

# DRAFT ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES

**105 McDonough Blvd. Brownfield Site**  
105 McDonough Boulevard  
City of Atlanta, Fulton County, Georgia

**Georgia USTMP Facility ID #9060480**  
**EPA Cooperative Agreement #: BF 02D34622**  
CHA Project Number: 081554.000

**September 2024**



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## CERTIFICATION

I, the undersigned, certify that I am currently an Oregon registered professional engineer and that this Analysis of Brownfield Cleanup Alternatives report was prepared in accordance with all applicable statutes and regulations.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, the undersigned, of CHA Consulting, Inc. have been designated by the Site owner to sign this certification for the Site.

**For CHA Consulting, Inc.:**

(Professional Seal)

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Printed Name of Certifying Engineer

Signature of Certifying Engineer

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Title

September 27, 2024

Date of Certification

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12/31/2024

Registration Expiration Date

CHA Consulting, Inc.

Company

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## LIST OF ACRONYMS & ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ABCA	Analysis of Brownfield Cleanup Alternatives
ACL	Alternate Concentration Limit
AMSL	Above Mean Sea Level
bgs	Below the Ground Surface
BRLF	Brownfield Revolving Loan Fund
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
Cardno	Cardno, Inc.
CAP	Corrective Action Plan
CHA	CHA Consulting, Inc.
CSR	Compliance Status Report
DBA	Davis-Bacon Act
DNAPL	Dense Non-Aqueous Phase Liquid
DPT	Direct Push Technology
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
EPD	Environmental Protection Division
FCS	FCS Urban Ministries, Inc.
FEMA	Federal Emergency Management Association
FIRM	Flood Insurance Rate Map
FY	Fiscal Year
GAC	Granular Activated Carbon
GRBCA	Georgia Risk Based Corrective Action
GRO	Gasoline-Range Organics
GUST	Georgia Underground Storage Tank
HI	Hazard Index
HSRA	Hazardous Site Response Act
HVR	High Vacuum Recovery
IA	Indoor Air
ISWQS	In-Stream Water Quality Standard
LNAPL	Light Non-Aqueous Phase Liquid
LOGIC	Logic Environmental, Inc.
LUST	Leaking Underground Storage Tank
mg/kg	Milligram per Kilogram
MW	Monitoring Well
NFA	No Further Action
OCG	One Consulting Group
ORC	Oxygen Release Compound
PAH	Polycyclic Aromatic Hydrocarbons
PCE	Tetrachloroethene (Perchloroethene)
PID	Photoionization Detector
PPCAP	Prospective Purchaser Corrective Action Plan
ppm	Parts per Million
PVC	Polyvinyl Chloride
QEP	Qualified Environmental Professional
RCRA	Resource Conservation and Recovery Act
RLF	Revolving Loan Fund
ROW	Right-of-Way
RRS	Risk Reduction Standard

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SISR	Site Investigation Summary Report
SSDS	Sub-Slab Depressurization System
SSSV	Sub-Slab Soil Vapor
SVI	Soil Vapor Intrusion
SVOC	Semivolatile Organic Compound
TCE	Trichloroethene
TPH	Total Petroleum Hydrocarbons
µg/L	Micrograms per Liter
USDA	United States Department of Agriculture
USDOL	United States Department of Labor
USEPA	United States Environmental Protection Agency
USGCRP	United States Global Change Research Program
USGS	United States Geological Survey
UST	Underground Storage Tank
USTMP	Underground Storage Tank Management Program
VISL	Vapor Intrusion Screening Levels
VOC	Volatile Organic Compound
WSP	WSP USA Environment & Infrastructure Inc.

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## 1.0 INTRODUCTION

CHA Consulting, Inc. (CHA) has prepared this Analysis of Brownfield Cleanup Alternatives (ABCA) report on behalf of the City of Atlanta (City) for the 105 McDonough Blvd. Brownfield Site (the “Site”) that is located in the City of Atlanta, Fulton County, Georgia. The current Site owner is 105 McDonough Blvd, LLC, which is wholly owned by FCS Urban Ministries, Inc. (FCS). The Site originally included two parcels with the addresses of 105 McDonough Boulevard and 1326 Jonesboro Road and it was enrolled in the Georgia Brownfield Program on July 18, 2018 via a Prospective Purchaser Corrective Action Plan (PPCAP). The Site was reconfigured under PPCAP Amendment No. 1 to include the following five parcels under the 105 McDonough Boulevard property address:

Parcel Address	Tax Map Parcel ID No.	Acreage
105 McDonough Boulevard	14 005600050611	0.167
Martin Street Right-of-Way	14 005600050611	0.074
115 McDonough Boulevard	14 005600080352	0.061
119 McDonough Boulevard	14 005600080360	0.086
1326 Jonesboro Road	14 005600080345	0.151
<b>Total</b>		<b>0.539</b>

A site location map is provided in **Figure 1**. The Site is a triangular-shaped property southeast of the intersection between McDonough Boulevard SE and Jonesboro Road SE. It extends approximately 90 feet south of the unpaved Martin Street right-of-way (ROW) forming an approximately 0.539-acre property. The former Diamond J. Mart, a former retail fuel station, located on the 105 McDonough Boulevard SE parcel includes an approximately 1,200-square-foot structure and is the only remaining building on the Site. The Site owner is currently working on abating hazardous building materials associated with the structure and the demolition of the building to provide better access to the Site to facilitate additional remediation. Since the hazardous material abatement and building demolition are not being completed with grant funds that will be utilized for the subsurface remediation of the Site, the abatement work is not addressed further in this document.

Much of the 105 McDonough Boulevard SE parcel is covered with impervious surfaces except a gravel area at the north end of the parcel where former underground storage tanks were removed and a small green space along the south end of the parcel. Broken-up asphalt remains on much of the 1326 Jonesboro Road SE parcel, while a small portion of the parcel and most of the 115-119 McDonough Boulevard parcels are vacant and covered with trees and vegetative overgrowth. Residential properties generally surround the Site; however, commercial properties, including the St. James First Baptist Missionary Church, the Carver Neighborhood Market/Community Grounds Cafe, and Sonoco Recycling are located along the north side of the Site.

Multiple environmental investigations have been completed on the Site between 2017 and 2023. The environmental assessments completed in 2017 and 2018 identified the presence of volatile organic compounds (VOCs), specifically petroleum-related contamination, in subsurface soils and groundwater. In 2019, funded with a City of Atlanta 2017 EPA Assessment Grant, three underground storage tanks (USTs), associated fuel dispensers, and approximately 70 cubic yards of contaminated soil were removed from the Site for offsite disposal. Cardno, Inc. (Cardno) issued a UST Closure Report April 2, 2019, and identified remaining petroleum impacts in soil. The Georgia Underground Storage Tank Management Program (USTMP) of the Georgia

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Environmental Protection Division (EPD) issued a letter on April 11, 2019, confirming a release from the USTs and requested that the owner's consultant prepare a Corrective Action Plan (CAP) Part A. One Consulting Group (OCG) issued a CAP Part A for the Site on March 8, 2021, and a Site Investigation Summary Report (SISR) on March 31, 2022. The Site is listed as a leaking underground storage tank (LUST) facility by the USTMP as Facility ID No. 9060480.

WSP USA Environment & Infrastructure Inc. (WSP) was assigned to the former Diamond J Mart Facility under the Georgia UST (GUST) State Contractor Program on July 6, 2022. WSP completed a high vacuum recovery (HVR) event in June 2023 to remove free product (light non-aqueous phase liquid [LNAPL]) from the on-site monitoring wells and completed quarterly groundwater monitoring events, with the last progress report being submitted in February 2024. The information obtained during the environmental assessments and groundwater monitoring events was utilized to guide site activities concerning potential environmental impairment and associated liabilities and will be utilized to develop an effective remedial approach to address the remaining contamination at the property.

In addition to the petroleum-related subsurface contamination at the Site due to the historical uses of the property, chlorinated solvents (considered dense non-aqueous phase liquid [DNAPL]) have been detected in the groundwater and subsurface soil vapor beneath the Site and have been determined to pose a potential threat for soil vapor intrusion (SVI) to occur in buildings constructed in the future on the Site. The chlorinated solvent contamination is suspected to be related to the historical businesses that operated west-southwest the Site, including the former American Cleaner Center (a dry cleaning facility that operated from at least 1990 to 1995) located at 1325 Jonesboro Road and Artistic Dry Cleaners B (a dry cleaning facility that operated from 1945 to 1975) located at 1327 Jonesboro Road.

The City of Atlanta received a United States Environmental Protection Agency (USEPA) Fiscal Year (FY) 2022 EPA Brownfield Revolving Loan Fund (BRLF) grant (Grant No. BF-02D34622-0). The BRLF grant is funding the development of this document and other documents associated with the planned remediation of the Site. This ABCA has been prepared to demonstrate to the USEPA that appropriate cleanup methods have been evaluated and will be applied for the 105 McDonough Blvd. Brownfield Site, as required by the grant. In addition to meeting the USEPA requirements, the ABCA provides the following:

- Information about the Site background and the potential threats the Site may pose to public health and/or the environment (e.g., exposure pathways, identification of contaminant sources, etc.).
- Identification of the applicable cleanup objectives and regulations.
- An analysis of reasonable remedial alternatives, including no action.
- A discussion of the effectiveness, implementability, and estimated cost of the cleanup methods considered.
- Identification of the most feasible cleanup alternative, with an explanation of the rationale for its selection.

Specifically, this ABCA addresses the remaining petroleum-related contamination associated with the former USTs on the Site and the potential for soil vapor intrusion into buildings constructed on the Site in the future.



## 2.0 SITE BACKGROUND

### 2.1 Site Description

The Site is comprised of five former tax parcels that were consolidated into a 0.539-acre parcel (Parcel ID 14 005600050611) on July 3, 2023. The Site is currently owned by 105 McDonough Blvd, LLC, which is wholly owned by FCS Urban Ministries, Inc. An approximately 1,204-square foot, single-story building formerly occupied by the Diamond J Mart is located on the north end of the Site and was constructed in approximately 1950 while the balance of the Site is currently undeveloped. The Site is located in a Mixed Residential-Commercial (MRC-2-C) zoning district per the City of Atlanta Zoning Ordinance, which permits medium-density mixed residential and commercial uses along corridors that are intended to serve a group of adjacent neighborhoods. The Site is primarily surrounded by residential properties although some commercial uses are located around the north end of the Site.

### 2.2 Site History

The 105 McDonough Boulevard property was operated as a retail fueling station from at least 1958 to 2008. The 1326 Jonesboro Road parcel was utilized as a retail gas station from the 1940s to the 1960s. The 115 and 119 McDonough Boulevard SE parcels were utilized for residential purposes since at least the 1950s but are currently vacant.

### 2.3 Environmental Impacts

This document provides a summary of previously documented environmental concerns identified at the Site by environmental consultants who completed the assessments (See Section 3.0). The summary of past assessments is limited by the availability of information available and observed at the time of the assessments. The completion of past investigations does not guarantee that all areas of the subject Site exhibited the characteristics that can be inferred from the observable site conditions or analytical results, and it is possible that illicit waste disposal or historical release occurred at the Site that could not reasonably be identified during the past investigations. If additional impacts are discovered during the remedial cleanup activities, additional investigative and/or remedial actions may be recommended.

As previously indicated, the primary impacts to the Site include petroleum-contaminated subsurface soil and groundwater associated with the historical retail fueling stations on the Site. Additionally, chlorinated solvent contamination in groundwater has been identified in the southeast corner of the Site and soil vapor impacts from chlorinated solvents were identified. This is believed to be associated with a historical offsite dry cleaner plume(s) that is migrating toward the Site. The environmental impacts present at the Site are further discussed in Section 3.0.

### 2.4 Regional Setting and Site Characterization

#### 2.4.1 Topographic and Physiographic Setting

According to the United States Geological Survey (USGS) *Topographical Map of Georgia – Southwest Atlanta Quadrangle*, the southern end of the Site slopes to the west while the northern end of the Site slopes north-northwest and the Site grades range from 1,015 to 1,020 feet above mean sea level (AMSL). The United States Department of Agriculture (USDA) Web Soil Survey map indicates that the soil occurring on the Site consists of urban land. Urban land is described as land so altered or obscured by urban works that identification of the soils is not feasible. The *Geologic Map of Georgia* (1976) prepared by the Georgia Department of Natural Resources and

the Geologic and Water Resources Division of the Georgia Geological Survey indicates that the Site is underlain by Hornblende Gneiss.

### **2.4.2 Site Hydrogeology**

Surface water flow from the Site generally flows to the west-southwest toward the North Fork of the South River located approximately 3,850 feet west-southwest of the Site. However, local fluctuations in the depth of the water table and flow direction have been observed at the Site. During the most recent groundwater gauging event completed on February 28, 2024, the water table had dropped approximately two feet in elevation and the flow was to the northwest, which contrasted the previous flow direction of west-southwest.

### **2.4.3 Forecasted Climate Conditions**

According to the United States Global Change Research Program (USGCRP), climate trends for the southeast region of the United States include increased temperatures and increased precipitation with greater variability and increased extreme precipitation events. Most specifically increased temperatures that may affect the health of elderly residents are most applicable to the cleanup of the Site. Additionally, heavy rain events may adversely impact the Site due to the potential for flooding from the South River. However, a review of the Flood Insurance Rate Maps (FIRM) developed for the project vicinity (Community Panels 13121C0357F and 13121C0359F (September 18, 2013) by the Federal Emergency Management Association (FEMA) indicated that the Site is located outside the 100-year floodplain.

Nevertheless, greater storm frequency and intensity in a changing climate may result in more frequent flooding and higher peak flow within the South River, which may result in changes to the flood zone and increased risk of flooding of the Site. Based on the nature of the Site and its proposed reuse, changing temperature, rising sea levels, wildfires, changing dates of ground thaw/freezing, changing ecological zone, saltwater intrusion, and changing groundwater table are not likely to significantly affect the Site and/or the outcome of the work to be funded by the revolving loan fund (RLF) Subgrant.

## 3.0 PAST ENVIRONMENTAL ASSESSMENTS

Summaries of known environmental reports and investigations relative to the Site are included in the subsections below. Sample locations are depicted on figures in the referenced documents.

### 3.1 Soil Assessment Summary

#### 3.1.1 2017 Phase II Soil and Groundwater Assessment

Logic Environmental, Inc. (LOGIC) conducted a limited subsurface soil and groundwater investigation at the Site on June 23, 2017, including the installation of five environmental soil borings (borings B-1 through B-5) at 105 McDonough Boulevard and 1326 Jonesboro Road. Soil samples collected from borings B-1, B-2, B-3, and B-4 were submitted for laboratory analysis of VOCs via the USEPA Method 8260. Specifically, soil samples B-1, B-2, B-4, and B-5 were only analyzed for the gasoline constituents of benzene, toluene, ethylbenzene, and xylenes (BTEX) while soil sample B-3 was analyzed for a broad range of VOCs.

BTEX soil contamination was detected in the soil samples collected from borings B-1 and B-2 collected near the former USTs and dispensers located at 105 McDonough Boulevard; however, only benzene was detected in sample B-1 at a concentration above the Residential Type 1 Risk Reduction Standard (RRS). No VOCs were detected above the laboratory reporting limits for soil samples B-3, B-4, and B-5.

#### 3.1.2 2018 Modified Phase II Subsurface Investigation

One Consulting Group (OCG) issued on Modified Phase II Subsurface Investigation Report on June 14, 2018. The investigation included the installation of four additional soil borings (borings SB-1 through SB-4) on the Site on April 6, 2018, and the collection of soil samples for analysis of VOCs. Borings SB-1, SB-3, and SB-4 were installed on the 1326 Jonesboro Road parcel while boring SB-2 was installed on the 115 McDonough Boulevard parcel. Based on field screening results, only samples collected from borings SB-1 and SB-2 were submitted for laboratory analysis. No VOCs were detected above the laboratory reporting limits from samples SB-1 and SB-2.

#### 3.1.3 2019 UST Closure

On February 19, 2019, under a City of Atlanta 2017 EPA Assessment Grant, Cardno, Inc. (Cardno) oversaw the excavation and removal of three USTs at the Site, including two 4,000-gallon gasoline USTs and one 2,000-gallon diesel fuel UST. In addition, the associated product piping and fuel dispensers were removed from the Site for offsite disposal along with approximately 70 cubic yards of soil from the tank pit excavation. However, no over-excavation of the remaining tank pit was performed at that time.

Following the removal of the USTs, Cardno collected two soil samples from beneath each of the three USTs at a depth of approximately 12 feet below the ground surface (bgs) in accordance with the Georgia EPD UST regulations. The soil samples were submitted to an environmental laboratory for analysis of BTEX compounds via EPA Method 8260, polycyclic aromatic hydrocarbons (PAHs) via EPA Method 8270, and total petroleum hydrocarbons – gasoline range organics (TPH-GRO) and total petroleum hydrocarbons – diesel range organics (TPH-DRO) via EPA Method 8015. At least one VOC was detected in each of the soil samples and the following parameters were detected in excess of the applicable UST Soil Threshold Levels:

- Xylene in sample UST-2 NW

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- Ethylbenzene in samples UST-3 NW and UST-3 SE.
- Elevated TPH-GRO and/or TPH-DRO concentrations exceeded 10 milligrams per kilogram (mg/kg) in all six samples.

Following the removal of the 70 cubic yards of contaminated soil for offsite disposal, Cardno request a “no further action” (NFA) determination from the Georgia EPD USTMP; however, the Georgia EPD request the preparation and submission of a Correction Action Plan (CAP) Part A.

### **3.1.4 2021 Corrective Action Plan Part A**

OCG submitted a CAP Part A to the Georgia EPD on March 8, 2021, as part of the UST investigation at the Site, including the installation of three soil borings (borings SB-1 through SB-3). One soil sample was collected from each of the three soil borings and submitted to an environmental laboratory for BTEX analysis via EPA Method 8260. BTEX compounds were detected in all three soil samples; however, only the BTEX concentrations in the soil sample collected from boring SB-1 at a depth of 17.5 feet bgs were detected at concentrations above the Residential Type 1 RRS.

### **3.1.5 2023 UST Soil Sampling**

To delineate the horizontal and vertical extents of the remaining contamination near the former tank pit exaction, WSP installed eight soil borings (borings UST-D1 through UST-D8) on August 8, 2023. Continuous soil samples were collected utilizing a direct push technology (DPT) drill rig to a depth of approximately 16 to 19 feet bgs, where the groundwater surface was encountered. WSP field screened the soil samples every four to five feet vertically for visual, olfactory, and organic vapors using a photoionization detector (PID). Additionally, soil samples were collected at various vertical intervals and submitted for laboratory analysis of BTEX compounds via USEPA Method 8260. The most significant impacts were found in a smear zone located approximately 15 to 19 feet below the ground surface, with some samples exceeding the Type 1 RRS, Type 3 RRS, and USTMP applicable standards.

WSP returned to the Site to collect additional subsurface soil samples from four borings (borings UST-D9 and UST-D12) advanced near the tank pit on December 29, 2023. Three of the borings were installed within the former tank pit excavation area to determine the depth of clean backfill in the excavation and further delineate the vertical dispersion of contamination. In two of the borings (UST-D11 and UST-D12), BTEX concentrations exceeded the applicable Type 1 RRS and Type 3 RRS from a depth of approximately 7 feet to 10 feet bgs.

### **3.1.6 2023 Supplemental Environmental Borings**

WSP conducted a Phase II ESA with a City of Atlanta 2020 Brownfield Assessment Grant on August 8, 2023. WSP installed five soil borings (borings EB-1 through EB-5) to further investigate the previously identified environmental concerns through the sampling and testing of soil and soil vapor samples (See Section 3.3 for a discussion of the soil vapor results). Two samples from each boring were submitted to an environmental laboratory for analysis of VOCs, PAHs, and Resource Conservation Recovery Act (RCRA) metals. Low concentrations of 2-butanone and acetone were detected in the soil sample collected from boring EB-1 but were detected at levels below the Type 1 RRS. No VOCs were detected above the laboratory reporting limits in the remaining soil samples.

No PAHs were detected in the soil samples, and while three metals (barium, chromium, and lead) were detected in all of the samples, the concentrations were below their respective Type 1 RRS.

## 3.2 Groundwater Assessment Summary

### 3.2.1 2017 Phase II Soil and Groundwater Assessment

Three of the soil borings (B-1, B-3 and B-4) installed by LOGIC in 2017 were converted to groundwater monitoring wells and sampled for laboratory analysis of BTEX. While gasoline-related contaminants were detected in each sample, elevated levels of benzene were detected at monitoring wells B-1 and B-3 in exceedance of the Media Target Concentrations for Groundwater Criteria and at a maximum concentration of 1,800 micrograms per liter ( $\mu\text{g/L}$ ). Ethylbenzene and toluene also exceeded their respective Media Target Concentrations at monitoring well B-1. Groundwater was typically encountered approximately 22 to 23 feet bgs.

### 3.2.2 2018 Modified Phase II Subsurface Investigation

OCG conducted a subsurface investigation and prepared a report dated June 14, 2018. Each of the four soil borings installed were converted to monitoring wells (SB-1 through SB-4) and sampled for VOCs via USEPA Method 8260B. Depth to water at the monitoring wells was found to be between 24 and 31 feet bgs, deeper than the monitoring locations sampled by LOGIC. Benzene was detected at concentrations exceeding the Media Target Concentration at monitoring well locations SB-2 and SB-4, with a maximum detection of 27.9  $\mu\text{g/L}$ . Other petroleum-related compounds including ethylbenzene, xylenes, and naphthalene were detected at concentrations above the reporting limit but not in exceedance of the Media Target Concentrations. Notably, tetrachloroethene (PCE) was detected at a concentration of 19.9  $\mu\text{g/L}$ , which exceeds the Media Target Concentration, at monitoring well SB-1 located on the southwest corner of the Site and nearest to the former dry cleaner.

An evaluation of potential receptors indicated no groundwater drinking water supplies within a one-mile radius and no surface water bodies within a 500-foot radius of the Site. The results of this investigation identified reportable releases of benzene and PCE in groundwater.

### 3.2.3 2021 Corrective Action Plan Part A and 2021/2022 Summary Reports #1 and #2

As part of the UST closure investigations, OCG conducted additional soil and groundwater investigations. The three soil borings were converted to monitoring wells (MW-1 through MW-3) and sampled for BTEX parameters, only. Results were compared to the In-Stream Water Quality Standard (ISWQS), the guidance criteria utilized by the Georgia USTMP.

Benzene was detected at concentrations exceeding the ISWQS in all three monitoring wells; toluene and ethylbenzene exceeded the ISWQS in MW-1 and MW-2; and total xylenes exceeded the ISWQS in wells MW-2 and MW-3.

Depth to groundwater was found to be between 17.46 and 18.39 feet bgs. No free product was encountered during this investigation. However, it was noted the elevated concentrations of BTEX compounds may indicate the presence of free product. OCG recommended installing two additional monitoring wells to further delineate the groundwater contamination on an offsite property (1297 McDonough Boulevard SE) and a location south of monitoring wells MW-1 and MW-2.

A June 27, 2021 report summarized the installation and sampling results for the additional monitoring wells (MW-4 and MW-5) and generally found both to exceed the ISWQS. On February 24, 2022, Brown Remediation, Inc. was contracted to perform HVR on the monitoring wells MW-1 and MW-2 and removed 1,100 gallons of petroleum-impacted water and 6.56 equivalent gallons

of vapor recovery. A subsequent monitoring report prepared by OCG included groundwater sampling and the results detected BTEX in exceedance of the ISWQS across most monitoring wells. OCG recommended quarterly monitoring for two years.

### 3.2.4 2022-2023 Groundwater Monitoring

WSP developed a groundwater monitoring program and performed a Georgia Risk-Based Corrective Action (GRBCA) workbook analysis to calculate site-specific alternate concentration limits (ACLs) and determine if a vapor intrusion pathway is viable. The analysis indicated the vapor intrusion pathway was “not actionable” because groundwater is deeper than the applicable screening depth of 15 feet, although future evaluation discussed in Section 3.3 identified the requirement to mitigate future buildings for potential soil vapor intrusion. The calculated ACLs are listed in the table, below.

Groundwater monitoring commenced in August 2022 and data through the fourth quarter of 2023 is provided in the PPCAP. Generally, while elevated concentrations of BTEX compounds are consistently detected in all monitoring wells, only benzene in MW-2 exceeds the applicable ACL. However, it should be noted the calculated ACLs are significantly higher than the Type 1 RRS for groundwater. The Type 1 RRS are listed in the table, below.

Parameter	Alternate Concentration Limit (µg/L)	Type 1 Risk Reduction Standard for Groundwater (µg/L)
Benzene	13,000	5
Toluene	530,000	1,000
Ethylbenzene	44,200	700
Xylene	110,000	10,000
MTBE	1,180,000	No Standard

### 3.3 Soil Vapor Assessment Summary

Five soil vapor sample samples were collected by WSP during a 2022 investigation and analyzed for VOCs. The sample locations were selected based on the conceptual building layouts proposed for the Site at that time. The detected VOCs included 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, n-hexane, propene, PCE, toluene, and trichloroethene (TCE). WSP compared the detected vapor concentrations to the United States EPA residential and non-residential vapor intrusion screening levels (VISLs) and evaluated the data for carcinogenic and non-carcinogenic risks.

The only compound detected above either its residential or non-residential VISL was PCE in sample SV-4. WSP calculated a cumulative carcinogenic risk of  $2.8 \times 10^{-5}$  for a residential exposure scenario and  $6.3 \times 10^{-6}$  for a commercial exposure scenario. The cumulative carcinogenic risk was determined to exceed the Hazardous Site Response Act (HSRA) target carcinogenic risk level of  $1 \times 10^{-5}$  for the residential exposure scenario but met an acceptable standard for the commercial exposure scenario.

WSP also calculated a cumulative non-carcinogenic hazard index (HI) of 6.9 for a residential exposure scenario and a 1.7 HI for a commercial exposure scenario, which exceeds a target HI of 1.0. Therefore, vapor intrusion from sub-slab soil vapor (SSSV) gas into indoor air (IA) was identified as a concern for both residential and commercial receptions, indicating mitigation for future construction would be necessary.

## 4.0 EXPOSURE ANALYSIS

The preparation of an ABCA requires an evaluation of possible remedial actions and their associated costs to address impacted areas. Available remedies are typically grouped into physical, biological, and chemical approaches. Physical remedies, such as engineered soil cover systems are typically classified as engineering controls. However, other controls referred to as institutional controls, include any non-physical means of enforcing restrictions on the use of real property that limits environmental or human exposure, restricts the use of groundwater, etc. via a deed restriction, environmental easement, or similar means. Excess public risk necessitating implementation of remedial action and/or institutional controls requires the following factors to be present at the Site:

- The presence of a chemical with sufficient toxicity to pose harm to the environment and/or human health (whether acute or chronic);
- The presence of a sufficient quantity of the chemical to pose potential harm;
- The presence of potential sensitive receptors that could be harmed by the occurrence of the chemical at the Site;
- A potential pathway for which a sufficient amount of the contaminant could reach one or more sensitive receptors.

For most remedial cleanup projects, some level of contamination typically remains at the Site following the completion of the remedial construction, which is often referred to as remaining contamination. The goal of most remedial approaches is to remove/abate, treat, immobilize, and encapsulate contaminated media and hazardous building materials to an acceptable level of risk to human health and the environment, which is accomplished through compliance with federal, state, and local regulations. Institutional controls are utilized, if needed, to limit potential exposure to remaining contamination following the implementation of the remediation/abatement.

### 4.1 Exposure Pathways

For the contaminants of concern to pose a significant risk to human health and/or the environment, there must be an exposure pathway making the contaminants accessible. Compounds that are not currently, nor in the future likely to be exposed via complete exposure pathways do not constitute a probable condition of elevated risk.

Based on the Site's zoning designation, availability of a municipal water supply in the City of Atlanta, and the intended mixed residential/commercial reuse concepts, the potential receptor populations evaluated are anticipated to be:

- Future residents of on the Site;
- Construction workers during the remediation construction and redevelopment construction;
- The property owner and their employees or representatives who access the Site; and,
- Future patrons of the end-use commercial development.

For each of the potential receptors being considered, the potential exposure pathways of concern include direct contact with contaminated soil, groundwater, or soil vapor via incidental ingestion, dermal contact, and/or inhalation of particulates and/or vapor, as discussed further in the following subsections.

### **4.1.1 Soil**

Laboratory analytical results of soil samples collected from the Site indicate the presence of BTEX compounds from the former gasoline USTs. The concentration of BTEX compounds in soil exceed the Type 1 and Type 3 RRS and detections of TPH-GRO and TPH-GRO in excess of 10 mg/kg, as discussed in Section 3.1. The contamination is identified at depth, generally 8 feet bgs and lower to at least the water table depth identified at approximately 18 feet bgs. Therefore, the exposure pathway is complete during remediation excavation and potentially during redevelopment construction, only. At the completion of redevelopment, the Site will be improved with engineered surfaces that will prevent dermal contact with Site soils.

Additionally, the leaching potential of contaminants from soil to groundwater is an incomplete exposure pathway since the Site and surrounding area are served by the municipal water supply and no surface water bodies are within 500 feet of the Site.

### **4.1.2 Groundwater**

Depth to groundwater varies across the Site but is generally found at 18 feet bgs or lower. Groundwater monitoring over various investigations and on-going monitoring identified BTEX and PCE at concentrations in exceedance of Media Target Concentrations for groundwater. However, site-specific ACLs were developed for the Site and only benzene remained slightly in exceedance of the ACL during multiple monitoring events in 2022 and 2023, as discussed in Section 3.2.

Exposure to groundwater is possible during remedial construction, only. The exposure pathway to groundwater post redevelopment of the Site is considered incomplete since the Site and surrounding area are served by the municipal water supply.

### **4.1.3 Soil Vapor**

Laboratory analysis of soil vapor samples identified VOCs including 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, n-hexane, propene, PCE, toluene, and TCE, as discussed in Section 3.3. PCE was identified at a concentration exceeding the non-residential VISL. Considering the redevelopment plan will include residential and commercial buildings, the potential exposure pathway for soil vapor intrusion into the buildings is considered complete. A sub-slab depressurization system to mitigate soil vapor intrusion impacts to indoor air is required for all occupied structures on the Site.



## 5.0 CLEANUP OBJECTIVES & APPLICABLE REGULATIONS

As part of this ABCA, CHA evaluated three remedial alternatives for the Site (See Section 6.0) and recommended an alternative for addressing the Site contaminants to achieve the cleanup objectives for protecting human health and the environment as well as comply with all applicable federal, state, and local regulations.

### 5.1 Cleanup Objectives

The primary cleanup objective for the Site is to protect human and environmental health by excavating and offsite disposal of impacted soils and preventing exposure to Site groundwater. More specifically, project objectives include:

- Preventing direct contact with contaminated subsurface soil, groundwater, and soil vapor (as evidenced by visual, olfactory, and photoionic evidence of subsurface contamination) of contractors and future Site occupants; and
- Preventing vapor exposure from potentially contaminated groundwater.

For the project Site, these objectives will be achieved by:

- Protecting the excavation area with sheet piles or alternative methods of excavation shoring.
- Excavation of overburden soils and stockpiling for on-site reuse, assuming no evidence of contamination is identified by the Qualified Environmental Professional (QEP).
- Excavation and offsite disposal of petroleum-impacted soil from 12 feet bgs to a proposed maximum depth 1 foot below the water table, or approximately 20 feet bgs.
- Management of groundwater for offsite disposal, as needed.
- Restoration of the below groundwater table area with a coarse material for stabilization.
- Placement of a non-woven geotextile demarcation barrier above the coarse stone material at the bottom of the excavation to provide separation between fill soils and the stone.
- Restoration of the above groundwater table with clean soils or stone to facilitate redevelopment.
- Installation of a sub-slab depressurization system to mitigate vapor intrusion for all future occupied structures.

### 5.2 Cleanup Standards

The Site owner, 105 McDonough Blvd, LLC, entered the Site into the Georgia Brownfield Program with Georgia EPD on October 9, 2018. Therefore, EPD will exercise authority over the removal of petroleum-contaminated soil, restoration of the Site, and installation of vapor intrusion mitigation measures. The cleanup will be performed in compliance with USEPA, EPD, and local regulations, as applicable.

Per the approved Amendment No. 2 to the PPCAP, the basic corrective action for the site will be performed under the Brownfield Program with the objective of meeting Type 1 or Type 2 (residential) risk reduction standards (RRS) for soil. In addition, the corrective action associated with the former Diamond J Mart facility will be conducted in coordination with a CAP Part B Addendum approved by USTMP. Details of how the cleanup will meet this requirement are discussed in Section 6.0.

## Draft Analysis of Brownfield Cleanup Alternatives

If additional groundwater sampling occurs, the groundwater cleanup standards are the ACLs described in this ABCA and based on the GRBCA workbook analysis conducted by WSP. However, additional groundwater testing is not anticipated.

No additional vapor intrusion sampling is anticipated because all future structures will be mitigated.

### **5.3 Davis-Bacon Act**

All work funded under the Brownfields grant must comply with the United States Department of Labor (USDOL) Davis-Bacon Act (DBA), which requires payment of prevailing wage rates for cleanup activities. The budget and schedule will take this requirement into account. More details regarding the Davis-Bacon Act can be found on the DOL's website:

<https://www.dol.gov/whd/regs/compliance/whdfs66.pdf>

CHA and/or their subconsultant will oversee the Davis-Bacon Act requirements on behalf of the City of Atlanta as their QEP.

## 6.0 BROWNFIELD CLEANUP ALTERNATIVES

This section summarizes the evaluation of three remedial alternatives for addressing the remaining soil contamination at the Site.

### 6.1 Alternative 1 – No Action

The No Action alternative has been included as a baseline comparison to other remedial alternatives. The No Action alternative assumes no corrective/remedial action is taken and is not a valid option for the Site, given the potential hazards to human health and the environment and proposed reuse plans for the Site. Although this alternative is the easiest to implement, it does not reduce the environmental impact or exposure to receptors.

### 6.2 Alternative 2 – Excavation and Offsite Disposal of Soils

Under this remedial alternative, additional source zone soils (the most contaminated soils) in the vicinity of the former tank pit excavation will be excavated, characterized, and disposed of offsite at a properly permitted facility. Based on the delineation activities performed at the Site, OCG estimated that a total of approximately 1,500 cubic yards of soil will be excavated at depths ranging up to 20 feet bgs to remove the smear zone beneath the water table. Of the total volume excavated, OCG has assumed that approximately two-thirds of the total volume excavated, or 1,000 cubic yards (or 1,400 tons at an assumed unit weight of 1.4 tons per cubic yard) will require offsite disposal while approximately 500 cubic yards of excavated material will be reused as backfill. Of the 500 cubic yards of reused material, approximately 300 cubic yards have been assumed to be the aggregate material previously imported to the Site to backfill the former tank pit excavation.

Following the CAP Part B Addendum approved by the Georgia EPD USTMP, the following actions proposed for Alternative 2 include:

- Installation of site controls at the Site, including the installation of temporary construction fencing around the perimeter of the proposed excavation area and associated staging areas. Additionally, the perimeter of the proposed excavation area will be protected to reduce the potential for surface water from draining into the excavation.
- The construction of a temporary soil containment pad(s) and decontamination pad, as appropriate.
- Decommissioning of monitoring wells within the proposed excavation area via the placement of a bentonite clay inside the two-inch diameter polyvinyl chloride (PVC) well screens and risers to a minimum height of one foot above the water table.
- Installation of a shoring system along the west and east sides of the proposed excavation to protect public roadways and utilities during the excavation activity. Such systems could be installed before starting excavation activities (e.g. steel sheet piles) or could be installed as the excavation is advanced deeper (e.g. wood lagging).
- Excavation of materials in the vicinity of the former tank pit excavation. The approximate limits of the proposed excavation area are shown in **Figure 2**. Soil/aggregate material exhibiting no field evidence of contamination (e.g. material with no visual/staining, olfactory, or photoionic evidence of contamination (e.g. PID levels less than 20 parts per million [ppm])), will be segregated and staged on-site for reuse as backfill following the completion of the excavation activities.

## Draft Analysis of Brownfield Cleanup Alternatives

- Excavation of contaminated/source soils and direct loading of material in dump trucks, dump trailers, and/or roll-off containers for proper offsite disposal at a Subtitle D (non-hazardous waste) landfill. In instances where unexpected evidence of contamination is encountered (e.g. non-petroleum contamination) and the remedial contractor is awaiting waste characterization sampling and/or an approved waste profile, contaminated soil will be placed onto temporary soil containment pads and covered with tarpaulins and/or polyethylene sheeting to reduce precipitation infiltration and control dust and odors that may emanate from the stockpiles. Similarly, the excavated soil may be placed on a temporary soil containment pad if dewatering is required before transporting the material offsite.
- To remove the contaminated soil in the smear zone, it may be necessary to excavate below the water table depending on the elevation of the water table at the time the remedial work is completed. If the smear zone extends beneath the water table at the time of the remedial construction, the remedial contractor may need to manage the groundwater but only if excavation of soil to the target depth is not possible/practical. While not anticipated to be necessary, any water removed from the excavation will initially be pumped into storage tanks (e.g. frac tanks) on-site. The water would then be:
  - Shipped offsite for treatment at a properly permitted wastewater treatment plant. Note: OCG has confirmed that additional waste characterization of the liquid waste would not be required for development of a waste profile with most disposal facilities.
  - Pretreated on-site (e.g. bag filters, granular activated carbon (GAC) vessels, etc.) and then discharged to a municipal sanitary sewer system under a duly authorized permit.

The work will be sequenced by the remedial contractor to minimize the volume of water that must be managed during the construction activities.

- If free product/LNAPL is encountered during the excavation activities, the liquid will be skimmed/pumped off of the water surface and placed into steel drums for characterization and offsite disposal. Similarly, any water collected from decontamination and temporary soil containment/dewatering pads will be placed into a drum(s) for waste characterization and offsite disposal.
- Confirmation sampling will only be performed along the northern and southern boundaries of the excavation since the west and east excavation limits will extend close to the property line. Additionally, no confirmation soil sampling will be performed on the bottom of the excavation since it is anticipated that the depth of the excavation will extend beneath the water table. The confirmation samples will be sampled for VOCs via EPA Method 8260, semivolatile organic compounds (SVOCs) via EPA Method 8270, and RCRA 8 metals via EPA Method 6010.
- Following the completion of the excavation activities to remove the petroleum-contaminated soils, the excavation will be backfilled in the following manner:
  - A 6-ounce per square yard non-woven geotextile will be placed on the bottom and sides of the excavation.
  - No. 57 stone as specified by the American Association of State Highway and Transportation Officials (AASHTO), will be placed in the excavation to a height of approximately one foot above the groundwater table. No. 57 stone is an open-graded stone with little to no fines.

## Draft Analysis of Brownfield Cleanup Alternatives

- The non-woven geotextile will be lapped over the top of the No. 57 stone encapsulating the stone material.
- Non-contaminated, overburden soils stockpiled on the Site will be placed into the excavation in lifts and properly compacted.
- Additional clean aggregate from a permitted quarry or other approved borrow source will be imported as clean fill to backfill the remaining excavation to match the surrounding grade or proposed subgrade for future buildings.
- Shoring systems, soil/decontamination pads, and other temporary controls will be dismantled and removed from the Site.
- Installation of active sub-slab depressurization systems (SSDSs) beneath each structure to mitigate potential vapor intrusion into any newly constructed buildings. The SSDS systems will include an open-grade aggregate and a vapor barrier beneath the concrete building slabs, a suction pipe extending from the concrete to above the roofline of the new buildings, and an electrically-powered fan to induce a vacuum to draw air from beneath the building slab and vent it to the atmosphere above the roof. Additionally, any joints or penetrations through the slab will be sealed.

**Feasibility:** This alternative is considered feasible since the Site is currently unoccupied. Additionally, the owner is in the process of removing the remaining structure on the Site to improve the accessibility to the excavation area and facilitate the staging of equipment and materials. While this alternative would result in increased truck traffic to and from the Site, this impact will be limited to approximately three to four weeks. The use of heavy construction equipment and a shoring system would eliminate the need for construction workers to enter the excavation and would limit workers' exposure to the contaminated media. Since this alternative will be completed quickly, it also helps the owner maintain a compressed schedule for the proposed Site redevelopment.

**Effectiveness:** This alternative is effective in controlling the potential exposure to petroleum-contaminated subsurface soils at the Site. This alternative would meet the applicable Georgia EPD RRS and permanently removes the most impacted soils from the Site.

### **6.3 Alternative 3 – Excavation and Offsite Disposal of Soils with ORC Application**

Alternative 3 includes all work proposed under Alternative 2; however, Alternative 3 includes the mixing of Oxygen Release Compound® (ORC) as manufactured by Regenesis (or similar) into the bottom foot of soil following the excavation of the contaminated soil before the commencement of backfilling activities. ORC is an engineered oxygen-release compound that is designed to enhance the in-situ aerobic biodegradation of remaining hydrocarbons in groundwater and saturated soils. By providing an oxygen source to the indigenous bacteria within the subsurface of the Site for up to a year following the application, ORC can accelerate the degradation of any remaining subsurface petroleum contamination.

**Feasibility:** This alternative is considered feasible since the ORC could be added to the open excavation and mixed in place with an excavator without any special methods to introduce the product into the subsurface. However, attempting to mix ORC effectively in soils that are located beneath the water table and not visible would be difficult, and uniform distribution of the ORC would be difficult to achieve.

## Draft Analysis of Brownfield Cleanup Alternatives

**Effectiveness:** It is unknown if the mixing of ORC in the excavation would provide a measurable benefit to the environment since no biological parameters have been measured at the Site and no bench-scale studies have been conducted to date. If indigenous bacteria capable of breaking the remaining contaminants down or appropriate nutrients are not present in the subsurface of the Site, the introduction of ORC may not be effective.

## 7.0 RECOMMENDED CLEANUP ALTERNATIVE

### 7.1 Selected Alternative 2 - Excavation and Offsite Disposal of Soils

CHA recommends that remedial Alternative 2 – Excavation and Offsite Disposal of Soils be implemented at the Site. The alternative would remove the most contaminated/source soils at the Site to help achieve the remedial goals for the project. Alternative 3 - Excavation and Offsite Disposal of Soils with ORC Application was not recommended due to the uncertainty of the net benefit the use of ORC would provide relative to the increased cost. Given the depth of any remaining contamination following the implementation of Alternative 2 and the lack of sensitive receptors in proximity to the Site, Alternative 2 is considered sufficiently protective of the environment and human health. Additionally, the proposed SSDS systems proposed for all newly constructed buildings on the Site will eliminate the potential for vapor intrusion into the buildings to protect the occupants of each.

### 7.2 Remedial Cost Analysis

**Table 1** below provides a summary of estimated costs associated with the selected environmental cleanup activities discussed in this ABCA. CHA notes that the costs associated with Alternative 3 are expected to be similar to the selected remedy, except there would be some additional cost for the ORC product and shipping of the material to the Site.

**Table 1. Remedial Costs**

Task #	Activity	Unit	Quantity	Unit Price	Cost
<b>Soil Excavation Activities</b>					
1	Mobilization and Site Controls	Lump Sum	1	\$15,000.00	\$15,000.00
2	Temporary Shoring System	Square Feet	3,600	\$55.00	\$198,000.00
3	Excavation of clean on-site fill and contaminated soils	Cubic Yard	1,500	\$13.00	\$19,500.00
4	Loading, transport, and offsite disposal of non-hazardous petroleum-contaminated soils (1,000± cubic yards)	Ton	1,400	\$85.00	\$119,000.00
5	Management of free product and decontamination fluids	Drum	4	\$1,000.00	\$4,000.00
6	Backfill beneath the water table	Cubic Yard	150	\$75.00	\$11,250.00
7	Non-woven geotextile beneath the water table	Square Yard	500	\$7.00	\$3,500.00
8	Placement of clean on-site backfill from prior tank pit excavation	Cubic Yard	300	\$10.00	\$3,000.00
9	Placement of clean, imported fill	Cubic Yard	1,050	\$40.00	\$42,000.00
10	Proctor and compaction testing	Lump Sum	1	\$4,200.00	\$4,200.00
<b>Subtotal</b>					<b>\$419,450.00</b>
<b>Consulting Services &amp; Vapor Mitigation</b>					
10	Source soil removal oversight and soil sampling	Lump Sum	1	\$21,500.00	\$21,500.00
11	Shoring system design drawing	Lump Sum	1	\$15,000.00	\$15,000.00
12	Monitoring, reporting, and EPD Compliance Status Report (CSR)	Lump Sum	1	\$20,000.00	\$20,000.00
11	Installation of vapor mitigation systems	Lump Sum	1	\$50,000.00	\$50,000.00
<b>Subtotal</b>					<b>\$106,500.00</b>
<b>Total</b>					<b>\$525,950.00</b>

## 8.0 SCHEDULE

**Table 2** provides a proposed schedule for the completion of the remedial construction project. The overall progress of these activities will be dependent on several factors including, but not limited to EPD review periods, weather conditions at the time of construction, etc.

**Table 2. Project Schedule**

Activity	Anticipated Start Date	Anticipated Completion Date
Building Abatement and Demolition	September 16, 2024	September 30, 2024
Analysis of Brownfield Cleanup Alternatives	September 16, 2024	September 27, 2024
Public Engagement Meeting	October 8, 2024	October 8, 2024
30-Day Public Comment Period	September 16, 2024	November 8, 2024
Remedial Construction	November 10, 2024	December 20, 2024
Closeout Reporting	December 20, 2024	January 31, 2024
Redevelopment Construction	December 20, 2024	To be Determined



## 9.0 REFERENCES

### **Regulatory Information Sources:**

Georgia Environmental Protection Division. Rule 391-3-19 Appendix I. Regulated Substances and Soil Concentrations that Trigger Notification. Ga. Comp. R. & Regs. R. 391-3-19- app (391-3-19) I.

Georgia Environmental Protection Division. Amended September 25, 2018. Rule 391-3-19 Appendix III. Media Target Concentrations and Standard Exposure Assumptions. Ga. Comp. R. & Regs. R. 391-3-19- app (391-3-19) III.

Georgia Environmental Protection Division Land Protection Branch. October 12, 2018. Type 1 and Type 3 Risk Reduction Standards.

Georgia Environmental Protection Division. Amended July 3, 2018. Rule 391-3-6.03 Designated Uses and Water Quality Standards. In-Stream Water Quality Standards. Ga. Comp. R. & Regs. R. 391-3-6-.03.

### **Recorded Information Sources:**

One Consulting Group. April 20, 2018. Phase I Environmental Site Assessment, 0 and 105 McDonough Blvd. SE and 1326 Jonesboro Rd. SE, Atlanta, Georgia

One Consulting Group. June 14, 2018. Modified Phase II Subsurface Investigation, 0 and 105 McDonough Blvd. SE and 1326 Jonesboro Rd. SE, Atlanta, Georgia

One Consulting Group. June 27, 2018. Prospective Purchaser Corrective Action Plan, 105 McDonough Blvd. SE and 1326 Jonesboro Rd. SE, Atlanta, Georgia.

Cardno. March 25, 2019. Submission of UST Closure Report, 105 McDonough Blvd SE, Atlanta, Georgia, Facility ID 906480.

One Consulting Group. March 3, 2021. Corrective Action Plan Part A, 105 McDonough Blvd SE.

One Consulting Group. March 31, 2022. GA UST Site Investigation Summary Report, 105 McDonough Blvd. SE, Atlanta, Georgia.

WSP USA Environment & Infrastructure Inc. December 7, 2022. GA UST Management Program Monitoring Only Report. 105 McDonough Blvd. SE, Atlanta, Georgia.

WSP USA Environment & Infrastructure Inc. September 26, 2023. Phase II Environmental Site Assessment, City of Atlanta Brownfields Program, USEPA Cooperative Agreement #01D11420. 105 McDonough Blvd. SE, Atlanta, Georgia.

WSP USA Environment & Infrastructure Inc. September 29, 2023. Prospective Purchaser Corrective Action Plan Amendment No. 1, Parcel Boundaries and Risk Reduction Standards, 105 McDonough Blvd. SE, Atlanta, Georgia.

WSP USA Environment & Infrastructure Inc. March 7, 2024. Prospective Purchaser Corrective Action Plan Amendment No. 2, 105 McDonough Blvd. SE, Atlanta, Georgia.

# FIGURES

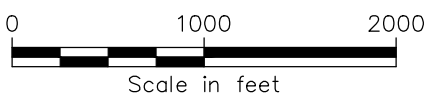
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# FIGURES



SITE LOCATION



SITE LOCATION MAP

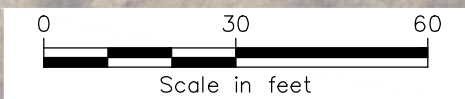
105 MCDONOUGH BLVD SE  
ATLANTA, GEORGIA

PROJECT NO.  
081554.000

DATE: 09/2024

FIGURE 1

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- PROPOSED EXCAVATION AREA
- MW-1 EXISTING MONITORING WELL
- SITE BOUNDARY



**SITE LAYOUT MAP**  
 105 McDONOUGH BLVD SE  
 ATLANTA, GEORGIA

PROJECT NO. 081554.000
DATE: 09/2024
<b>FIGURE 2</b>

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