoxide	7.7	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Methoxychlor	0.63	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Toxaphene	0.33	--	<0.53	--	<0.12	--	<0.11	--	<0.11	--	<0.11	
alpha-BHC	410	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
beta-BHC	2.1	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
cis-Chlordane	0.36	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
delta-BHC	1.3	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
trans-Chlordane	NE	--	<0.021	--	<0.0047	--	<0.0045	--	<0.0045	--	<0.0046	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.021	--	<0.022	--	<0.021	--	<0.023	--	<0.023	
2,4,5-TP (Silvex)	--	--	<0.021	--	<0.022	--	<0.021	--	<0.023	--	<0.023	
2,4-D	--	--	<0.21	--	<0.22	--	<0.21	--	<0.22	--	<0.23	
2,4-DB	--	--	<0.21	--	<0.22	--	<0.22	--	<0.23	--	<0.23	
Dalapon	--	--	<0.51	--	<0.52	--	<0.51	--	<0.54	--	<0.55	
Dicamba	--	--	<0.021	--	<0.022	--	<0.021	--	<0.022	--	<0.023	
Dichloroprop	--	--	<0.21	--	<0.22	--	<0.21	--	<0.22	--	<0.23	
Dinoseb	--	--	<0.11	--	<0.11	--	<0.11	--	<0.11	--	<0.12	
MCPA	--	--	<21	--	<21	--	<21	--	<22	--	<23	
MCPP	--	--	<21	--	<22	--	<21	--	<22	--	<23	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA8-D	GTA-SA8-E	GTA-SA8-E	GTA-SA8-F	GTA-SA8-F	GTA-SA8-G	GTA-SA8-G	GTA-SA8-H	GTA-SA8-H	
			1-4	0-1	1-4	0-1	1-4	0-1	1-4	0-1	1-4	
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab
			9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022	9/13/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Acenaphthene	4,500	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Acenaphthylene	NE	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Anthracene	23,000	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Benzo(a)anthracene	21	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Benzo(a)pyrene	2	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Benzo(b)fluoranthene	21	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Benzo(g,h,i)perylene	NE	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Benzo(k)fluoranthene	210	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Chrysene	2,100	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Dibenz(a,h)Anthracene	2.1	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Fluoranthene	3,000	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Fluorene	3,000	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Naphthalene	17	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Phenanthrene	2,300	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Pyrene	2,300	--	<0.0099	<0.010	<0.010	<0.0097	<0.0097	<0.0099	<0.010	<0.0099	<0.010	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.4	<2.3	<2.6	<2.2	<2.3	<2.1	<2.4	<2.4	<2.1	
Arsenic	3.0/26.8*	4.9	3.9	6.3	4.9	6.4	5.0	7.8	7.0	6.8	6.1	
Beryllium	230	1.6	1.6	1.8	2.2	1.4	1.9	1.4	2.4	1.4	1.0	
Cadmium	98	1.1	<0.48	<0.47	<0.53	<0.44	<0.46	<0.42	<0.49	<0.47	<0.42	
Chromium ⁽³⁾	6.3	30	44	27	41	46	61	49	35	55	43	
Copper	4,700	42	15	11	27	18	27	23	31	19	17	
Lead	550	61	20	15	19	26	23	25	13	18	15	
Mercury	4.6	0.14	<0.096	<0.094	<0.11	<0.088	<0.091	<0.085	<0.098	<0.094	<0.085	
Nickel	2,200	22	37	26	72	35	52	36	40	26	23	
Selenium	580	1.0				<0.44	<0.46	0.49	<0.49	0.60	<0.42	
Silver	580	1.0	<0.48	<0.47	<0.53	<0.44	<0.46	<0.42	<0.49	<0.47	<0.42	
Thallium	1.2	1.5	<0.48	<0.47	<0.53	<0.44	<0.46	<0.42	<0.49	<0.47	<0.42	
Zinc	35,000	73	91	69	130	87	100	83	82	64	66	
Organochlorine Pesticides												
4,4-DDD	2.5	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
4,4-DDE	9.3	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
4,4-DDT	8.5	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Aldrin	0.18	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.11	--	<0.11	--	<0.12	--	
Dieldrin	0.7	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endosulfan I	0.14	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endosulfan II	700	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endosulfan Sulfate	NE	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endrin	NE	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endrin Aldehyde	25	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Endrin ketone	NE	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Gamma-BHC (Lindane)	NE	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Heptachlor	2.5	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Heptachlor Epoxide	7.7	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Methoxychlor	0.63	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Toxaphene	0.33	--	--	<0.12	--	<0.11	--	<0.11	--	<0.12	--	
alpha-BHC	410	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
beta-BHC	2.1	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
cis-Chlordane	0.36	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
delta-BHC	1.3	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
trans-Chlordane	NE	--	--	<0.0049	--	<0.0045	--	<0.0045	--	<0.0047	--	
Chlorinated Herbicides												
2,4,5-T		--	--	<0.025	--	<0.022	--	<0.023	--	<0.022	--	
2,4,5-TP (Silvex)		--	--	<0.025	--	<0.022	--	<0.023	--	<0.022	--	
2,4-D		--	--	<0.25	--	<0.22	--	<0.23	--	<0.22	--	
2,4-DB		--	--	<0.26	--	<0.22	--	<0.23	--	<0.23	--	
Dalapon		--	--	<0.61	--	<0.53	--	<0.55	--	<0.54	--	
Dicamba		--	--	<0.025	--	<0.022	--	<0.023	--	<0.022	--	
Dichloroprop		--	--	<0.25	--	<0.22	--	<0.23	--	<0.22	--	
Dinoseb		--	--	<0.13	--	<0.11	--	<0.11	--	<0.11	--	
MCPA		--	--	<25	--	<21	--	<22	--	<22	--	
MCPP		--	--	<25	--	<22	--	<23	--	<22	--	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
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 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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 Shaded and bold values represent exceedance of MDE RCS
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Table 1
Soil Analysis Summary

Sample Identification	MDE NRCS	ATC Central	GTA-SA8-I	GTA-SA8-I	GTA-SA8-J	GTA-SA8-J	GTA-SA8-K	GTA-SA8-K	GTA-SA8-L	GTA-SA8-L	GTA-SA8-M	
			0-1	1-4	0-1	1-4	0-1	1-4	0-1	1-4	0-1	
			Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite
			9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Acenaphthene	4,500	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Acenaphthylene	NE	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Anthracene	23,000	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Benzo(a)anthracene	21	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Benzo(a)pyrene	2	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Benzo(b)fluoranthene	21	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Benzo(g,h,i)perylene	NE	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Benzo(k)fluoranthene	210	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Chrysene	2,100	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Dibenz(a,h)Anthracene	2.1	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Fluoranthene	3,000	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Fluorene	3,000	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Naphthalene	17	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Phenanthrene	2,300	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Pyrene	2,300	--	<0.0099	<0.010	<0.010	<0.010	<0.010	<0.010	<0.0098	<0.010	<0.0098	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.2	<2.4	<2.7	<3.1	<2.8	<2.8	<2.3	<3.1	<2.9	
Arsenic	3.0/26.8*	4.9	2.4	6.7	7.2	3.1	9.9	14	4.5	6.9	8.7	
Beryllium	230	1.6	1.1	1.6	1.3	1.1	1.4	1.7	0.65	0.75	0.93	
Cadmium	98	1.1	<0.43	<0.48	<0.54	<0.63	<0.55	<0.55	<0.46	<0.63	<0.58	
Chromium ⁽³⁾	6.3	30	33	47	46	40	48	50	29	43	44	
Copper	4,700	42	9.5	26	21	15	22	23	8.6	18	19	
Lead	550	61	11	16	15	13	17	16	13	14	22	
Mercury	4.6	0.14	<0.086	<0.097	<0.11	<0.13	<0.11	<0.11	<0.092	<0.13	<0.12	
Nickel	2,200	22	19	52	29	27	29	35	13	24	22	
Selenium	580	1.0	<0.43	<0.48	<0.54	<0.63	<0.55	<0.55	0.48	<0.63	<0.58	
Silver	580	1.0	<0.43	<0.48	<0.54	<0.63	<0.55	<0.55	<0.46	<0.63	<0.58	
Thallium	1.2	1.5	<0.43	<0.48	<0.54	<0.63	<0.55	<0.55	<0.46	<0.63	<0.58	
Zinc	35,000	73	50	76	68	55	86	83	29	39	56	
Organochlorine Pesticides												
4,4-DDD	2.5	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
4,4-DDE	9.3	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
4,4-DDT	8.5	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Aldrin	0.18	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.12	--	<0.12	--	<0.12	--	<0.12	
Dieldrin	7.7	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endosulfan I	0.14	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endosulfan II	700	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endosulfan Sulfate	NE	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endrin	NE	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endrin Aldehyde	25	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Endrin ketone	NE	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Gamma-BHC (Lindane)	NE	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Heptachlor	2.5	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Heptachlor Epoxide	7.7	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Methoxychlor	0.63	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Toxaphene	0.33	--	<0.12	--	<0.12	--	<0.12	--	<0.12	--	<0.12	
alpha-BHC	410	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
beta-BHC	2.1	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
cis-Chlordane	0.36	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
delta-BHC	1.3	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
trans-Chlordane	NE	--	<0.0046	--	<0.0048	--	<0.0047	--	<0.0047	--	<0.0046	
Chlorinated Herbicides												
2,4,5-T	--	--	<0.023	--	<0.022	--	<0.025	--	<0.023	--	<0.022	
2,4,5-TP (Silvex)	--	--	<0.023	--	<0.022	--	<0.025	--	<0.023	--	<0.022	
2,4-D	--	--	<0.23	--	<0.22	--	<0.24	--	<0.23	--	<0.21	
2,4-DB	--	--	<0.23	--	<0.22	--	<0.25	--	<0.23	--	<0.22	
Dalapon	--	--	<0.56	--	<0.53	--	<0.59	--	<0.55	--	<0.52	
Dicamba	--	--	<0.023	--	<0.022	--	<0.024	--	<0.023	--	<0.021	
Dichloroprop	--	--	<0.23	--	<0.22	--	<0.24	--	<0.23	--	<0.21	
Dinoseb	--	--	<0.12	--	<0.11	--	<0.12	--	<0.11	--	<0.11	
MCPA	--	--	<23	--	<22	--	<24	--	<22	--	<21	
MCPP	--	--	<23	--	<22	--	<24	--	<23	--	<21	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
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 Samples collected Between September 8, 2022 and September 15, 2022
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 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA8-M	GTA-SA9-A	GTA-SA9-A	GTA-SA9-B	GTA-SA9-B	GTA-SA9-C	GTA-SA9-C	GTA-SA9-D	GTA-SA9-D	
			1-4	0-1	1-5	0-1	1-5	0-1	1-5	0-1	1-5	
			Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab	Composite	Grab
			9/9/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/14/2022
Polycyclic Aromatic Hydrocarbons (PAHs)												
2-Methylnaphthalene	300	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Acenaphthene	4,500	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Acenaphthylene	NE	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Anthracene	23,000	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Benzo(a)anthracene	21	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Benzo(a)pyrene	2	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Benzo(b)fluoranthene	21	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Benzo(g,h,i)perylene	NE	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Benzo(k)fluoranthene	210	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Chrysene	2,100	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Dibenz(a,h)Anthracene	2.1	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Fluoranthene	3,000	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Fluorene	3,000	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Indeno(1,2,3-c,d)Pyrene	21	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Naphthalene	17	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Phenanthrene	2,300	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Pyrene	2,300	--	<0.011	<0.0099	<0.0099	<0.0100	<0.0099	<0.010	<0.010	<0.011	<0.011	
Priority Pollutant (PP) Metals												
Antimony	47	6.8	<2.8	<2.5	<2.6	<2.0	<2.4	<2.4	<2.6	<2.9	<2.7	
Arsenic	3.0/26.8*	4.9	7.4	8.1	9.6	6.9	6.8	5.7	7.0	6.8	5.3	
Beryllium	230	1.6	0.82	1.4	1.9	0.95	1.0	1.3	1.5	1.9	2.8	
Cadmium	98	1.1	<0.55	<0.49	<0.51	<0.41	<0.48	<0.49	<0.52	<0.58	<0.54	
Chromium ⁽³⁾	6.3	30	33	33	50	54	41	34	36	35	37	
Copper	4,700	42	23	15	22	14	20	14	19	32	31	
Lead	550	61	13	22	17	17	13	17	13	15	12	
Mercury	4.6	0.14	0.14	<0.099	<0.10	<0.082	<0.096	<0.097	<0.10	<0.12	<0.11	
Nickel	2,200	22	28	24	30	19	28	24	27	40	49	
Selenium	580	1.0	<0.55	<0.49	<0.51	<0.41	<0.48	<0.49	<0.52	<0.58	<0.54	
Silver	580	1.0	<0.55	<0.49	<0.51	<0.41	<0.48	<0.49	<0.52	<0.58	<0.54	
Thallium	1.2	1.5	<0.55	<0.49	<0.51	<0.41	<0.48	<0.49	<0.52	<0.58	<0.54	
Zinc	35,000	73	48	59	60	43	53	52	48	71	75	
Organochlorine Pesticides												
4,4-DDD	2.5	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
4,4-DDE	9.3	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
4,4-DDT	8.5	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Aldrin	0.18	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Chlordane (n.o.s.)	7.7	--	--	<0.12	--	<0.11	--	<0.13	--	<0.13	--	
Dieldrin	7.7	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endosulfan I	0.14	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endosulfan II	700	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endosulfan Sulfate	NE	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endrin	NE	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endrin Aldehyde	25	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Endrin ketone	NE	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Gamma-BHC (Lindane)	NE	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Heptachlor	2.5	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Heptachlor Epoxide	7.7	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Methoxychlor	0.63	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Toxaphene	0.33	--	--	<0.12	--	<0.11	--	<0.13	--	<0.13	--	
alpha-BHC	410	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
beta-BHC	2.1	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
cis-Chlordane	0.36	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
delta-BHC	1.3	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
trans-Chlordane	NE	--	--	<0.0047	--	<0.0046	--	<0.0051	--	<0.0053	--	
Chlorinated Herbicides												
2,4,5-T	--	--	--	<0.022	--	<0.023	--	<0.023	--	<0.024	--	
2,4,5-TP (Silvex)	--	--	--	<0.022	--	<0.023	--	<0.023	--	<0.024	--	
2,4-D	--	--	--	<0.22	--	<0.23	--	<0.23	--	<0.24	--	
2,4-DB	--	--	--	<0.23	--	<0.23	--	<0.23	--	<0.24	--	
Dalapon	--	--	--	<0.53	--	<0.55	--	<0.55	--	<0.57	--	
Dicamba	--	--	--	<0.022	--	<0.023	--	<0.023	--	<0.024	--	
Dichloroprop	--	--	--	<0.22	--	<0.23	--	<0.23	--	<0.24	--	
Dinoseb	--	--	--	<0.11	--	<0.11	--	<0.11	--	<0.12	--	
MCPA	--	--	--	<22	--	<22	--	<22	--	<23	--	
MCPP	--	--	--	<22	--	<23	--	<23	--	<24	--	
Total Petroleum Hydrocarbons (TPH)												
TPH DRO	620	--	--	--	--	--	--	--	--	--	--	

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
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 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 1
Soil Analysis Summary

Sample Identification Sample Interval Sample Type Sampling Date	MDE NRCS	ATC Central	GTA-SA9-E	GTA-SA9-E	GTA-SA9-F	GTA-SA9-F	GTA-SA10	GTA-SA10
			0-1	1-5	0-1	1-5	0-1	1-10
			Grab	Composite	Grab	Composite	Grab	Composite
			9/14/2022	9/14/2022	9/14/2022	9/14/2022	9/9/2022	9/9/2022
Polycyclic Aromatic Hydrocarbons (PAHs)								
2-Methylnaphthalene	300	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Acenaphthene	4,500	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Acenaphthylene	NE	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Anthracene	23,000	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Benzo(a)anthracene	21	--	0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Benzo(a)pyrene	2	--	0.012	<0.0098	<0.010	<0.010	<0.0098	<0.011
Benzo(b)fluoranthene	21	--	0.011	<0.0098	<0.010	<0.010	<0.0098	<0.011
Benzo(g,h,i)perylene	NE	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Benzo(k)fluoranthene	210	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Chrysene	2,100	--	0.011	<0.0098	<0.010	<0.010	<0.0098	<0.011
Dibenz(a,h)Anthracene	2.1	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Fluoranthene	3,000	--	0.013	<0.0098	<0.010	<0.010	<0.0098	<0.011
Fluorene	3,000	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Indeno(1,2,3-c,d)Pyrene	21	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Naphthalene	17	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Phenanthrene	2,300	--	<0.010	<0.0098	<0.010	<0.010	<0.0098	<0.011
Pyrene	2,300	--	0.013	<0.0098	<0.010	<0.010	<0.0098	<0.011
Priority Pollutant (PP) Metals								
Antimony	47	6.8	<2.9	<2.8	<2.0	<2.7	<2.6	<2.8
Arsenic	3.0/26.8*	4.9	5.2	6.3	5.6	4.3	6.2	5.4
Beryllium	230	1.6	1.0	1.8	1.2	1.4	1.1	2.3
Cadmium	98	1.1	<0.58	<0.55	<0.41	<0.53	<0.52	<0.56
Chromium ⁽³⁾	6.3	30	22	7.8	23	20	34	17
Copper	4,700	42	21	24	23	22	13	20
Lead	550	61	16	19	15	12	17	14
Mercury	4.6	0.14	<0.12	<0.11	<0.081	<0.11	<0.10	<0.11
Nickel	2,200	22	26	39	27	28	23	30
Selenium	580	1.0	<0.58	<0.55	<0.41	<0.53	0.53	<0.56
Silver	580	1.0	<0.58	<0.55	<0.41	<0.53	<0.52	<0.56
Thallium	1.2	1.5	<0.58	<0.55	<0.41	<0.53	<0.52	<0.56
Zinc	35,000	73	45	95	43	41	49	54
Organochlorine Pesticides								
4,4-DDD	2.5	--	<0.0047	--	<0.0049	--	<0.0047	--
4,4-DDE	9.3	--	<0.0047	--	<0.0049	--	<0.0047	--
4,4-DDT	8.5	--	<0.0047	--	<0.0049	--	<0.0047	--
Aldrin	0.18	--	<0.0047	--	<0.0049	--	<0.0047	--
Chlordane (n.o.s.)	7.7	--	<0.12	--	<0.12	--	<0.12	--
Dieldrin	7.7	--	<0.0047	--	<0.0049	--	<0.0047	--
Endosulfan I	0.14	--	<0.0047	--	<0.0049	--	<0.0047	--
Endosulfan II	700	--	<0.0047	--	<0.0049	--	<0.0047	--
Endosulfan Sulfate	NE	--	<0.0047	--	<0.0049	--	<0.0047	--
Endrin	NE	--	<0.0047	--	<0.0049	--	<0.0047	--
Endrin Aldehyde	25	--	<0.0047	--	<0.0049	--	<0.0047	--
Endrin ketone	NE	--	<0.0047	--	<0.0049	--	<0.0047	--
Gamma-BHC (Lindane)	NE	--	<0.0047	--	<0.0049	--	<0.0047	--
Heptachlor	2.5	--	<0.0047	--	<0.0049	--	<0.0047	--
Heptachlor Epoxide	7.7	--	<0.0047	--	<0.0049	--	<0.0047	--
Methoxychlor	0.63	--	<0.0047	--	<0.0049	--	<0.0047	--
Toxaphene	0.33	--	<0.12	--	<0.12	--	<0.12	--
alpha-BHC	410	--	<0.0047	--	<0.0049	--	<0.0047	--
beta-BHC	2.1	--	<0.0047	--	<0.0049	--	<0.0047	--
cis-Chlordane	0.36	--	<0.0047	--	<0.0049	--	<0.0047	--
delta-BHC	1.3	--	<0.0047	--	<0.0049	--	<0.0047	--
trans-Chlordane	NE	--	<0.0047	--	<0.0049	--	<0.0047	--
Chlorinated Herbicides								
2,4,5-T		--	<0.024	--	<0.023	--	<0.022	--
2,4,5-TP (Silvex)		--	<0.024	--	<0.023	--	<0.022	--
2,4-D		--	<0.23	--	<0.22	--	<0.22	--
2,4-DB		--	<0.24	--	<0.23	--	<0.23	--
Dalapon		--	<0.56	--	<0.54	--	<0.53	--
Dicamba		--	<0.023	--	<0.022	--	<0.022	--
Dichloroprop		--	<0.23	--	<0.22	--	<0.22	--
Dinoseb		--	<0.12	--	<0.11	--	<0.11	--
MCPA		--	<23	--	<22	--	<22	--
MCPP		--	<23	--	<22	--	<22	--
Total Petroleum Hydrocarbons (TPH)								
TPH DRO	620	--	--	--	--	--	--	--

Notes:
 This table is only to be used in conjunction with the report for which it was prepared. See t
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Star
 ATC = Anticipated Typical Concentration for soils in Eastern Maryland
 Shaded and bold values represent exceedance of MDE RCS
 NA = Not applicable
 NE = MDE standard not established
 * = Risk-based calculated value
 The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA1-F	GTA-SA1-F
			0-1	1-17
			Grab	Composite
			9/9/2022	9/9/2022
Priority Pollutant (PP) Metals				
Chromium	6.3	30		
Hexavalent Chromium	6.3	NE		
Polychlorinated Biphenyls				
PCB-1016	5.1	--	<0.052	<0.055
PCB-1221	0.83	--	<0.052	<0.055
PCB-1232	0.72	--	<0.052	<0.055
PCB-1242	0.95	--	<0.052	<0.055
PCB-1248	0.95	--	<0.052	<0.055
PCB-1254	0.97	--	<0.052	<0.055
PCB-1260	0.99	--	<0.052	<0.055

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See the report text for background info
 Samples collected Between September 8, 2022 and September 15, 2022
 Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)

NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Standards for Soil and Groundwater; October 2018; Interim Final Guidance (Update No. 3)

ATC = Anticipated Typical Concentration for soils in Central Maryland
 Shaded and bold values represent exceedance of MDE RCS

NE = MDE standard not established

* = Risk-based calculated value



Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA1-G	GTA-SA1-G	GTA-SA1-H	GTA-SA1-H
			0-1	1-19	0-1	1-19
			Grab	Composite	Grab	Composite
			9/9/2022	9/9/2022	9/9/2022	9/9/2022
Priority Pollutant (PP) Metals						
Chromium	6.3	30		46		
Hexavalent Chromium	6.3	NE		<1.2		
Polychlorinated Biphenyls						
PCB-1016	5.1	--	<0.058	<0.063	<0.056	<0.067
PCB-1221	0.83	--	<0.058	<0.063	<0.056	<0.067
PCB-1232	0.72	--	<0.058	<0.063	<0.056	<0.067
PCB-1242	0.95	--	<0.058	<0.063	0.076	<0.067
PCB-1248	0.95	--	<0.058	<0.063	<0.056	<0.067
PCB-1254	0.97	--	<0.058	<0.063	<0.056	<0.067
PCB-1260	0.99	--	<0.058	<0.063	<0.056	<0.067

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See information, assumptions, limitations, etc.

Samples collected Between September 8, 2022 and September 15, 2022

Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)

NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Standards for Soil and Groundwater; October 2018; Interim Final Guidance (Update No. 3)

ATC = Anticipated Typical Concentration for soils in Central Maryland

Shaded and bold values represent exceedance of MDE RCS

NE = MDE standard not established

* = Risk-based calculated value



Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA1-I	GTA-SA1-I	GTA-SA3-A	GTA-SA4-B	GTA-SA4-B
			0-1	1-12.5	0-1	0-1	1-15
			Grab	Composite	Grab	Grab	Composite
			9/9/2022	9/9/2022	9/13/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30			74		57
Hexavalent Chromium	6.3	NE			<1.3		<1.3
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.056	<0.053	--	<0.059	<0.061
PCB-1221	0.83	--	<0.056	<0.053	--	<0.059	<0.061
PCB-1232	0.72	--	<0.056	<0.053	--	<0.059	<0.061
PCB-1242	0.95	--	<0.056	<0.053	--	<0.059	<0.061
PCB-1248	0.95	--	<0.056	<0.053	--	<0.059	<0.061
PCB-1254	0.97	--	<0.056	0.15	--	<0.059	<0.061
PCB-1260	0.99	--	<0.056	<0.053	--	<0.059	<0.061

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See t
Samples collected Between September 8, 2022 and September 15, 2022
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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-C	GTA-SA4-C	GTA-SA4-D	GTA-SA4-D	GTA-SA4-E
			0-1	1-5.5	0-1	1-6	0-1
			Grab	Composite	Grab	Composite	Grab
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30					
Hexavalent Chromium	6.3	NE					
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1221	0.83	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1232	0.72	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1242	0.95	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1248	0.95	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1254	0.97	--	<0.061	<0.073	<0.054	<0.058	<0.054
PCB-1260	0.99	--	<0.061	<0.073	<0.054	<0.058	<0.054

Notes:

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Samples collected Between September 8, 2022 and September 15, 2022
Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)

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Standards for Soil and Groundwater; October 2018; Interim Final Guidance (Update No. 3)

ATC = Anticipated Typical Concentration for soils in Central Maryland

Shaded and bold values represent exceedance of MDE RCS

NE = MDE standard not established

* = Risk-based calculated value



Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-E	GTA-SA4-F	GTA-SA4-F	GTA-SA4-G	GTA-SA4-G
			1-15	0-1	1-15	0-1	1-15
			Composite	Grab	Composite	Grab	Composite
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30					
Hexavalent Chromium	6.3	NE					
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1221	0.83	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1232	0.72	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1242	0.95	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1248	0.95	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1254	0.97	--	<0.063	<0.061	<0.059	<0.058	<0.063
PCB-1260	0.99	--	<0.063	<0.061	<0.059	<0.058	<0.063

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-H	GTA-SA4-H	GTA-SA4-I	GTA-SA4-I	GTA-SA4-J
			0-1	1-11	0-1	1-15	0-1
			Grab	Composite	Grab	Composite	Grab
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30	46				
Hexavalent Chromium	6.3	NE	<1.3				
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1221	0.83	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1232	0.72	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1242	0.95	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1248	0.95	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1254	0.97	--	<0.060	<0.069	<0.052	<0.065	<0.058
PCB-1260	0.99	--	<0.060	<0.069	<0.052	<0.065	<0.058

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-J	GTA-SA4-K	GTA-SA4-K	GTA-SA4-L	GTA-SA4-L
			1-9	0-1	1-15	0-1	1-15
			Composite	Grab	Composite	Grab	Composite
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30					
Hexavalent Chromium	6.3	NE					
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1221	0.83	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1232	0.72	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1242	0.95	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1248	0.95	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1254	0.97	--	<0.063	<0.051	<0.066	<0.057	<0.064
PCB-1260	0.99	--	<0.063	<0.051	<0.066	<0.057	<0.064

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-M
Sample Interval			0-1
Sample Type			Grab
Sampling Date			9/8/2022
Priority Pollutant (PP) Metals			
Chromium	6.3	30	
Hexavalent Chromium	6.3	NE	
Polychlorinated Biphenyls			
PCB-1016	5.1	--	<0.058
PCB-1221	0.83	--	<0.058
PCB-1232	0.72	--	<0.058
PCB-1242	0.95	--	<0.058
PCB-1248	0.95	--	<0.058
PCB-1254	0.97	--	<0.058
PCB-1260	0.99	--	<0.058

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA4-M	GTA-SA4-N	GTA-SA4-N	GTA-SA4-O	GTA-SA4-O
			1-15	0-1	1-15	0-1	1-15
			Composite	Grab	Composite	Grab	Composite
			9/8/2022	9/8/2022	9/8/2022	9/8/2022	9/8/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30					
Hexavalent Chromium	6.3	NE					
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1221	0.83	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1232	0.72	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1242	0.95	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1248	0.95	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1254	0.97	--	<0.066	<0.063	<0.063	<0.063	<0.059
PCB-1260	0.99	--	<0.066	<0.063	<0.063	<0.063	<0.059

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA6-D	GTA-SA6-E	GTA-SA6-E	GTA-SA6-F	GTA-SA6-F
			1-8.8'	0-1	1-15	0-1	1-15
			Composite	Grab	Composite	Grab	Composite
			9/13/2022	9/8/2022	9/8/2022	9/14/2022	9/14/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30	120				
Hexavalent Chromium	6.3	NE	<1.3				
Polychlorinated Biphenyls							
PCB-1016	5.1	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1221	0.83	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1232	0.72	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1242	0.95	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1248	0.95	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1254	0.97	--	--	<0.050	<0.061	<0.061	<0.065
PCB-1260	0.99	--	--	<0.050	<0.061	<0.061	<0.065

Notes:

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Samples collected Between September 8, 2022 and September 15, 2022
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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA7-I	GTA-SA7-I	GTA-SA7-J	GTA-SA7-J	GTA-SA7-K
			0-1	1-5	0-1	1-5	0-1
			Grab	Composite	Grab	Composite	Grab
			9/9/2022	9/9/2022	9/9/2022	9/9/2022	9/9/2022
Priority Pollutant (PP) Metals							
Chromium	6.3	30					
Hexavalent Chromium	6.3	NE					
Polychlorinated Biphenyls							
PCB-1016	5.1	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1221	0.83	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1232	0.72	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1242	0.95	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1248	0.95	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1254	0.97	--	<0.055	<0.055	<0.063	<0.065	<0.054
PCB-1260	0.99	--	<0.055	<0.055	<0.063	<0.065	<0.054

Notes:

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Table 2
Soil Analysis Summary - Addendum

Sample Identification	MDE NRCS	ATC Central	GTA-SA7-K	GTA-SA8-B
Sample Interval			1-11	1-4
Sample Type			Composite	Composite
Sampling Date			9/9/2022	9/13/2022
Priority Pollutant (PP) Metals				
Chromium	6.3	30		61
Hexavalent Chromium	6.3	NE		<1.1
Polychlorinated Biphenyls				
PCB-1016	5.1	--	<0.065	--
PCB-1221	0.83	--	<0.065	--
PCB-1232	0.72	--	<0.065	--
PCB-1242	0.95	--	<0.065	--
PCB-1248	0.95	--	<0.065	--
PCB-1254	0.97	--	<0.065	--
PCB-1260	0.99	--	<0.065	--

Notes:

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**Table 3
Sediment Analysis Summary**

Sample Identification	MDE NRCS	ATC Central	GTA-DA11-E	GTA-DA11-W
Sampling Date			9/26/2022	9/26/2022
Polycyclic Aromatic Hydrocarbons (PAHs)				
2-Methylnaphthalene	300	--	<0.017	<0.019
Acenaphthene	4,500	--	<0.017	<0.019
Acenaphthylene	NE	--	<0.017	<0.019
Anthracene	23,000	--	<0.017	<0.019
Benzo(a)anthracene	21	--	<0.017	<0.019
Benzo(a)pyrene	2	--	<0.017	<0.019
Benzo(b)fluoranthene	21	--	<0.017	<0.019
Benzo(g,h,i)perylene	NE	--	<0.017	<0.019
Benzo(k)fluoranthene	210	--	<0.017	<0.019
Chrysene	2,100	--	<0.017	<0.019
Dibenz(a,h)Anthracene	2.1	--	<0.017	<0.019
Fluoranthene	3,000	--	<0.017	<0.019
Fluorene	3,000	--	<0.017	<0.019
Indeno(1,2,3-c,d)Pyrene	21	--	<0.017	<0.019
Naphthalene	17	--	<0.017	<0.019
Phenanthrene	2,300	--	<0.017	<0.019
Pyrene	2,300	--	<0.017	<0.019
Priority Pollutant (PP) Metals				
Antimony	47	6.8	<4.7	<4.8
Arsenic	3.0/26.8*	4.9	6.7	9.0
Beryllium	230	1.6	2.8	3.4
Cadmium	98	1.1	<0.94	<0.96
Chromium ⁽³⁾	6.3	30	39	51
Copper	4,700	42	37	51
Lead	550	61	27	37
Mercury	4.6	0.14	<0.19	<0.19
Nickel	2,200	22	62	79
Selenium	580	1.0	<0.94	<0.96
Silver	580	1.0	<0.94	<0.96
Thallium	1.2	1.5	<0.94	<0.96
Zinc	35,000	73	160	200
Polychlorinated Biphenyls				
PCB-1016	5.1	--	<0.10	<0.11
PCB-1221	0.83	--	<0.10	<0.11
PCB-1232	0.72	--	<0.10	<0.11
PCB-1242	0.95	--	<0.10	<0.11
PCB-1248	0.95	--	<0.10	<0.11
PCB-1254	0.97	--	<0.10	<0.11
PCB-1260	0.99	--	<0.10	<0.11

Notes:

This table is only to be used in conjunction with the report for which it was prepared. See the report text for background information, assumptions, limitations, etc.

Samples collected on September 26, 2022

Results in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)

NRCS = MDE Non Residential Cleanup Standards for soil as presented in MDE's Cleanup Standards for Soil and Groundwater; October 2018; Interim Final Guidance (Update No. 3)

ATC = Anticipated Typical Concentration for soils in Western Maryland

Shaded and bold values represent exceedance of MDE RCS

NA = Not applicable

NE = MDE standard not established

* = Risk-based calculated value

The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 4
Sediment Analysis Summary - Addendum

*Former Alcoa Eastalco Works Property,
 Initial Infrastructure Phase
 Frederick, Maryland
 GTA Project No. 31201536
 Page 1 of 1*

Sample Identification	MDE NRCS	ATC Central	GTA-DA11-W
Sampling Date			9/26/2022
Priority Pollutant (PP) Metals			
Hexavalent Chromium	6.3	NE	<2.2

Notes:

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Samples collected on September 26, 2022

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ATC = Anticipated Typical Concentration for soils in Central Maryland

Shaded and bold values represent exceedance of MDE RCS

NA = Not applicable

NE = MDE standard not established

* = Risk-based calculated value

The comparison value for mercury is referenced as the elemental mercury RCS/NRCS.



Table 5
Groundwater Analysis Summary

Former Alcoa Eastalco Works Property
Initial Infrastructure Phase
Frederick Maryland
GTA Project No. 31201536
Page 1 of 1

Sample Location	Comparison Value	GTA-GW-1	GTA-GW-2
	MCL		
Fluoride	4.0	<0.25	<0.25

Notes:

This table is only to be used in conjunction with the report for which it was prepared.

See the report text for background information, assumptions, limitations, etc.

Samples collected September 15, 2022

Results in milligrams per liter (mg/L)

MCL = United States Environmental Protection Agency National Primary Drinking Water Regulations

Maximum Contaminant Level; Published May 2009.

Shaded and bold values represent exceedance of the GCS



Table 6
Surface Water Analysis Summary

*Former Alcoa Eastalco Works Property,
Initial Infrastructure Phase
Frederick Maryland
GTA Project No. 31201536
Page 1 of 1*

Sample Location	Comparison Value	GTA-SW-1	GTA-SW-2	GTA-SW-3	GTA-SW-4
	MCL				
Total Cyanide	0.2	<0.010	<0.010	<0.010	<0.010
Fluoride	4.0	--	--	3.3	--

Notes:

This table is only to be used in conjunction with the report for which it was prepared.

See the report text for background information, assumptions, limitations, etc.

Samples collected September 15, 2022

Results in milligrams per liter (mg/L)

MCL = United States Environmental Protection Agency National Primary Drinking Water Regulations, Maximum Contaminant Level, Published May 2009

Shaded and bold values represent exceedance of the GCS

