COTTAGE PLACE GARDENS PHASE 5
PARCEL SITE

WESTCHESTER COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: C360161

Prepared for:

178 Warburton Limited Partnership

90 State Street

Albany, NY 12207

Prepared by:

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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NOVEMBER 2021

(REVISED DECEMBER 2021)

CERTIFICATIONS

I, Rosaura Andújar-McNeil, P.E., am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

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, Rosaura Andújar-McNeil, P.E., of C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C, am certifying as Owner's Designated Site Representative for the site.

097844	12/24/2021	
NYS Professional Engineer #	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
ABC Tank	A.B.C. Tank Repair & Lining, Inc.
All Suffolk	All Suffolk Materials, Inc.
Alpha	Alpha Analytical, Inc.
Apollo	Apollo Construction & Development, Inc.
ASAR	ASAR International Corporation
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bsg	Below surface grade
C.T. Male	C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
COC	Certificate of Completion
CPM	CPM Environmental, LLC
CQAP	Construction Quality Assurance Plan
Department	New York State Department of Environmental Conservation
DER-10	NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation
DUSR	Data Usability Summary Report
Dutchess	Dutchess Environmental Construction, Inc.
EC	Engineering Control
ECS	Environmental Construction Services
EDS	Environmental Data Services, Inc.
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FER	Final Engineer Report
FS	Floor Sample
HASP	Health and Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
Mega	Mega Contracting Group, LLC.
Mg/Kg	Milligrams per Kilogram
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NYS	New York State
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental

Acronym	Definition
	Conservation
NYSDOH	New York State Department of Health
NYSDOL	New York State Department of Labor
OSHA	Occupational Safety and Health Administration
PCBs	Poly-Chlorinated Biphenyls
PE	Post Excavation
PFAS	Per- and Fluoralkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perluorooctanesulfonic Acid
PID	Photoionization Detector
PIS	Petroleum-Impacted Soil
PM-10	Particulate Matter Less Than 10 Micrometers in Size
ppm	Parts Per Million
Pro-Teck	Pro-Teck, LLC.
PS&S	PS&S Engineering, P.C.
QAPP	Quality Assurance Project Plan
QEP	Qualified Environmental Professional
RAOs	Remedial Action Objectives
RWP	Remedial Work Plan
RI	Remedial Investigation
Russo	Russo Development
QA/QC	Quality Assurance/Quality Control
SCLE	SCLE Architects, LLP
S/MMP	Soil/Materials Management Plan
SCOs	Soil Cleanup Objectives
SEQRA	State Environmental Quality Review Act
SGS	SGS North America, Inc.
Sisca	The Sisca Organization
Site	Cottage Place Gardens Phase 5 Parcel Site
SOP	Site Operation Plan
SOPs	Standard Operating Procedures
STEL	Short Term Exposure Limit
SVI	Soil Vapor Intrusion
SVOCs	Semi-Volatile Organic Compounds
SW	Sidewall Sample
SWPPP	Stormwater Pollution Prevention Plan
TAL	Target Analyte List
TCL	Target Compound List
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

Acronym	Definition
Volunteer	170-174 Warburton Limited Partnership
WC	Waste Characterization
WCDEF	Westchester County Department of Environmental Facilities

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

178 Warburton Limited Partnership entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in December 2017, to investigate and remediate a 1.54-acre property located in City of Yonkers, Westchester County, New York (Note: Site acreage as reflected in the original BCA. Site acreage has subsequently changed, as described below). The property was remediated to unrestricted use and will be used for affordable housing.

Two (2) Brownfield Cleanup Program (BCP) Applications to Amend Brownfield Cleanup Agreement and Amendment (BCA Amendment) have been executed for the Site and are summarized in Section 1.1 below. The following Site Description incorporates the BCA Amendments. The site is located in the County of Westchester, New York.

The site is comprised of one (1) parcel (two [2] parcels originally, see Section 1.1). The parcel is addressed as 178 Warburton Avenue and is identified as Block 2095 and Lot 33 on the City of Yonkers Tax Map # 220.

The site is situated on an approximately 1.401-acre area bounded by Wood Place, the previously remediated 188 Warburton Avenue BCP Site (C360138), and the previously remediated Cottage Place Gardens Phase 3A Parcel BCP Site (C360150) to the north; the previously remediated Cottage Place Gardens Phase 4 Parcel BCP Site (C360160) to the south; Cottage Place Gardens to the east; and Warburton Avenue followed by residential and retail development to the west (see Figure 1). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

1.1 BCA Amendments

The original December 2017 BCA identified the Site as being comprised of two (2) parcels. The first parcel, encompassing the western portion of the site, was addressed as 178 Warburton Avenue and identified as Block 2095 and Lot 33 on the City of Yonkers Tax Map # 220. The second parcel, encompassing the remaining eastern portion of the Site, was addressed as 8 Cottage Place and is identified as Block 2094 and a portion of Lot 1 on the City of Yonkers Tax Map # 220.

Two (2) BCA Amendments have been executed for the Site and are included in Appendix B.

The first BCA Amendment was executed on June 15, 2018. The purpose of the BCA Amendment was to reconfigure the portion of the Site addressed as 8 Cottage Place to accommodate the proposed redevelopment goals. The reconfiguration reduced the size of such Parcel from 1.33 acres to 1.255 acres (a reduction of 0.075 acre). Due to the reduction, the overall size of the Site decreased from 1.54 acres (as depicted in the original BCA) to 1.465 acres.

The second BCA Amendment was executed on October 21, 2021. The purpose of the second BCA Amendment was to assemble the Site's two (2) existing tax parcels into one (1) tax parcel, to combine the Site's two (2) addresses into one (1) address, and to reconfigure the Site boundaries. The two (2) tax parcels (2.-2095-33 and 2.-2094-1 [portion of]) constituting the BCP Site in the original BCA were assembled into one (1) tax parcel (2.-2095-33). The two (2) addresses (178 Warburton Avenue and 8 Cottage Place) constituting the Site in the original BCA were combined into one (1) address (178 Warburton Avenue). The Site boundaries were reconfigured to protect existing infrastructure on adjoining properties to the south and underground utilities to the north. The reconfiguration reduced the size of the Site from 1.465 acres (per first BCA Amendment) to 1.401 acres. Overall, the two (2) executed BCA Amendments have reduced the size of the Site from 1.54 acres (as depicted in the original BCA) to 1.401 acres, constituting an overall Site reduction of 0.139 acre.

2.0 SUMMARY OF SITE REMEDY

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation (RI), the following Remedial Action Objectives (RAOs) were identified for this site. The RAOs are listed in the April 2020 Decision Document, which is included in Appendix F.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Remove the source of groundwater contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater contamination.

2.1.3 Soil Vapor

RAOs for Public Health

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

2.1.4 Surface Water RAOs

Not Applicable

2.1.5 Sediment RAOs

Not Applicable.

2.2 Description of Selected Remedy

The site was remediated in accordance with the remedy selected by the NYSDEC in the Decision Document dated April 2020.

The factors considered during the selection of the remedy are those listed in 6 NYCRR 375-1.8. The following are the components of the selected remedy:

1. Completion of a non-emergency interim remedial measure (IRM). The IRM included remediation of wastes contained within an aboveground tank, drums and containers located in and around the 178 Warburton Avenue building; asbestos abatement and demolition of the 178 Warburton Avenue building; surface re-grading and application of asphalt binder to the 178 Warburton Avenue parcel; and protection, replacement and/or decommissioning of existing monitoring wells within the 178 Warburton Avenue parcel. The IRMs are discussed in Section 3.0.

2. Asbestos abatement and demolition of three (3) buildings within remaining portions of the Site.

3. Excavation of soil/fill exceeding unrestricted SCOs listed in Table 375.6.8(a) in 6 NYCRR Part 375 to depths of four (4) to 18 feet below the ground surface (bgs).

4. Decommissioning of monitoring wells.

5. Closure by removal of potential source areas that included four (4) underground storage tanks (USTs) and underground hydraulic lifts.

6. Excavation dewatering, testing and off-site disposal.

7. Application of in-situ treatment products in the bottom of the remediated impacted fill/soil excavation within the 178 Warburton Avenue parcel prior to backfilling the excavation.

8. Pre- and post-remedial action groundwater assessment at the 178 Warburton Avenue parcel and off-site (west of the Site, monitoring wells at the intersection of Warburton Avenue and Babcock Place).

9. Soil vapor intrusion evaluation.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

The information and certifications made in the June 2021 Construction Completion Report (CCR) were relied upon to prepare this report and certify that the remediation requirements for the Site have been met. The Site did not contain operable units and separate remedial contracts were not initiated.

3.1 Interim Remedial Measures

Non-emergency IRMs implemented at the Site are documented in the Department approved June 2021 CCR, which is presented as Exhibit 1. The Department approved the CCR on October 6, 2021.

The IRMs were completed within the western portion of the Site referenced as the 178 Warburton Avenue parcel. The following sections summarize the IRMs.

3.1.1 Asbestos Abatement

Approximately 1,200 square feet of asbestos containing asphalt from the roof of the 178 Warburton Avenue building was abated by CPM Environmental, LLC (CPM) from May 17 to 23, 2018. C.T. Male did not provide construction observation and the community air monitoring plan (CAMP) was not initiated during this activity.

3.1.2 Building Demolition

The above grade portion of the 178 Warburton Avenue building was demolished by The Sisca Organization (Sisca) during the week of March 11, 2019. The concrete slab of the building was left intact. The building rubble was segregated and disposed of off-site. C.T. Male did not provide construction observation and the CAMP was not initiated during this activity.

3.1.3 Waste Removal

Wastes contained in a tank, drums and containers located in and around the 178 Warburton Avenue building were removed on July 11, 2018 by Dutchess Environmental Construction, Inc. (Dutchess) under contract with Pro-Teck, LLC (Pro-Teck). The containment vessels and approximately 380 gallons of used oil, 25 gallons of petroleum contaminated water and 47 gallons of petroleum contaminated sludge were removed from the 178 Warburton Avenue parcel for off-site disposal. C.T. Male provided construction observation during this activity. The CAMP was not initiated during this activity.

3.1.4 Surface Grading

Surface grading of the 178 Warburton Avenue parcel was completed by Sisca on April 18 and 19, 2019 utilizing the bucket of a track mounted excavator. The surface grading was conducted to contour the 178 Warburton Avenue parcel for future application of asphalt binder. C.T. Male provided construction observation and the CAMP was initiated during this activity.

3.1.5 Previously Installed Monitoring Wells

The surface grading (see section above) included locating monitoring wells previously installed during the Phase II Environmental Site Assessment (ESA) of the Site. Monitoring wells were not installed within the 178 Warburton Avenue parcel during the RI. The monitoring wells are identified as 178MW01 to 178MW04. These monitoring wells were not decommissioned as part of the IRMs but were later decommissioned as part of the Site's overall remedial action.

3.1.6 Application of Asphalt Binder

Sisca applied asphalt binder to the surface of the 178 Warburton Avenue parcel on July 10, 2019. C.T. Male did not provide construction observation and the CAMP was not initiated during this activity.

There was a modification to the IRM Work Plan for application of the asphalt binder. The modification consisted of reducing the area to receive the asphalt binder to exclude the area immediately behind (east) of the concrete pad of the demolished 178 Warburton Avenue building. The area excluded measured approximately 70 feet long from north to south by approximately seven (7) feet wide from east to west. This area was excluded because construction material was already staged in this area and the staging of construction material was not viewed as having the potential to significantly disturb surface soils in this area. The Department approved of this modification and the approved modification is appended to the CCR.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Work Plan (RWP) for the Cottage Place Gardens Phase 5 Parcel Site (August 2019, Revised March 2020). All deviations from the RWP are noted below.

4.1 Governing Documents

4.1.1 Site Specific Health & Safety Plan (HASP)

C.T. Male personnel adhered to the provisions of the site-specific HASP developed by C.T. Male and approved by the Department (NYSDEC). The general contractor and its subcontractors were responsible for developing and adhering to their own site-specific HASPs.

C.T. Male field personnel were required to adhere to in-house Standard Operating Procedures (SOPs) that were developed in response to the coronavirus COVID-19 pandemic, which included, but was not limited to, social distancing, disinfection procedures and wearing face masks.

All remedial work performed by C.T. Male personnel under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal Occupational Safety and Health Administration (OSHA), and Executive Orders issued by the Governor of New York State (NYS) in relation to the COVID-19 pandemic.

The HASP was complied with for all remedial and invasive work performed at the Site.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP was included as Appendix B of the RI Work Plan (June 30, 2017, Revised January 2018) approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives.

4.1.3 Construction Quality Assurance Plan (CQAP)

A formal CQAP was not prepared for the remedial action. Construction quality assurance practices were discussed in the Department-approved RWP. The following construction quality assurances were generally employed during the remedial action.

-C.T. Male provided full-time construction observers to observe and document the remedial action; collect waste characterization, backfill and confirmatory post-excavation samples for laboratory analyses; implement the community air monitoring plan (CAMP); sign hazardous and non-hazardous waste manifests as an agent for the Volunteer (178 Warburton Limited Partnership); verify Part 364 trucking permits; and observe the closure of USTs and hydraulic lifts. The construction observer prepared a daily log summarizing the daily activities.

-C.T. Male provided an Engineer of Record to supervise the construction observer; review contractor submittals; coordinate and communicate with the Department Project Manager; participate in construction progress meetings; review of analytical data; and oversee the preparation of the Final Engineering Report (FER).

-The general contractor was responsible for adhering to the provisions of the RWP and was responsible for ensuring that its subcontractors adhered to the provisions of the RWP.

4.1.4 Soil/Materials Management Plan (S/MMP)

Guidelines for the proper management of impacted soil/materials were detailed in sections 1.4, 1.7, 2.4 and 2.5 of the RWP. Generally, 900 square foot excavation grids were overlain across the Site to guide the confirmatory post-excavation sampling plan. At each grid, impacted soil was excavated employing a track-mounted excavator and either directly loaded into dump trucks or the impacted soil was temporarily stockpiled atop and covered with 12-mil poly for future loading. During loading, the dump trucks were staged atop a stabilized construction entrance (when possible and feasible) that was constructed in accordance with specifications in the RWP (crushed stone at least 6-inches deep), or the trucks were staged atop blacktop pavement on Irving Place or the cul-de-sac on Bishop Williams J. Walls Place.

Per the RWP, each of the dump trucks was required to be equipped with a solid cover to minimize the release of impacted soil during transport. Dump trucks that had mesh covers were required to install a solid sheet of poly atop the soil and then cover the poly with the mesh tarp prior to leaving the Site. In April 2020, as part of the remedial action conducted at the adjoining Cottage Place Gardens Phase 4 Parcel Site (C360160), the Department allowed a modification to employing plastic atop the surface of impacted fill/soil for trucks equipped with a mesh cover. Trucks with mesh covers covering impacted soil were allowed to forego the placement of plastic over the impacted soil if the wastes were contained in the vehicle so there is no leaking, blowing or other discharge of waste during transport; the mesh covering must be present, functional, in good condition and able to cover at least 90% of the surface of the load; and no petroleum impacted soil or malodorous soils/materials will be transported without the use of plastic covering. The same modification was applied to the off-site transport of impacted soil from the Cottage Place Gardens Phase 5 Parcel Site. The Department approved modification for the Cottage Place Gardens Phase 4 Parcel Site is included in Appendix C-1 for reference.

The dump trucks used for the transport of the impacted soil had NYS Part 364 permits. The impacted soil was disposed of off-site at permitted disposal facilities. The Department and C.T. Male reviewed and approved the facilities' approval letters prior to exportation.

4.1.5 Storm-Water Pollution Prevention Plan (SWPPP)

A Site-specific SWPPP, dated July 2020 (Revised October 2020) was prepared for the Site by PS&S Engineering, P.C. (PS&S) of Yonkers, New York.

SWPPP inspections were conducted monthly by PS&S. Results of the SWPPP inspections were presented in Construction Duration Inspection Reports. The Site-specific SWPPP and Construction Duration Reports, from January 2021 to September 2021, are included in Appendix D.

The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control.

4.1.6 Community Air Monitoring Plan (CAMP)

Air monitoring for particulates was performed during remedial field activities in accordance with the requirements of the RWP and the NYSDOH Generic CAMP. C.T. Male utilized three (3) real-time particulate monitors capable of continuously measuring concentrations of particulate matter less than 10 micrometers in size (PM-10). The monitors were placed at temporary monitoring stations, based on the prevailing wind direction each day, one (1) upwind and two (2) downwind of the work area. If an occupied building was located within 20 feet of the work area, a downwind monitor was placed along the portion of the building's exterior wall closest to the work area. Dust monitoring was discontinued during heavy rain events or during non-ground intrusive activities. Dust monitoring was also not conducted during smog conditions, as these conditions continuously triggered the dust monitor alarms in the absence of any ground intrusive Site remedial activities.

Monitoring for volatile organic compounds (VOCs) was conducted during ground intrusive activities. A hand-held photoionization detector (PID) was used by the construction observer to manually collect VOC readings upwind three (3) times a day and downwind hourly. The VOC monitoring procedures was a Department-approved modification to the RWP, which originally called for continuous VOC monitoring at downwind locations of the work area. In April 2019, as part of the remedial action conducted at the adjoining Cottage Place Gardens Phase 4 Parcel Site (C360160), the Department allowed the aforementioned modification. The same modification was applied to the Cottage Place Gardens Phase 5 Parcel Site. The Department approved modification to the CAMP is included in Appendix C-2.

4.1.7 Contractors Site Operations Plans (SOPs)

C.T. Male's Engineer of Record reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.8 Community Participation Plan

Community participation activities included a Construction Notice Fact Sheet that was issued by the Department prior to the commencement of the Remedial Action.

Subsequent Fact Sheets will be issued by the Department for its review and approval of the FER and issuance of the Certificate of Completion (COC).

4.2 Remedial Program elements

4.2.1 Contractors and Consultants

Primary Consultant (Project Engineer): C.T. Male

C.T. Male was the Remediation Engineer and acted as an intermediary between the Volunteer (178 Warburton Limited Partnership) and general contractor (Mega Contracting Group, LLC). C.T. Male provided a full-time on-site construction observer for the duration of the remedial action. The construction observer was supervised by C.T. Male's Engineer of Record. The Engineer of Record conducted periodic Site visits and participated in construction meetings.

In general, C.T. Male's responsibilities included: ensuring that the general contractor adhered to the RWP; review and approval of disposal facility, waste manifest and imported fill source submittals; construction observation; review of Part 364 trucking permits; waste manifests signatory as agent for the Volunteer; implementation of the CAMP; land survey; preparation of field notes and drawings summarizing the progress of the remedial action; collection of waste characterization, backfill and confirmatory post-excavation media samples for laboratory analyses; and collection of post remediation media samples (sub-slab vapor, soil gas, outdoor air, and groundwater) for laboratory analyses to assess the performance of the remedy and the potential for soil vapor intrusion.

Sub-Consultant (Analytical Laboratory): SGS North America, Inc.

SGS North America, Inc. (SGS) of Dayton, New Jersey performed laboratory analyses of waste characterization samples for the disposal facilities and select remedial action documentation samples that were analyzed for per- and polyfluoroalkyl substances (PFAS). The analytical data was presented in ASP Category B data deliverable packages. SGS is a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory

Sub-Consultant (Analytical Laboratory): Alpha Analytical, Inc.

Alpha Analytical, Inc. (Alpha) of Westborough, Massachusetts performed laboratory analyses of waste characterization samples for the disposal facilities, select remedial action documentation samples that were analyzed for PFAS, backfill samples and all confirmatory post-excavation samples. The analytical data was presented in ASP Category B data deliverable packages. Alpha is a NYSDOH ELAP certified laboratory.

Sub-Consultant (Data Validation): Environmental Data Services, Inc.

Environmental Data Services, Inc. (EDS) of Palm Beach Gardens, Florida was the third-party independent data validator that performed data validation of the PFAS documentation samples and the confirmatory post-excavation media samples. EDS generated Data Usability Summary Reports (DUSRs) per Appendix 2B: Guidance for Data Deliverables and the Development of Data Usability Summary Reports of NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation (DER-10).

General Contractor: Mega Contracting Group, LLC.

The Mega Contracting Group, LLC (Mega) of Astoria, New York was the primary contractor for the Site's remedial action. Mega retained and oversaw subcontractors for asbestos abatement of the buildings, demolition of the buildings, tank and hydraulic lift closures, impacted fill/soil excavations, excavation dewatering and treatment, and transport of impacted fill/soil to the disposal facilities. Mega prepared and adhered to its own site-specific HASP.

Sub-Contractor (Asbestos Abatement): ASAR International Corporation

ASAR International Corporation (ASAR) of Staten Island, New York conducted asbestos abatement of Buildings 4, 8 and 12 prior to their demolition (see the CCR in Exhibit 1 for asbestos abatement of the building within the 178 Warburton Avenue parcel). The asbestos abatement closeout reports are included in Appendix E. The asbestos abatement closeout reports were prepared by Naths/CUNO Environmental Corporation; the asbestos abatement project monitor.

Sub-Contractor (Building Demolition): Russo Development

Russo Development (Russo) of Carlstadt, New Jersey conducted building demolition of Buildings 4, 8 and 12 (see the CCR in Exhibit 1 for building demolition of the building within the 178 Warburton Avenue parcel).

Sub-Contractor (Soil Remediation): Apollo Concrete

Apollo Construction & Development, Inc. (Apollo) of Flushing, New York provided personnel and equipment for the remediation and load-out of impacted soil. Apollo also removed and staged the underground hydraulic lifts and USTs. In addition, Apollo cut, crushed and removed the fiberglass USTs off-site following staging.

Sub-Contractor (Soil Broker): All Suffolk Materials, Inc.

All Suffolk Materials, Inc. (All Suffolk) of Selden, New York was the broker for the off-site disposal of impacted soils. All Suffolk was responsible for obtaining disposal facility approvals for the impacted soil and for providing Part 364 permitted trucks for transport of the impacted soils to the disposal facilities.

Sub-Consultant (Soil Amendments for In-Situ Treatment): Regenesis Bioremediation Products

Regenesis Bioremediation Products (Regenesis) of San Clemente, California was a subconsultant to Mega, designed the treatment formula and provided the soil amendments, inclusive of on-site guidance, for the in-situ treatment to address remaining residual contamination at the 178 Warburton Avenue parcel.

Sub-Contractor (Excavation Water Management): Earth Construction Services LLC

Earth Construction Services LLC (ECS) of Mount Kisco, New York was a subconsultant to Mega and designed, installed, serviced, and monitored the treatment of impacted excavation water at the 178 Warburton Avenue parcel.

Sub-Contractor (Tanks/Hydraulic Lifts Closures): A.B.C. Tank Repair & Lining, Inc.

A.B.C. Tank Repair & Lining, Inc. (ABC Tank) of Brooklyn, New York was responsible for the closure by removal of three (3) of the four (4) USTs (see Section 4.2.2 and 4.3.2) and three (3) underground hydraulic lifts. Tanks A Lot (subsidiary of ABC Tanks) provided the vacuum truck for removal of remnant liquids within the UST and hydraulic lifts at the 178 Warburton Avenue parcel.

Sub-Contractor (SWPPP): PS&S

PS&S of Yonkers, New York prepared a site-specific SWPPP and conducted monthly SWPPP inspections. Results of the SWPPP inspections were presented in Construction Duration Inspections Reports.

4.2.2 Site Preparation

Construction meetings for development purposes were held bi-weekly from project start-up in November 2020. C.T. Male participated in construction meetings until remediation related activities were completed in June 2021. Attendees at the construction meetings included the Volunteer, Mega, C.T. Male, SCLE Architects, LLP (SCLE) (Site architects), PS&S (Civil Project Manager), the Fresnel Group (Development Consultant) and Cole Technologies (Field Operations Manager). Generally, the Department project

manager was copied on the meeting minutes, in addition to the weekly reporting by C.T. Male.

The project was conducted in two (2) phases: asbestos abatement/building demolition followed by the remedial action. The following presents the sequence of work.

-Mobilization: Mega mobilized to the Site in November 2020. Mobilization included delivery of heavy equipment and tools and the job trailer.

-The construction entrances at the Site were installed in the southwestern and northcentral portions of the Site in February 2020. The construction entrances were installed at the start of the impacted fill/soil remediation.

-Site Clearing: Mega cleared select vegetation within the Site, as needed, during the duration of the remedial action. Vegetation mostly consisted of landscaped areas and single trees sporadically located throughout the Site.

-Utility Mark Outs: Mega was responsible for locating and managing all utilities that traversed the Site, which included water, sewer, storm water, electrical, natural gas, telecommunications and other private utilities. Mega coordinated with public and private utility companies to decommission and/or reroute any utilities within the confines of the Site.

-Site Security: Site security included installation and maintenance of a combination chain-link and wood stockade security fencing with lockable gate around the perimeter of the Site.

-Erosion and Sediment Control: Erosion and sediment control requirements for compliance with the BCP were defined in the RWP. Silt fencing, catch basin silt sacks and construction entrances were installed and maintained by Mega when needed from November 2020 throughout the duration of the remedial action. The erosion and sediment control measures as presented in the site-specific SWPPP were inspected monthly by PS&S.

-Asbestos Abatement. Asbestos abatement of the buildings within the Site took place from November 2020 to January 2021.

-Building Demolition. Demolition of the buildings within the Site took place from December 2020 to February 2021.

-Waste Characterization Sampling. Waste characterization (WC) samples were collected from the Site for disposal facility acceptance criteria. The sampling frequency and analytical analyses was dictated by All Suffolk (waste broker). C.T. Male field personnel collected the samples on behalf of the Volunteer under the direction of All Suffolk. WC sampling was conducted, as needed, in September 2020 and from December 2020 to May 2021, as requested by All Suffolk on behalf of the disposal facilities.

-Excavation. Excavation and off-site disposal of impacted fill/soil within the Site took place from February 2021 to May 2021.

-Monitoring Well Decommissioning. On-site monitoring wells were decommissioned in general conformance with the Detailed Well Decommissioning Plan – CPG5 approved by the Department on February 11, 2021.

-Closure of USTs. Four (4) USTs were closed by removal during the remedial action.

One (1) approximate 500-gallon UST was pumped out by TanksALot (subsidiary of ABC Tank) on February 16, 2021. The tank was subsequently cleaned, cut-up and disposed of off-site by ABC Tank on April 15, 2021.

Two (2) approximate 10,000-gallon USTs that formerly contained heating oil for boilers in Building 12 were removed from their tank grave on April 24, 2021 and staged on the ground surface atop 12-mil thick polyethylene. No liquids were documented inside the tanks. No subjective evidence of field contamination was documented. The fiberglass tanks were cut, crushed and removed from the Site by Apollo in May 2021.

One (1) approximate 100 to 200-gallon UST was unexpectedly uncovered in the southeastern portion of the Site adjacent to Bishop William J. Walls Place on May 20, 2021. The UST was removed and staged atop and covered with poly. No subjective evidence of field contamination was documented in the soils surrounding the UST.

The tank was identified as missing during C.T. Male's site inspection on August 19, 2021. It is believed the tank was removed by unauthorized personnel, unrelated to the on-site contractors, for salvaging purposes.

-Hydraulic Lifts. Three (3) underground hydraulic lifts were emptied of their contents on February 16, 2021 by TanksALot (subsidiary of ABC Tank). The lifts were subsequently disposed of off-site at a recycling facility.

-Fill Material. The importation and Site reuse of fill material to backfill the impacted fill/soil excavations within the Site took place from February to August 2021. Department-approved topsoil and Item 4, see Section 4.6, will be imported to the Site (anticipated summer of 2022 or prior), as needed, throughout site development after October 2021.

-Soil Vapor Intrusion Evaluation. A Soil Vapor Intrusion (SVI) evaluation letter report was prepared after completion of the remedial action and submitted to the Department on December 13, 2021 to assess potential soil vapor exposures to occupants of the future building constructed on the Site. The SVI evaluation letter report was approved by the Department on December 17, 2021. The SVI evaluation report and Department's approval letter are presented as Exhibit 5.

-Post Remedial Action Groundwater Assessment: A Revised Post-Remedial Action Groundwater Assessment Report was submitted to the Department on December 6, 2021. The Groundwater Assessment was approved by the Department on December 15, 2021. The Groundwater Assessment and approval letter from the Department letter are presented as Exhibit 4.

Agency approvals applicable to the remedial action included the NYSDEC Decision Document; City of Yonkers Department of Housing and Buildings COMM-ALT Permit Number B202100154 for soil remediation; City of Yonkers Department of Housing and Buildings TANK-COMM Permit Number B202100373 (1,000 gallon UST at the 178 Warburton Avenue parcel) and MINOR ALTERATION Permit Number B202100593 (2 – 10,000 gallon USTs) for closure by removal of the underground storage tanks; Westchester County Department of Environmental Facilities (WCDEF) Permit 457-20 for the discharge of development project water to the county sewer system; United States Environmental Protection Agency (EPA) for the request of an Identification Number NYR000248195 for the generation of hazardous waste; and United States EPA and NYSDOL Notifications for asbestos abatement activities; and NYSDOL 12 NYCRR Part

56. Note: No permit was issued for the approximate 100 to 200-gallon UST encountered in the southeastern corner of the Site as the tank was not able to be located.

The NYSDEC Decision Document is included in Appendix F. The City of Yonkers Department of Housing and Building , US EPA and the WCDEF permits are included in Appendix G. The asbestos abatement related documentation was included in the Asbestos Abatement Project Closeout Reports, which are presented in Appendix E.

State Environmental Quality Review Act (SEQRA) requirements and all substantive compliance requirements for attainment of applicable natural resource or other permits were achieved during this Remedial Action.

4.2.3 General Site Controls

Site security included installation and maintenance of a combination chain-link and wood stockade security fencing with lockable gate around the perimeter of the Site.

C.T. Male's construction observer prepared daily logs during the remedial action. The logs included information regarding the contractor's activities and progress, community air monitoring, media sampling, Site visitors, and meteorological conditions. Drawings depicting the locations of dust monitors, excavation limits and stockpile areas were attached to the logs.

Erosion and sediment control requirements were defined in the RWP for compliance with the BCP. Silt fencing, catch basin silt sacks and construction entrances were installed and maintained by Mega from November 2020 throughout the duration of the remedial action. The developer retained PS&S to conduct monthly SWPPP inspections in accordance with the site-specific SWPPP.

Soil screening with a PID and by organoleptic perception (sight and smell) were employed throughout the project to identify areas of petroleum impacts during closure of the USTs and hydraulic lifts, and where necessary, to guide the contractor on satisfactory removal of soil beyond the prescribed soil removal limits.

Stockpiling of impacted fill/soil was necessary throughout the project when the excavated material was not immediately loaded into dump trucks. Stockpiles were maintained within the property boundaries. Generally, any stockpile left on-site during

non-working hours was covered with plastic sheeting until it was loaded into trucks for off-site disposal.

The USTs and hydraulic lifts were staged at the ground surface pending off-site disposal. The USTs and hydraulic lifts were staged atop 12-mil thick polyethylene and covered.

Purged water from the monitoring wells sampled after the completion of remedial activities was placed in four (4) 55-gallon drums and staged on-Site for future profiling and off-site disposal at a treatment, storage and disposal facility (TSDF). The purge water may be discharged to the nearest catch basin with approval from the Westchester County Department of Environmental Facilities. Final disposition of these drums is pending and an information on the disposal will be provided in the final FER.

Dry decontamination procedures, such as the controlled physical removal of soils adhered to the tracks of the excavator and excavator bucket, and the tires of soil loadout trucks, were employed in a controlled manner as needed.

4.2.4 Nuisance Controls

Manual truck washing stations were utilized at the stabilized construction entrances until the majority of the impacted fill/soil removal efforts were completed. Generally, the trucks that were loaded with impacted fill/soil were confined to the construction entrance and the truck tires did not come into contact with the impacted fill/soil. The stabilized construction entrances removed sediment from the truck tires before they left the Site. Dry decontamination methods (i.e. manual use of a broom) were employed to remove any gross soil adhering to truck tires. Any sediment that was inadvertently tracked onto roadways was swept up and disposed of with fill/soil loaded into subsequent trucks. Residual impacted fill/soil generated at the wash stations were ultimately removed from the Site with the final loads of impacted fill/soil leaving the Site.

Dust control measures included the periodic wetting of impacted fill/soil when it was handled during excessively dry weather conditions. Additionally, particulate monitoring was conducted at the perimeter of the work area during ground intrusive activities as part of the CAMP. Results of the CAMP are presented in Section 4.2.5.

Nuisance odors were not encountered during the remedial action. Petroleum impacted fill/soil that was not directly loaded into trucks for off-site disposal was staged atop poly and covered.

Trucks were loaded at construction entrances that were accessed from Warburton Avenue (southwestern portion of the Site) and the northcentral portion of the Site via the parking area of 188 Warburton Avenue via Willow Place (northcentral of the Site). Trucks were being loaded from Bishop William J. Walls Place temporarily towards the end of the remediation to access soils in the southwestern corner of the Site. Once loaded, the trucks immediately proceeded to their designated disposal facilities. Prior to entering the Site for loading, the trucks were temporarily staged along Warburton Avenue, Irving Place, Bishop William J. Walls Place or Willow Place. There were no complaints received during the temporary staging of trucks along these roadways.

4.2.5 CAMP Results

Appendix H contains a table that provides an overview of dust and VOC monitoring exceedances of the 15-minute short-term exposure limits (STEL) and how the exceedances were resolved.

The following table summarizes the CAMP STEL exceedances and reasoning for the exceedances and/or actions taken to resolve the exceedances.

Date	CAMP STEL Exceedance and Action Taken
2/8/21 and 2/11/21	Dust exceedances were reported on these dates. The exceedances were the results of equipment powering (false negatives during equipment start-up) or trucks near dust monitors not related to site activities.
2/26/21	An isolated particulate spike of 0.1705 mcg/m3 was encountered at downwind dust monitor CPG#2 when it was put into operation on the morning of February 26, 2021. The particulate spike is viewed as a false positive and may be attributed to possible dust during overnight storage of the equipment. There were no remedial ground intrusive activities taking place at the Site when the particulate monitor was put into operation.

Date	CAMP STEL Exceedance and Action Taken
3/4/21 and 3/5/21	There were several CAMP particulate exceedances on Thursday 3/4 and Friday 3/5. These particulate exceedances were caused by a substantial volume of dust and fumes that were generated from work being conducted by Con Edison within 178 Warburton Avenue in the vicinity of the Site's western boundary. The work being done by Con Edison was not within the confines of the Site.
3/11/21	There were several CAMP particulate exceedances on Thursday 3/11. These particulate exceedances are attributed to ambient smog conditions. There were no ground intrusive activities occurring at the time of the particulate exceedances.
3/15/21	Dust monitor #2 exceeded 0.150 mg/m3 when it was put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and is likely attributed to the accumulation of particulates during overnight storage. Dust monitor #2 exceeded 0.150 mg/m3 due to wind stirring up dust along Irving Place, which is off-site.
3/16/21	Dust Monitor #3 exceeded 0.150 mg/m3 when it was put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and is likely attributed to the accumulation of particulates during overnight storage.
3/22/21	Dust monitor #3 exceeded 0.150 mg/m3 when it was put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and is likely attributed to the accumulation of particulates during overnight storage.
3/24/21	Dust monitor #1 (upwind dust monitor) exceeded 0.150 mg/m3 due to particulates or fumes being generated by hammering through subsurface rock during drilling for installation of the SOE. The hammering frequency was reduced and water was applied to the borehole to control

Date	CAMP STEL Exceedance and Action Taken
	generation of particulates/fumes. NYSDEC was informed verbally on 3/24 regarding this event.
3/29/21	Dust monitor #2 exceeded 0.150 mg/m3 when its environmental enclosure was opened. There were no ground intrusive activities in the immediate vicinity of the monitor. The exceedance is viewed as a false positive and is likely attributed to the possible generation of particulates upon opening the enclosure.
3/30/21	Dust monitors #2 and #3 exceeded 0.150 mg/m3 when they were put into operation. There were no ground intrusive activities. The exceedances are viewed as false positives and are likely attributed to the accumulation of particulates during overnight storage.
4/02/21	Dust monitor #2 exceeded 0.150 mg/m3 when it was put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and is likely attributed to the accumulation of particulates during overnight storage.
4/05/21	Dust monitors #1 and #2 exceeded 0.150 mg/m3 when they were put into operation. There were no ground intrusive activities. The exceedances are viewed as false positives and are likely attributed to the accumulation of particulates during overnight storage. Dust monitor #2 exceeded 0.150 mg/m3 throughout the day due to dust being generated during off-site street utility work in the vicinity of Warburton Avenue and Irving Place.
4/06/21	Dust monitor #2 exceeded 0.150 mg/m3 when it was put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and is likely attributed to the accumulation of particulates during overnight storage.

Date	CAMP STEL Exceedance and Action Taken
4/09/21	Dust monitor #2 exceeded 0.150 mg/m3 throughout the day due to dust being generated during off-site street utility work in the vicinity of Warburton Avenue and Irving Place.
4/19/21	Dust monitor #2 exceeded 0.150 mg/m3 due to the presence of exhaust fumes from nearby trucks and excavators. Dust monitor #3 exceeded 0.150 mg/m3 due to dust generated from the unloading of steel on Irving Place.
4/22/21	Dust monitors #1, #2 and #3 exceeded 0.150 mg/m3 throughout the day due to high winds that stirred up dust along Irving Place, Babcock Place and Warburton Avenue.
4/23/21	Dust monitors #2 and #3 exceeded 0.150 mg/m3 when put into operation. There were no ground intrusive activities. The exceedances are viewed as false positives and likely attributed to the accumulation of particulates during overnight storage.
4/28/21	Dust monitor #1 exceeded 0.150 mg/m3 due to the presence of fumes generated from welding H-beams for the SOE.
5/11/21	Dust monitor #2 exceeded 0.150 mg/m3 throughout the day due to high winds that stirred up dust along Irving Place. The particulate exceedances were not caused by Site activities.
5/12/21	Dust monitor #3 exceeded 0.150 mg/m3 when put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and likely attributed to the accumulation of particulates during overnight storage.
5/14/21	Dust monitor #2 exceeded 0.150 mg/m3 during the breaking up of staged fiberglass USTs formerly located to the east of former Building 12. The contractor applied water to reduce particulate emissions.

Date	CAMP STEL Exceedance and Action Taken
5/17/21	Dust monitor #1 exceeded 0.150 mg/m3 when put into operation. There were no ground intrusive activities. The exceedance is viewed as a false positive and likely attributed to the accumulation of particulates during overnight storage.
5/18/21	Dust monitor #2 exceeded 0.150 mg/m3 throughout the day due to high winds that stirred up dust along Irving Place. The particulate exceedances were not caused by Site activities.
5/19/21	Dust monitor #2 exceeded 0.150 mg/m3 throughout the day due to high winds that stirred up dust along Irving Place. The particulate exceedances were not caused by Site activities.
5/21/21	Dust monitor #2 exceeded 0.150 mg/m3 from exhaust fumes of nearby heavy equipment.
5/27/21	Dust monitor #3 exceeded 0.150 mg/m3 from exhaust fumes of nearby heavy equipment.

The following table provides the reasons why the CAMP was not implemented on particular dates. For the reasons provided in the table below, the CAMP was not implemented for a total 23 days of the approximately six (6) month time period it took to remediate the Site.

Date	Reason why CAMP was not Implemented
12/21/20 to 12/25/20	Due to the absence of ground-intrusive activities, the CAMP was implemented during these dates.
12/28/20 to 01/01/21	Due to the absence ground-intrusive activities, the CAMP was not implemented during these dates.

Date	Reason why CAMP was not Implemented
01/18/21 to 01/22/21	The CAMP was not implemented during these dates due to the limited nature of the excavation (half day on 01/22/21 only) and equipment availability.
01/25/21 to 01/29/21	The CAMP was not implemented during these dates due to limited site disturbances.
5/31/21 to 6/4/21	Due to rain, the CAMP was not implemented for particulates.

Copies of all field data sheets relating to the CAMP are provided in Appendix H.

4.2.6 Reporting

Weekly and monthly reports are included in Appendix I. Daily field logs prepared by C.T. Male personnel are presented in Appendix J.

The daily field logs (Appendix J) were prepared by C.T. Male's construction observer. The reports included information regarding the contractor's activities and progress, community air monitoring, media sampling, Site visitors, and meteorological conditions. Drawings depicting the locations of dust monitors, excavation limits and stockpile areas were attached to the logs.

The weekly reports (Appendix I) were prepared by C.T. Male's engineer of record or Qualified Environmental Professional (QEP) and included a summary of the previous week's work, media sampling, the CAMP, and anticipated work activities for the following week. The weekly reports were transmitted via email to the Department's Project Manager on a weekly basis, and intermittently on a bi-weekly basis during limited remedial action activities.

The monthly progress reports (Appendix I) were submitted to the Department Project Manager by C.T. Male's QEP. The monthly progress reports included information pertaining to work performed and work anticipated to be performed, approved activity modifications, results of sampling and tests, percentage of project completion, unresolved delays affecting the project schedule, and citizen participation activities. The monthly progress reports were a requirement of the BCA and were submitted by the tenth day of each month.

The photo log required by the RWP is included in Appendix K.

4.3 Contaminated Materials Removal

The following contaminated media (source areas) were removed during the remedial action: impacted fill/soils; four (4) USTs, including their contents; and three (3) underground hydraulic lifts, including their contents; and contaminated water from excavation areas. A detailed description of the removal activities is provided in Sections 4.3.1 and 4.3.2. A discussion of the management of contaminated water that accumulated in the remedial excavations is provided in Section 4.3.3.

The impacted fill/soils were remediated to meet Unrestricted Use Soil Clean Objectives (SCOs) for the Site.

A list of the SCOs for the contaminants of concern for this project is provided in Table 375-6.8(a) in Appendix L.

A figure of the location of original sources and areas where excavations were performed is shown in Figure 2: Remedial Action Overview.

4.3.1 Impacted Fill/Soils

The following impacted fill/soils were removed during the remedial action: urban fill soils, hazardous soils based on lead content, and petroleum-impacted soils (PIS).

Generally, urban fill soils were present throughout the Site from the pre-existing surface grade to depths ranging from four (4) to 18 feet bsg. Compounds and analytes that exceeded Unrestricted Use SCOs as a function of the RI and previous investigations are depicted on Figure 1A.

Hazardous lead soils were present adjacent to the northwestern corner of former Building 8 in the approximate east-central portion of the Site and were confined to an approximate horizontal footprint of 20-feet by 20-feet that extended approximately five (5) to seven (7) feet bsg. See Figure 2 for the location of the hazardous lead excavation.

PIS was encountered in the remedial excavation within the 178 Warburton Avenue parcel; beneath the two (2) 20,000 gallon USTs east of former Building 12; and adjacent to three (3) underground hydraulic lifts within the 178 Warburton Avenue parcel. PIS was also generated from leaks from excavator equipment during remedial activities.

Depths of excavation for remediation purposes varied throughout the Site and were determined based on post-excavation confirmatory sampling results and visual

observations (i.e. lack of field evidence of contamination, such as odors, staining, discoloration, sheen and/or elevated PID readings).

4.3.1.1 Disposal Details

Waste characterization sampling was conducted by C.T. Male prior to and during the remedial action, as needed. The waste characterization sampling frequency and analytical requirements were dictated by All Suffolk (soil broker). The following summarizes the waste characterization sampling events.

In September 2020, the initial sampling event was conducted and included the collection of waste characterization samples from all of the delineated waste characterization cells with the exception of waste characterization cell O due to the presence of stockpiled material overlying the cell. The results for the September 2020 waste characterization sampling event are documented in a letter report prepared by C.T. Male, inclusive of summary tables and laboratory results, and is presented in Appendix M-1.

In December 2020, waste characterization samples were collected of stockpiled fill/soil that was representative of soil beneath former Building 12. The results for the December 2020 waste characterization sampling event are documented in a letter report prepared by C.T. Male, inclusive of summary tables and laboratory results, and is presented in Appendix M-2.

In January 2021, waste characterization samples were collected of stockpiled fill/soil that was representative of soil beneath former Building 8. The results for the January 2021 waste characterization sampling event are documented in a letter report prepared by C.T. Male, inclusive of summary tables and laboratory results, and is presented in Appendix M-3.

In January 2021, waste characterization samples were collected of stockpiled fill/soil that was representative of soil beneath former Building 4. The results for the January 2021 waste characterization sampling event are documented in a letter report prepared by C.T. Male, inclusive of summary tables and laboratory results, and is presented in Appendix M-4.

In February 2021, a waste characterization sample was collected of PIS affiliated with the removal of three (3) underground hydraulic lifts within the 178 Warburton Avenue parcel. A letter report prepared by C.T. Male, inclusive of laboratory results, is presented in Appendix M-5.

In February 2021, waste characterization samples were collected from waste characterization cell O. The results for the February 2021 waste characterization sampling event are documented in a waste characterization sampling map, analytical results summary table and analytical report prepared by C.T. Male, and is presented in Appendix M-6.

In February 2021, additional waste characterization samples were collected from central and eastern portions of the Site per the request of the Freemansburgh, PA disposal facility. The results for the February 2021 waste characterization sampling event are documented in email correspondence, a waste characterization sampling map and analytical report prepared by C.T. Male, and is presented in Appendix M-7.

In March 2021, additional waste characterization samples were collected from waste characterization cell H to re-characterize the cell for the disposal facility(ies). The results for the March 2021 waste characterization sampling event are documented in the waste characterization sampling map, analytical table and analytical report prepared by C.T. Male, and is presented in Appendix M-8.

In April 2021, additional waste characterization samples were collected from waste characterization cell H to further characterize the cell for the disposal facility(ies). The results for the April 2021 waste characterization sampling event are documented in the analytical table and analytical report prepared by C.T. Male, and is presented in Appendix M-9.

In May 2021, additional waste characterization samples were collected from waste characterization cells M and Q. These soils were previously excavated and stockpiled on eastern portions of the Site. The results for the May 2021 waste characterization sampling event are documented in the waste characterization sampling map, analytical table and analytical report prepared by C.T. Male, and is presented in Appendix M-10.

In May 2021, additional waste characterization samples were collected from waste characterization cells M and Q. These samples were collected from in-situ soil within these cells and not stockpiled soils (see previous paragraph). The results for the May 2021 waste characterization sampling event are documented in the analytical table and analytical report prepared by C.T. Male, and is presented in Appendix M-11.

In December 2020 and January, February and March 2021, waste characterization samples were collected from that portion of waste characterization cell H containing lead in soils at hazardous levels. The portion of waste characterization cell H containing hazardous levels of lead was located at the northwestern corner of former Building 8. The

sampling was conducted to assess the areal extent of hazardous lead in soils. The results for the waste characterization sampling events are documented in the waste characterization sampling map and analytical reports prepared by C.T. Male, and is presented in Appendix M-12.

Excavation of hazardous lead soils in waste characterization cell H extended from five (5) to seven (7) bgs and was delineated based on the laboratory results and the acceptance limits of the disposal facilities. Following the removal of hazardous lead soils, at least one (1) additional foot was excavated for the removal of urban fill soils. The final depth for remediation purposes in the area was approximately five (6) to seven (8) bgs.

All Suffolk was provided with copies of all the WC sampling results, the RWP and the RI Report. Draft disposal facility applications were provided to C.T. Male for review prior to final submission to the proposed disposal facilities by All Suffolk. Acceptance letters from disposal facility owners are attached in Appendix N.

The following transporters were used to transport impacted fill/soils to their corresponding soil disposal facility:

- Uriel Trucking, LLC.
- W. Ojeda and Sons Trans. Corp.
- Cabrera Transport, LLC.
- CF Brothers Transportation, Inc.
- DI Trucking, LLC.
- EMB Industries, LLC.

Part 364 permits associated with these transporters are presented in Appendix O.

Excavation and off-site disposal of impacted fill/soil was conducted from February 2021 to May 2021. Table 4.3.1.1 below shows the total quantities of each category of material removed from the Site and the disposal locations.

Table 4.3.1.1: Disposal Summary

Facility Name	Facility Location	Impacted Fill/Soil Type	Quantities (tons)
Clean Earth Environmental Solutions (Republic Environmental Systems [PA] LLC)	2869 Sandstone Drive Hatfield, PA 19440	Hazardous Soils	207.34
Barnsdale Associates Freemansburg Road Facility	1600 Freemansburg Road Bethlehem, PA 18052	PIS and Urban Fill	20,709.74
Soil Safe Logan Township, NJ Facility	378 Route 130 South Logan Township, NJ 08085	PIS and Urban Fill	2,045.23
Soil Safe (Metro 12) Carteret, NJ Facility	Salt Meadow Road Carteret, NJ 07008	PIS and Urban Fill	16,225.53
		Total:	**39,187.84**

Approximately 39,187.84 tons of impacted fill/soils were excavated and disposed of off-site during the remedial action.

Manifests and bills of lading are included in Appendix P.

4.3.1.2 On-Site Reuse

The remediation contractor inadvertently excavated and stockpiled approximately 700 cubic yards of native soil from the western portion of the Site in the vicinity of former Building 12. Historic fill material overlying the excavated native soil was previously remediated, however, confirmatory post-excavation floor samples had not yet been collected for laboratory analyses to indicate that the underlying native soils had attained SCOs for Unrestricted Use.

In lieu of disposing of the stockpiled native soil off-site as impacted, sampling and laboratory analyses was conducted on the soil stockpile with approval of NYSDEC and in accordance with DER-10, 5.4(e) to assess if the soil could be reused on-Site as backfill material.

The stockpile was sub-divided into two (2) (eastern and western) portions. From each portion, one (1) 5-point composite and three (3) grab samples were collected for laboratory analyses. The grab samples were analyzed for Target Compound List (TCL)

VOCs. The composite samples were analyzed for TCL semi-volatile organic compounds (SVOCs), herbicides (2,4,5-TP Silvex only), pesticides and poly-chlorinated biphenyls (PCBs), Target Analyte List (TAL) metals (including mercury), trivalent chromium, hexavalent chromium and cyanide. Analytical results depicted all of the analyzed parameters at concentrations below DER-10 Unrestricted Use Allowable Constituent Levels for Imported/Reuse Fill and Soil with the exception of the pesticides 4,4'-DDE (0.00334 ppm) and 4,4'-DDT (0.00434 ppm) which were detected at concentrations slightly above their Unrestricted Use SCO of 0.0033 ppm in samples representative of the eastern portion of the stockpile only. Analytical results for samples collected from the western portion of the stockpile met Unrestricted Use SCOs.

The eastern portion of the soil stockpile for on-site reuse (material with slight exceedances of pesticides) was relocated to confirmatory post-excavation sampling grids D14, D15, E14 and E15 (see Figure 2) and placed at an elevation 15-feet below the proposed Site redevelopment's final grade in accordance with the Department's indications (area was over excavated and soils placed at the bottom of the excavation). The western portion of the soil stockpile for on-site reuse (clean material meeting Unrestricted Use SCOs) was used to cover the material (material with slight exceedances of pesticides).

The general contractor generated 1,500-2,000 cubic yards of on-site native material as a result of building foundation excavation and site development activities and the importation of excess backfill material (structural and granular fill material not requiring chemical testing in accordance with DER-10). The native material is currently stockpiled in the central portion of the site and will be reused for backfill in the park area (eastern portion of the site) in lieu of a portion of the previously approved imported backfill (see Section 4.6). The stockpiled native material is representative of visually assessed clean native soil obtained from western and central portions of the CPG Phase 5 BCP Site in the vicinity of former Building 12 and Building 8. Historic fill material (HFM) previously overlying this native soil was remediated via excavation and confirmatory post-excavation floor samples showed all analyzed parameters at concentrations below UU SCOs. As such, the Department Project Manager did not require testing of the material for on-Site reuse in accordance with DER-10. Appendix U-5 includes the completed Request to Import/Reuse Fill or Soil Form for this material. The Department approved modification to reuse the stockpiled materials without chemical testing is included in email correspondence from the Department at the end of Appendix U-5 and Appendix C-3.

The Department approved Request to Import/Reuse Fill or Soil Forms are included in Appendix U.

4.3.2 Underground Storage Tanks and Hydraulic Lifts

Four (4) USTs and three (3) underground hydraulic lifts were closed by removal during the remedial action.

One (1) approximate 500-gallon UST was unexpectedly uncovered in the vicinity of the former building within the 178 Warburton Avenue parcel. The tank was pumped out by TanksALot (subsidiary of ABC Tank) on February 16, 2021. The tank was subsequently cleaned, cut-up and disposed of off-site by ABC Tank on April 15, 2021.

Two (2) approximate empty 10,000-gallon USTs that formerly contained heating oil for Building 12 were removed from their tank grave on April 24, 2021 and staged on the ground surface atop 12-mil thick polyethylene. No liquids were documented inside the tanks. No subjective evidence of field contamination was documented. The fiberglass tanks were cut, crushed and removed from the Site by Apollo in May 2021.

One (1) approximate 100 to 200-gallon UST was unexpectedly uncovered in the southeastern portion of the Site adjacent to Bishop William J. Walls Place on May 20, 2021. The UST was removed and staged atop and covered with poly. No subjective evidence of field contamination was documented in the soils surrounding the UST.

The tank was identified as missing during C.T. Male's site inspection on August 19, 2021. It is C.T. Male's opinion based on interviews with the client and project contractors that the tank was removed by unauthorized personnel, unrelated to the on-site contractors, for salvaging purposes.

Three (3) underground hydraulic lifts were encountered beneath the footprint of the former building within the 178 Warburton Avenue parcel. The lifts were staged atop 12-mil polyethylene and covered. The lifts were emptied of their contents on February 16, 2021 by TanksALot (subsidiary of ABC Tank). The lifts were subsequently disposed of off-site at a recycling facility.

Closure documentation for the USTs and hydraulic lifts are included in Appendix Q. Applicable City of Yonkers permits for the closures are included in Appendix G.

4.3.3 Excavation Water Management

Construction water that accumulated in post-remediation excavations in the

western portion of the Site was discharged to the county sewer system following treatment via catch basins located at the intersection of Wood Place and Warburton Avenue and/or Irving Place and Warburton Avenue. The treatment system was designed by ECS and reviewed by C.T. Male. Comments on the design and operation provided by C.T. Male were incorporated in subsequent information provided by Mega. The system was approved by WCDEF and NYSDEC on December 15, 2020 ad January 11, 2021, respectively. The installation, operation, and monitoring of the system was performed by ECS/Mega in general conformance with the RWP and the WCDEF permit.

Generally, the treatment system consisted of a settling tank, bag filters, and granular activated carbon vessels. Documentation pertaining to the treatment system design (C.T. Male letter to NYSDEC, subconsultant submittals and follow-up e-mail correspondence) are presented in Appendix V.

A permit to discharge the water was obtained by Mega from the WCDEF. The permit allowed for the maximum discharge to the sewer of 25,000 gallons per day, based on a monthly average. The daily maximum discharge was not exceeded during the duration of the remedial action.

Approximately 155,400 gallons of treated water was discharged during the remedial action within the 178 Warburton Avenue parcel from March to May 2021, based on field observations and pump rating.

One (1) sample of treated water was collected for laboratory analyses per WCDEF permit requirements. All analytical results for sampled water met the WCDEF permit requirements with the exception of pH, which had a pH value of 10.4 versus the local sewer limitation pH value of 9.5. In email correspondence between Mega and C.T. Male, Mega indicated that the treated water would either be diluted with potable water or hydrochloric acid would be added to the treated water to reduce the pH value to be within the local sewer limitation. Mega used a portable pH meter to obtain pH levels prior to discharge. Mega indicated that the pH value had been reduced to a pH value of 8.1, which falls within the local sewer limitations. The WCDEF permit, email correspondence between Mega and C.T. Male regarding the pH value, email correspondence from the Department indicating approval of the treatment system and approval to discharge, and analytical results for treated excavation water are presented in Appendix G.

4.4 Other Remedial Elements

Other remedial elements that were implemented as part of the Site's overall remedy included the application of in-situ soil amendments to address residual contaminants,

decommissioning of monitoring wells, pre- and post-remedial action groundwater assessment, and a soil vapor intrusion (SVI) evaluation.

4.4.1 Application of In-Situ Soil Amendments

In-situ soil amendments were applied to the bottom of the final remedial excavation (generally ±10 to 12 feet bsg, 17 feet bsg in the southwestern corner) within the 178 Warburton Avenue parcel to remediate potential residual dissolved phase petroleum hydrocarbons in groundwater. The in-situ soil amendments consisted of PetroFix™ and ORC Advanced® Pellets. Based on an excavation treatment area of 8,500 ft^2 and in consultation with the supplier of the amendments (Regenesis), approximately 6,800 pounds of PetroFix™ and 2,039 pounds of ORC Advanced® Pellets were applied to the excavation bottom by Mega and under the oversight of C.T. Male, in accordance with product application guidance provided by Regenesis. A representative from Regenesis was on-site on May 17, 2021 prior to the application of the amendments to provide guidance to Mega and C.T. Male staff. The amendment application was conducted on May 21, 2021.

Product application guidance and technical information for PetroFix™ and ORC Advanced® Pellets are included as Exhibit 3.

4.4.2 Decommissioning of Monitoring Wells

The monitoring wells were decommissioned in general conformance with the Department approved Detailed Well Decommissioning Plan submitted to the Department via email on February 8, 2021. In summary, 11 monitoring wells installed during the RI and previous investigations were decommissioned by extending the impacted fill/soil remedial excavations to depths below the bottoms of the wells. The excavated wells were disposed of off-site with the impacted fill/soil.

The Department approved Detailed Well Decommissioning Plan is included as Exhibit 2.

4.4.3 Groundwater Assessment

Per the Decision Document, pre and post remedial action groundwater sampling was conducted to assess groundwater conditions within the 178 Warburton Avenue parcel and at off-site downgradient locations after completion of the remedial action. The methods, findings and conclusions of the groundwater assessment is presented in the Revised 2021 Groundwater Assessment Report prepared by C.T. Male, which is attached

hereto as Exhibit 4. The Groundwater Assessment was approved by the Department on December 15, 2021. The approval letter from the Department letter is also presented in Exhibit 4.

The report concluded that based on the remedial actions completed, and analytical data developed prior to and after completion of the remedial action:

- The groundwater evaluation satisfies the groundwater evaluation criteria of the Decision Document since groundwater is not used as a potable water supply and the remedial action removed all on-site sources that would contribute to groundwater contamination. Further groundwater monitoring is not required as Track 1 Unrestricted Use criteria has been substantially attained for the groundwater component of the remedy.

- The concentrations of compounds remaining in groundwater are below or approaching their regulatory standards (Ambient Groundwater Quality Guidance Values for Class GA as listed in TOGS 1.1.1 and 6 NYCRR 703.5) at asymptotic levels and the depth to groundwater is greater than 11 feet below the finished floor of the new buildings.

Per the approval letter by the Department, remaining monitoring wells, both on- and off-site, will be decommissioned per CP-43, Monitoring Well Decommissioning Policy. An abandonment report will be forwarded to the Department at the conclusion of decommissioning work.

4.4.4 Soil Vapor Intrusion Evaluation

Per the Decision Document, a SVI Evaluation was completed to evaluate if potential soil vapor exposure pathways exist to future occupants of the new building being constructed at the Site after completion of the remedial action. The December 13, 2021 SVI Evaluation Report prepared by C.T. Male is attached hereto as Exhibit 5. The SVI evaluation letter report was approved by the Department on December 17, 2021.

The report concluded the following.

- The remedial action at the Site conducted under the auspices of the BCP was successful at remediating the source areas of impacted fill/soil mixtures, bulk storage tanks and hydraulic lifts.

- The concentrations of compounds remaining in on-site groundwater after completion of the remedial action, only remaining medium that may have the potential to emit vapors, were non-detect.

- The concentrations of eight (8) chlorinated solvents, NYSDOH's compounds of concern in soil vapor (carbon tetrachloride, 1,1-dichloroethene [1,1-DCE], cis-1,2-dichloroethene [cis-1,2-DCE], trichloroethylene [TCE], methylene chloride, tetrachloroethylene [PCE], 1,1,1-trichloroethane [1,1,1-TCA], and vinyl chloride) were not detected in soil vapor at levels indicative of a soil vapor intrusion concern.

- The concentrations of petroleum-related compounds remaining in soil vapor at the 178 Warburton Avenue parcel after completion of the remedial action (collected prior to the installation of the building foundation) are present at low levels and are not indicative of a source area at the Site.

- Sub-slab soil vapor samples were not able to be collected after two (2) attempts due to a high water table at the Site saturating the monitoring points as documented in a letter by C.T. Male (dated November 22, 2021).

- A Preprufe® 300R Plus waterproofing membrane (1.2 mm, approximately 47 mils) was installed beneath the proposed building slab as a required element of building construction, regardless of the potential for vapor intrusion. The Preprufe® 300R Plus is a HDPE film, pressure sensitive adhesive and weather resistant protective coating that bonds to the poured concrete, preventing both the ingress and lateral migration of water and serving as a barrier to water, moisture, and gas. Although the potential for SVI is not deemed to be a concern within the Site, the installation of the below-slab vapor barrier/waterproofing membrane serves as an additional precautionary measure against the potential encroachment of soil vapor into the building.

It is C.T. Male's opinion that the removal of the source of the petroleum contamination via soil excavation at the 178 Warburton Avenue parcel, application of soil amendments to address remaining residual contamination, soil vapor and groundwater data exhibiting non-detect, coupled with the installation of a robust vapor barrier and inherent attenuation factor by a new building foundation as part of building construction, has attenuated the potential vapor intrusion exposure pathways to future building occupants.

4.5 Remedial Performance/Documentation Sampling

Post-excavation (PE) confirmatory end-point samples were collected to confirm that soils remaining following the removal of impacted fill/soil meet Unrestricted Use SCOs as established in the RWP.

PE samples were identified with the prefix "FS" to denote a floor sample, and "SW" to denote a sidewall sample, followed by a sequential number (i.e. 001, 002, etc.) identifying the remediated cell as dictated by the project sequence.

Generally, resamples of any given cell/area (samples that initially failed and the area was subsequently excavated to achieve Unrestricted Use SCOs) were identified by adding a "B" or "C" suffix to each sample ID (i.e. FS-001B). Resamples were only analyzed for the compounds/analytes for which the original sample failed.

Generally, PE samples were collected at a frequency of one (1) grab sample per each 900 square feet of excavation floor and one (1) grab sample from each sidewall for every 30 linear feet of sidewall, pursuant to DEC DER-10. Per the RWP, PE samples were to be analyzed for the TCL for VOCS by USEPA Method 8260, SVOCs by USEPA Method 8270, pesticides by USEPA Method 8081 and PCB by USEPA Method 8082, the TAL for metals by USEPA Methods 3050 and 7471, hexavalent chromium by USEPA Method 1,7196A) and the emerging contaminant 1,4-Dioxane by USEPA Method 8260), unless subsequent sampling modifications were approved by the Department (see Section 4.5.1).

A figure and table summarizing all end-point sampling is included in Figure 3 and Appendix L, respectively, and all exceedances of SCOs are highlighted.

4.5.1 PE Sampling Modifications

Based on conditions observed in the field and analytical data trends, the following sampling modifications were approved by the Department. Department approvals are included in Appendix C-4.

-The sampling frequency for TCL PCB analyses was reduced to the collection of one (1) sample per four (4) spatially distributed PE sampling cells. This modification was based on the fact that no PCB exceedances were documented in the RI Report.

-The sampling frequency for TCL VOC analyses was amended to include VOC analyses of samples collected within the 178 Warburton Avenue parcel, in the vicinity of the known USTs adjacent east of former Building 12 and in any newly identified petroleum impacted areas exhibiting subjective field evidence of contamination. In remaining portions of the Site, the sampling frequency for VOC analyses was reduced to the collection of one (1) sample for VOC analyses per each four (4) spatially distributed PE sampling cells. The sampling frequency amendment was based on data in the RI Report depicting VOC detections in samples collected from the 178 Warburton Avenue parcel with few detections of acetone (typical laboratory contaminant) in remaining portions of the Site.

-The sampling frequency for TCL pesticide analyses was amended to include pesticide analyses of samples collected within the 178 Warburton Avenue parcel and in remaining portions of the Site at a sampling frequency of the collection of one (1) sample for pesticides analyses per each four (4) spatially distributed PE sampling cells. The sampling frequency amendment was based on data in the RI Report depicting pesticide detections in samples collected from the 178 Warburton Avenue parcel with no pesticide detections in samples collected from remaining portions of the Site.

-PE samples were not analyzed for cyanide. The RI Report data depicted cyanide concentrations in soil to be non-detect in 11 of 13 samples and to be at concentrations below Unrestricted Use SCOs in two (2) of 13 samples.

-A subset of the PE samples (18 PE samples total) was analyzed for the NYSDEC list of 21 per- and polyfluorinated alkyl substances (PFAS) emerging contaminants as per the Department approved Sampling Plan for Emerging Contaminants (dated February 7, 2020), which is attached hereto as Exhibit 6-1. Fourteen (14) of the 18 soil samples for PFAS analyses were collected during the waste characterization sampling conducted in September 2020. Due to access constraints during the initial PFAS sampling, the remaining four (4) samples were collected as their applicable PE sampling cells were cleared for sampling during the remedial action. Results of the initial PFAS sampling event conducted in September 2020 is presented in a letter report (dated November 16, 2020) prepared by C.T. Male entitled Per- and Polyfluorinated Substances Sampling Results – September 2020 (attached hereto as Exhibit 6-2). The remaining four (4) soil samples for

PFAS analyses during the remedial action were collected from PE sampling cells F9 to F11, F14, C9 and E12. The analytical results for these samples are presented in the analytical table and analytical reports in Exhibit 6-3.

As depicted in the documents in Exhibit 6-2 and 6-3, analytical results for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were at concentrations that were below Guidance Values for Anticipated Site Use (Unrestricted) promulgated at Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (January 2021).

4.5.2 PE Floor Samples

All PE floor sample results were provided to the Department for review prior to proceeding with construction/backfilling activities in any given area. Upon review of the results and considering all other available information, the Department determined that sufficient removal for the remedial action had been conducted and that the objectives of the remedial action for soils had been achieved. All Department approvals for PE samples are provided in Appendix R. Figure 3 depicts PE floor sample locations and Figure 5 depicts excavation depths for remediation purposes for each excavation cell.

4.5.3 PE Sidewall Samples

Final PE sidewall samples meet UU SCOs with the exception of the samples presented in the below-referenced table.

Table 4.5.3: PE Sidewall Sample Exceedances

Sample ID	Exceeding Compound	Guidance Level (mg/kg)	Concentration (mg/kg)
SW-007-3-E7	Total Lead	63	92.2
	Total Mercury	0.18	0.189
SW-018-2-B12	Total Copper*	50	60.5
SW-019-3-B17	Total Lead	63	703
	Total Mercury	0.18	0.498
	Total Zinc	109	278

Table 4.5.3: PE Sidewall Sample Exceedances

Sample ID	Exceeding Compound	Guidance Level (mg/kg)	Concentration (mg/kg)
SW-020-3-C17	Total Lead	63	495
	Total Mercury	0.18	0.447
	Total Zinc	109	264
SW-021-3-D17	Benzo(a)anthracene	1	1.2
	Benzo(a)pyrene	1	1.2
	Benzo(b)fluoranthene	1	1.5
	Chrysene	1	1.1
	Indeno(1,2,3-cd)pyrene	0.5	0.92
	Total Lead	63	351
	Total Mercury	0.18	0.497
	Total Zinc	109	236
SW-022-3.5-E17	Benzo(a)anthracene	1	4.2
	Benzo(a)pyrene	1	3.7
	Benzo(b)fluoranthene	1	4.6
	Benzo(k)fluoranthene	0.8	1.5
	Chrysene	1	3.6
	Dibenzo(a,h)anthracene	0.33	0.91
	Indeno(1,2,3-cd)pyrene	0.5	2.8
	4,4’-DDT	0.0033	0.00342
	Total Barium	350	499
	Total Lead	63	741

Table 4.5.3: PE Sidewall Sample Exceedances

Sample ID	Exceeding Compound	Guidance Level (mg/kg)	Concentration (mg/kg)
	Total Mercury	0.18	0.694
	Total Zinc	109	424
SW-023-3.5-F17	Hexavalent Chromium	1	1.4
	Total Lead	63	2,660
	Total Mercury	0.18	0.384
	Total Zinc	109	186
SW-024-4-G17	Hexavalent Chromium	1	1.51
	Total Lead	63	91.7
	Total Mercury	0.18	0.334

*The total copper exceedance in this sidewall sample is representative of Department approved Item #4 that was previously imported onto the Cottage Place Gardens Phase 3A Parcel BCP Site (C360150), which adjoins the Site to the north.

All PE sidewall sample results were provided to the Department for review prior to proceeding with construction/backfilling activities in any given area. A demarcation layer consisting of plastic sheeting was installed at the request of the Department along sidewall areas of the Site boundaries where exceedances in the wall samples were documented. The sidewall samples that exceeded Unrestricted Use SCOs are representative of fill/soil that extends off-site and are not within the BCP Site boundary. Sidewall sample exceedances along the eastern Site boundary will be addressed as part of the Phase 6 redevelopment of the Cottage Place Gardens complex. It is anticipated that the Phase 6 redevelopment will enter into the BCP and that impacted fill/soil will be remediated in similar fashion to previous phases (phases 1 to 5) of the Cottage Place Gardens complex redevelopment. Figure 4 depicts the sidewall sampling locations with exceedances and Figure 6 the locations of the demarcation layer.

In addition, a demarcation layer was placed in areas where analytical results for the sidewall samples were not available prior to backfill or lagging being placed within these portions of the Site. These areas include the perimeter of the 178 Warburton Avenue parcel and the excavation sidewall where sample SW-018-2-B12 was collected (northcentral portion of the Site). Further review of the results (after the placement of the demarcation layer) determined that all analyzed parameters in these areas meet the Soil Cleanup Objectives for Unrestricted Use Site.

Upon review of the results of the above-referenced exceedances and considering all other available information, the Department determined that sufficient removal for the remedial action had been conducted within the Site boundary and that the objectives of the remedial action for soils have been achieved. All Department approvals for PE samples are provided in Appendix R.

4.5.4 Quality Assurance/Quality Control

The following quality assurance/quality control (QA/QC) samples were collected throughout the remedial action in accordance with the RWP: matrix spike, matrix spike duplicate (MS/MSD) and duplicate. Generally, QA/QC samples were collected at a frequency of 1 per 20 media type samples collected.

DUSRs were prepared for the data generated in this remedial performance evaluation program. The raw analytical data packages are provided in Appendix S. The DUSRs are included in Appendix T.

Generally, data was found to be usable and acceptable with exception of the following rejected results:

- Low percent recovery for perfluorooctanesulfonamide (PFOSA or FOSA), a surrogate compound, in the PFAS "Equipment Rinse Blank" sample (water) collected on March 23, 2021.
- Low percent recovery for 2,4-dinitrophenol and 2,6-dinitro-o-creosol, compound spikes added to the native sample, in the MS/MSD sample (parent floor sample FS-044-6-D11) collected on March 23, 2021.
- Low percent recovery for 2,4-dinitrophenol and 2,6-dinitro-o-creosol, compound spikes added to the native sample, in the MS/MSD sample (parent sidewall sample SW-013-8-C1S) collected on May 17, 2021.

- Low percent recovery for 2,4-dinitrophenol, compound spike added to the native sample, in the MSD sample (parent floor sample SW-022-3.5-E17) collected on May 20, 2021.

The above-referenced rejected results do not impact the overall performance of the remedial action.

4.6 Backfill

A table of all sources of imported backfill with quantities for each source is shown in the following Table 4.6.

TABLE 4.6: BACKFILL SUMMARY			
Source of Fill	**Type Fill**	**Quantity (yds^3)**	**Description**
Stone Industries Hakedon, NJ	#4 Blue Stone	50	Used for the construction entrance. A Request to Import/Reuse Fill or Soil Form was not submitted to the Department for this material. See email correspondence and sieve analyses test in Appendix U-1.
Braen Stone of Sparta 217 Limecrest Road of Lafayette, NJ	Structural and Granular Fill Material	16,200	Structural fill was placed underneath the proposed building. Granular fill was used as backfill for the remainder of the Site. See Request to Import/Reuse Fill or Soil Form and Department approval in Appendix U-2.
Portion of the CPG Phase 5 Parcel BCP Site	Native on-site soil material	700	See Request to Import/Reuse Fill or Soil Form and Department approval in Appendix U-3. The analytical results depict slight exceedances above UU SCOs for the pesticides 4,4'-DDE and 4,4'-DDT. Per the Department's directive, the backfill was placed at least 15 feet below existing grades.
Tilcon - West Nyack Quarry 1 Crusher Rd, West Nyack, NY	NYSDOT Type 2 Subbase (Item #4/Type 4 Subbase), NYSDOT #2 3/4" Crushed Stone and ASTM #4 1 1/4" Stone.	5,250	See Request to Import/Reuse Fill or Soil Form and Department approval in Appendix U-4. Backfill to be placed in the park area (eastern portion of the Site, east of the on-site building) in areas needing backfill following the remedial excavation and underneath proposed paved areas. The importation of this material is anticipated by June 2022.
Portion of the CPG Phase 5 Parcel BCP Site	Native on-site soil material	1,500 – 2,000	See Request to Import/Reuse Fill or Soil Form and Department approval in Appendix U-5. Backfill to be placed in the park area (eastern portion of the Site, east of the on-site building) in areas needing backfill following the remedial excavation.

TABLE 4.6: BACKFILL SUMMARY			
Source of Fill	**Type Fill**	**Quantity (yds^3)**	**Description**
Naturcycle Route 82 Sand & Gravel Inc. 17 Canoe Hill Rd, Millbrook, NY	Topsoil	500	See Request to Import/Reuse Fill or Soil Form and Department approval in Appendix U-6. Topsoil to be placed in two (2) areas proposed to be landscaped within the park area in north central portion of the Site and east of the proposed roadway near the eastern property boundary.

4.7 Contamination Remaining at the Site

The Site is in conformance with Track 1 unrestricted use SCOs. Areas along the perimeter of the Site where contamination extends off-site is discussed in Section 4.5.3.

4.8 Soil Cover System

The remedy for the Site did not require the installation of a soil cover system. The Site is in general conformance with Track 1 unrestricted use SCOs.

4.9 Other Engineering Controls

The remedy for the site did not require the construction of any other engineering control systems.

4.10 Institutional Controls

The remedy for the Site did not require the implementation of an institutional control or environmental easement. No institutional controls or environmental easements were prepared for the Site.

4.11 Deviations From the Remedial Work Plan

The following deviations from the RAWP were documented during the remedial action and are described in detail in the following paragraphs. The Department approvals are included in Appendix C.

- Sampling frequency for several parameters and modification to the sampling regime were modified as described in Section 4.5.1.

- The 100-200 gallon UST encountered in the southeastern portion of the Site during excavation activities was not properly removed as per the RWP as the tank was identified as missing. Further details are provided in Section 4.3.2. It is C.T. Male's

opinion based on interviews with the client and project contractors that the tank was removed by unauthorized personnel, unrelated to the on-site contractors, for salvaging purposes. The Department was informed of this event verbally on August 23, 2021 and this was documented in the subsequent weekly progress report for the Site. No further actions, besides informing the developer of site security deficiencies, were recommended by the Department.

- On-site reuse of 700 cubic yards with slight exceedances of pesticides as described in Section 4.6.

FIGURES

XREFS: NONE

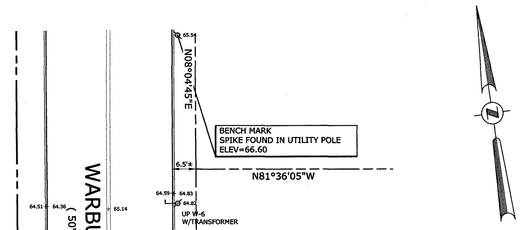
PROJECT NUMBER: 16.6669

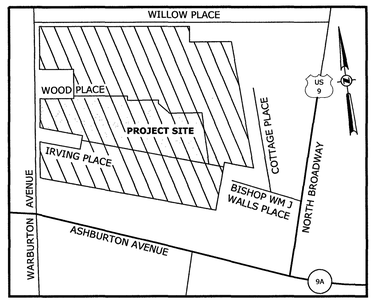
MAP REFERENCES:

1. "Boundary and Topographic Survey" Cottage Place, City of Yonkers, Westchester County, New York, Dated June 29, 2010. Prepared by Langan Engineers & Environmental Services.
2. "Cottage Gardens Pur, Yonkers, NY, Master Plan", prepared by Magnusson Architects & Planning PC., DWG No. A-04, dated September 30, 2015.

MAP NOTES:

1. Boundary and topographic information shown hereon was compiled from an actual field survey conducted during the month of May 2015 and Septmeber 2015.
2. North orientation and bearings are referenced to Grid North and are based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 as obtained from GPS observations
3. Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
4. Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Queens and Lamont Earth CORS.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. This survey was prepared without the benefit of an up to date abstract of title or title report and is therefore subject to any easements, covenants, restrictions or any statement of fact that such documents may disclose.
7. Test pit locations shown hereon were field located.
8. Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map, City of Yonkers, New York, Westchester County, Panel 309 of 426, Community Panel Number 36119C0309F, effective date September 28, 2007, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.
9. Utility mark out by others, field located January 03, 2017.
10. No delineation of wetlands observed on site.





SITE LOCATION MAP
NOT SCALE

178GP03			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Benzene	0.06	**0.48**	2.5-5
Ethylbenzene	1	**9.6**	
Toluene	0.7	**2.8**	
o-Xylene	0.26	**4.7**	
p/m-Xylene	0.26	**19**	
4,4'-DDD	0.0033	**0.00351**	PI
4,4'-DDE	0.0033	**0.0108**	P

178GP02				
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)		DEPTH (ft)
p/m-Xylene	0.26	**0.44**		2.5-5
Benzo(a)anthracene	1	**1.4**		
Benzo(a)pyrene	1	**1.3**	J	
Benzo(b)fluoranthene	1	**1.5**		
Chrysene	1	**1.5**		
Indeno(1,2,3-cd)pyrene	0.5	**0.72**	J	
4,4'-DDT	0.0033	**0.00331**	P	

SB2016-8			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Cadmium, Total	2.5	**4.2**	2-6
Lead, Total	63	**340**	
Zinc, Total	109	**1800**	

SW-3A-021(3.5')			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC. (mg/kg)	DEPTH (ft)
Lead, Total	63	**78.2**	3.5

B-A			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Copper	50	**52.9**	2.5-5
Lead	63	**1410**	
Mercury	0.18	**0.501**	
Zinc	109	**521**	

SW-3A-001			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC. (mg/kg)	DEPTH (ft)
Lead, Total	63	**138**	2.5
Mercury, Total	0.18	**0.41**	

SW-3A-002			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC. (mg/kg)	DEPTH (ft)
Benzo(b)fluoranthene	1	**1.1**	2.5
Indeno(1,2,3-cd)pyrene	0.5	**0.56**	
Lead, Total	63	**113**	
Mercury, Total	0.18	**0.39**	

SW-3A-003			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC. (mg/kg)	DEPTH (ft)
Acetone	0.05	**0.12**	2.5
Barium, Total	350	**1150**	
Mercury, Total	0.18	**0.24**	

SW-3A-035			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Acetone	0.05	**0.092**	2.5

SB2016-3			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
3-Methylphenol/4-Methyl	0.33	**0.58**	2-4
Benzo(a)anthracene	1	**54**	
Benzo(a)pyrene	1	**46**	
Benzo(b)fluoranthene	1	**56**	
Benzo(k)fluoranthene	0.8	**14**	
Chrysene	1	**44**	
Dibenzo(a,h)anthracene	0.33	**5.3**	
Fluoranthene	100	**110**	
Indeno(1,2,3-cd)pyrene	0.5	**28**	
Phenol	0.33	**0.57**	
Lead, Total	63	**960**	
Mercury, Total	0.18	**0.69**	
Zinc, Total	109	**360**	

SB2016-1			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Acetone	0.05	**0.052**	2-4
Mercury, Total	0.18	**0.49**	

178GP04			
ANALYTE	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
4,4'-DDE	0.0033	**0.00537**	0-5

B-P			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Chromium	30	**30.2**	7.5-9.2

B-Q			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Lead	63	**143**	0.5-2.5
Zinc	109	**318**	

B-B			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Lead	63	**211**	2.5-5
Mercury	0.18	**0.318**	
Zinc	109	**136**	

SB2016-6			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Lead, Total	63	**160**	2-4
Mercury, Total	0.18	**0.23**	
Zinc, Total	109	**110**	

B-K			
Analyte	UNRESTRICTED USE SCO (mg/kg)	CONC (mg/kg)	DEPTH (ft)
Benzo(a)anthracene	1	**7.20D**	2.5-5
Benzo(a)pyrene	1	**5.50D**	
Benzo(b)fluoranthene	1	**6.20D**	
Benzo(k)fluoranthene	0.8	**1.8**	
Chrysene	1	**5.80D**	
Dibenzo(a,h)anthracene	0.33	**0.62**	
Indeno(1,2,3-cd)pyrene	0.5	**2.3**	
Copper	50	**71.2**	
Lead	63	**232**	
Mercury	0.18	**0.242**	
Zinc	109	**148**	

PHASE 5
AREA=63,831± SQ. FT. OR 1.465± ACRES

PHASE 3A

PHASE 4

BUILDING NO. 12

4 STORY BRICK APARTMENT BUILDING NO. 12

4 STORY BRICK APARTMENT BUILDING NO. 7

4 STORY BRICK APARTMENT BUILDING NO. 8

4 STORY BRICK APARTMENT BUILDING NO. 4

4 STORY BRICK APARTMENT BUILDING NO. 5

4 STORY BRICK APARTMENT BUILDING NO. 2S

1 STORY CONCRETE BLOCK GARAGE

Lands Now or Formerly of MUNICIPAL HOUSING AUTHORITY FOR THE CITY OF YONKERS
Section 2 Block 2094 Portion of Lot 1

Lands Now or Formerly of Municipal Housing Authority For The City of Yonkers
Section 2 Block 2094 Portion of Lot 1

IRVING PLACE
(40' WIDE RIGHT OF WAY)

(35' WIDE RIGHT OF WAY)

POINT OF BEGINNING

LEGEND

SB	Soil Boring	HH	Hand Hole
MW	Monitor Well	HYD	Hydrant
	Where applicable, soil borings and monitoring wells are identified on the Figure as being co-located for visual purposes. In actuality, the soil borings were converted into monitoring wells.	LP	Light Pole
		SMH	Sanitary Manhole
		TPED	Telephone Pedestal
CB	Catch Basin	UMH	Unknown Manhole Type
CBCI	Catch Basin Curb Inlet	UP	Utility Pole
CBR	Catch Basin Round	WV	Water Valve
CO	Cleanout	T	Overhead Telephone Wires
TREE	Coniferous Tree	UE	Underground Electric Line Markout
TREE	Deciduous Tree	G	Underground Gas Line Markout
EMH	Electric Manhole	STM	Underground Steam Line
FFE=	Finished Floor Elevation	UT	Underground Telephone Line Markout
RE=	Roof Elevation	W	Underground Water Line Markout
GV	Gas Valve	SS	Underground Sanitary Sewer Line Markout
	Confirmatory Post-Excavation Sidewall Sampling Location from the Remedial Action at the Cottage Place Gardens Phase 3A Parcel Site		

ZONING

District M Apartment Houses, Medium Density

To: 178 Warburton Limited Partnership

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS ,and includes Items 2, 3, 4, 5, 6, 7(a)(b)(c), 8, 9, 10(a)(b), 11, 13, 14, 16, 17, 18, 19, 20 and 21 of Table A thereof. The Fieldwork Was Completed on January 4, 2017.

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY.

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
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02/15/18	2	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MIG	WJN
03/21/18	3	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MIG	WJN
07/12/18	4	ADDED TEST BORING LOCATIONS	SB	SB	SB
	5				
	6				
	7				
	8				
	9				

APPROVED: WJN
DRAFTED : GLB/TCB
CHECKED : MG
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JUNE 23, 2017

FIGURE 1A
ANALYTES IN FILL/SOIL EXCEEDING SCGs
PRE-REMEDIATION
COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 17-363

CAD DWG. FILE NAME: K:\Projects\15512\Survey\Drawings-Maps\ALTA PHASE 5.dwg

CAD DWG. FILE NAME: ALTA PHASE 5.dwg

XREFS: NONE

PROJECT NUMBER: 16.6669

MAP REFERENCES:

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6. This survey was prepared without the benefit of an up to date abstract of title or title report and is therefore subject to any easements, covenants, restrictions or any statement of fact that such documents may disclose.
7. Test pit locations shown hereon were field located.
8. Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map, City of Yonkers, New York, Westchester County, Panel 309 of 426, Community Panel Number 36119C0309F, effective date September 28, 2007, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.
9. Utility mark out by others, field located January 03, 2017.
10. No delineation of wetlands observed on site.

	178 MW01		3/8/2017
ANALYTE	Conc	Q	SCG
Benzo(a)anthracene	0.1	J	0.002 (GV)
Benzo(b)fluoranthene	0.05	J	0.002 (GV)
Chrysene	0.1	J	0.002 (GV)
Barium, Total	1220		1000
Chromium, Total	290		50
Copper, Total	499		200
Iron, Total	96,000		300
Lead, Total	599		25
Manganese, Total	7820		300
Nickel, Total	212		100

	178 MW02		3/8/2017
ANALYTE	Conc	Q	SCG
Benzene	4.7		1
Ethylbenzene	10		5
Toluene	6.9		5
o-Xylene	12		5
p/m-Xylene	25		5
Benzo(a)anthracene	0.19		0.002 (GV)
Benzo(b)fluoranthene	0.24		0.002 (GV)
Benzo(k)fluoranthene	0.08	J	0.002 (GV)
Chrysene	0.2		0.002 (GV)
Indeno(1,2,3-cd)pyrene	0.09	J	0.002 (GV)
Chromium, Total	90		50
Iron, Total	48,000		300
Lead, Total	382		25
Manganese, Total	1900		300
Sodium, Total	240,000		20,000

	178 MW05		10/1/2020
ANALYTE	Conc	Q	SCG
Magnesium, Total	39,600		35,000
Sodium, Total	373,000		20,000

	OS-178 MW08		10/1/2020
ANALYTE	Conc	Q	SCG
Isopropylbenzene	11		5
Magnesium, Total	39,000		35,000
Manganese, Total	748.9		300
Sodium, Total	379,000		20,000

	OS-MW-07		11/2/2022
ANALYTE	Conc	Q	SCG
Magnesium, Total	47,900		35,000
Manganese, Total	1,422		300
Sodium, Total	1,420,000		20,000

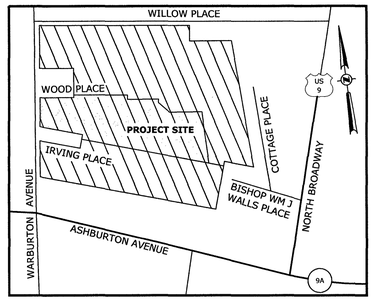
	178 MW06		10/1/2020
ANALYTE	Conc	Q	SCG
Acetone	110		50
Benzene	410		1
Ethylbenzene	570		5
Isopropylbenzene	49		5
o-Xylene	980		5
p/m-Xylene	2,200		5
Toluene	1,100		5
Naphthalene	97		10
Iron, Total	920		300
Manganese, Total	1,582		300
Sodium, Total	159,000		20,000

	178 MW04		3/8/2017
ANALYTE	Conc	Q	SCG
Benzene	22		1
Benzo(a)anthracene	0.42		0.002 (GV)
Benzo(b)fluoranthene	0.62		0.002 (GV)
Benzo(k)fluoranthene	0.24		0.002 (GV)
Chrysene	0.46		0.002 (GV)
Indeno(1,2,3-cd)pyrene	0.29		0.002 (GV)
Iron, Total	15,000		300
Manganese, Total	1780		300
Sodium, Total	260,000		20,000

	178 MW03		178 MW03
ANALYTE	Conc	Q	SCG
Benzene	58		1
Ethylbenzene	440		5
Isopropylbenzene	60		5
Methyl tert butyl ether	20	J	10 (GV)
Toluene	300		5
o-Xylene	260		5
p/m-Xylene	940		5
Benzo(a)anthracene	0.15	J	0.002 (GV)
Benzo(b)fluoranthene	0.14	J	0.002 (GV)
Benzo(k)fluoranthene	0.05	J	0.002 (GV)
Chrysene	0.14	J	0.002 (GV)
Indeno(1,2,3-cd)pyrene	0.04	J	0.002 (GV)
Naphthalene	68		10 (GV)
Chromium, Total	90		50
Iron, Total	36,000		300
Lead, Total	186		25
Manganese, Total	1360		300
Sodium, Total	220,000		20,000

	MW-P		1/13/2015
ANALYTE	Conc	Q	SCG
Acetone	100		50
Phenol	2	J	1
Iron	2,210		300
Manganese	7,370		300
Sodium	362,200		20,000

	MW-B		1/13/2015
ANALYTE	Conc	Q	SCG
Chromium	110		50
Iron	48,100		300
Lead	459		25
Manganese	1,080		300
Mercury	4.76		0.7
Sodium	32,000		20,000



SITE LOCATION MAP
NOT SCALE

SB Soil Boring
MW Monitoring Well
SVP Soil Vapor Point
CB Catch Basin
CBCI Catch Basin Curb Inlet
CBR Curb Inlet Catch Basin
CO Cleanout
TREE Coniferous Tree
TREE Deciduous Tree
EMH Electric Manhole
FFE= Finished Floor Elevation
RE= Roof Elevation
GV Gas Valve
T Overhead Telephone Wires
UE Underground Electric Line Markout
G Underground Gas Line Markout
STM Underground Steam Line
UT Underground Telephone Line Markout
W Underground Water Line Markout
SS Underground Sanitary Sewer Line Markout

Analytical Boxes Showing Analytes at Concentrations Exceeding SCGs. Concnetraions and SCGs are in ugl or ppb.

To: 178 Warburton Limited Partnership

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS ,and includes Items 2, 3, 4, 5, 6, 7(a)(b)(c), 8, 9, 10(a)(b), 11, 13, 14, 16, 17, 18, 19, 20 and 21 of Table A thereof. The Fieldwork Was Completed on January 4, 2017.

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

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03/21/18	3	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MIG	WJN
07/12/18	4	ADDED TEST BORING LOCATIONS	SB	SB	SB
	5				
	6				
	7				
	8				
	9				

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APPROVED: SB
DRAFTED : SB
CHECKED : SB
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JULY 17, 2018

FIGURE 1B
GROUNDWATER ABOVE SCGs PRE-REMEDIAL ACTION
COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 3 OF 3
DWG. NO: 17-363

CAD DWG. FILE NAME: K:\Projects\15512\Survey\Drawings-Maps\ALTA PHASE 5.dwg

CAD DWG. FILE NAME: ALTA PHASE 5.dwg

XREFS: NONE

PROJECT NUMBER: 16.6669

AREA OF APPLICATION OF SOIL AMENDMENTS AND PETROLEUM IMPACTED SOILS

APPROXIMATE LOCATION OF ONE (1) 500 GALLON UST

APPROXIMATE LOCATION OF REINTRODUCTION OF 700 CYD OF SOIL PLACED AT AN ELEVATION OF 15' BELOW PROPOSED REDEVELOPMENT GRADE

APPROXIMATE LOCATION OF HAZARDOUS SOILS

APPROXIMATE LOCATION OF TWO (2) 20,000 GALLON USTs

APPROXIMATE AREA OF 100-200 GALLON UST

CURRENT APPROXIMATE LOCATION OF ON-SITE AND OFF-SITE GROUNDWATER MONITORING WELLS TO ASSESS POST-REMEDIATION CONDITIONS

LOCATION OF THREE (3) UNDERGROUND HYDRAULIC LIFTS

APPROXIMATE LOCATION OF BUILDING POST-DEVELOPMENT

AREA REMEDIATED UNDER CPG4 REMEDIATION

LIMIT OF CONSTRUCTION

AREA UNDER CONSTRUCTION

PROPOSED PARKING STRUCTURE

PROPOSED SITE BOUNDARY ADJUSTMENT

PHASE 2

PHASE 3A

PHASE 4

PHASE 5
AREA=63,831± SQ. FT. OR 1.465± ACRES

PHASE 6

WOOD PLACE
(35' WIDE PUBLIC RIGHT OF WAY)

IRVING PLACE
(40' WIDE PUBLIC RIGHT OF WAY)

WARBURTON AVENUE
(50' WIDE PUBLIC RIGHT OF WAY)

BISHOP WM. WALLS PLACE
(40' WIDE PUBLIC RIGHT OF WAY)

POINT OF BEGINNING

Lands Now or Formerly of
17 WARBURTON APARTMENTS LLC
Block 2095 Lot 33
Book 55302 Page 3186

Lands Now or Formerly of
178 WARBURTON APARTMENTS LLC
Section 2 Block 2094 Lot 58
Book 57023 Page 3388
174 WARBURTON AVENUE

Lands Now or Formerly of
MUNICIPAL HOUSING AUTHORITY FOR THE CITY OF YONKERS
Section 2 Block 2096 Lot 33
188 WARBURTON AVENUE

Lands Now or Formerly of
MUNICIPAL HOUSING AUTHORITY
FOR THE CITY OF YONKERS
Section 2 Block 2094 Portion of Lot 1

LANDS NOW OR FORMERLY OF
MUNICIPAL HOUSING AUTHORITY
FOR THE CITY OF YONKERS
Section 2 Block 2094 Lot 3

Lands Now or Formerly of
Municipal Housing Authority
For The City of Yonkers
Section 2 Block 2094 Portion of Lot 1

BUILDING NO. 12
4 STORY BRICK APARTMENT BUILDING NO. 12

4 STORY BRICK APARTMENT BUILDING NO. 8

4 STORY BRICK APARTMENT BUILDING NO. 4

4 STORY BRICK APARTMENT BUILDING NO. 2S

4 STORY BRICK APARTMENT BUILDING NO. 2N

PROPOSED WATERMAIN EASEMENT, AREA=2,804± SQFT. 0.06±ACRE

178 MW05
178 MW06
OS-178 MW08
OS-178 MW07

WATERLINE EASEMENT COTTAGE PLACE GARDENS PHASE 3A GRANTED TO THE CITY OF YONKERS CONTROL NO. 583343223 SCHEDULE B, ITEM NO. 8

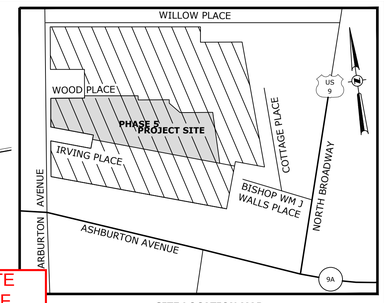
ACCESS EASEMENT PER CONTROL NUMBER 583413067 SCHEDULE B, ITEM NO. 25

ACCESS EASEMENT PER CONTROL NUMBER 573463275 SCHEDULE B, ITEM NO. 7

UTILITY EASEMENT NO. 1 COTTAGE PLACE GARDENS PHASE 4, 5 AND 6 GRANTED TO THE CITY OF YONKERS CONTROL NO. 592463672 SCHEDULE B, ITEM NO. 9

ACCESS EASEMENT PER CONTROL NUMBER 583413067 SCHEDULE B, ITEM NO. 25

SITE LOCATION MAP
NOT SCALE



LEGEND

SB	Soil Boring	HH	Hand Hole
MW	Monitor Well	HYD	Hydrant
TP	Test Pit	LP	Light Pole
BOL	Bollard	SMH	Sanitary Manhole
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3. "ALTA/NSPS Land Title Survey Phase 5 Cottage Place Gardens Prepared For 178 Warburton Limited Partnership", prepared by C.T. Male Associates, D.P.C., dated June 23, 2017, last revised September 2, 2020, Dwg. No. 17-363.

CURRENT OWNER OF RECORD

178 Warburton Apartments LLC
Municipal Housing Authority for the City of Yonkers

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

WILLIAM J. NETTLETON
P.L.S. NO. 49513

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
10/12/2021	1	FEATURES IN COLOR	ML	RAM	RAM
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

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APPROVED:
DRAFTED : GLB
CHECKED :
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JUNE 10, 2021

FIGURE 2: REMEDIAL ACTION OVERVIEW
COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE (C360161)

Prepared For
178 WARBURTON LIMITED PARTNERSHIP

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
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518.786.7400 * FAX 518.786.7299

SHEET 2 OF 2
DWG. NO: 21-375

CAD DWG. FILE NAME: K:\Projects\15512B\Survey\Drawings-Maps\BCA NO 2 EXHIBIT.dwg

CAD DWG. FILE NAME: BCA NO 2 EXHIBIT.dwg

XREFS: NONE

PROJECT NUMBER: 16.6669

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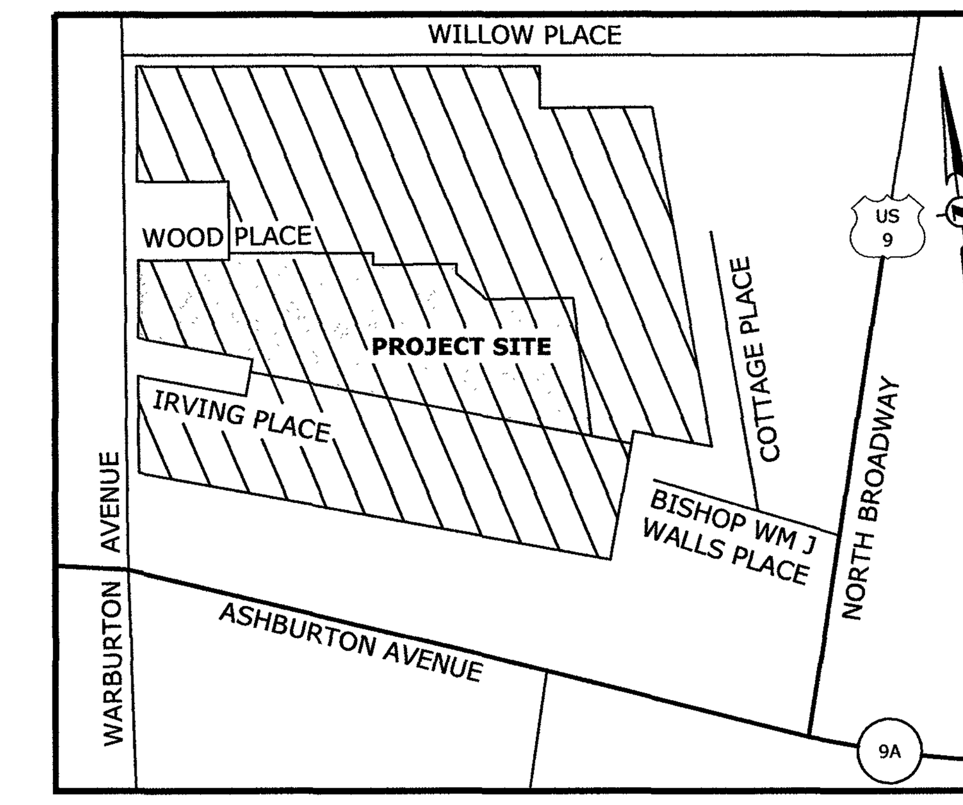
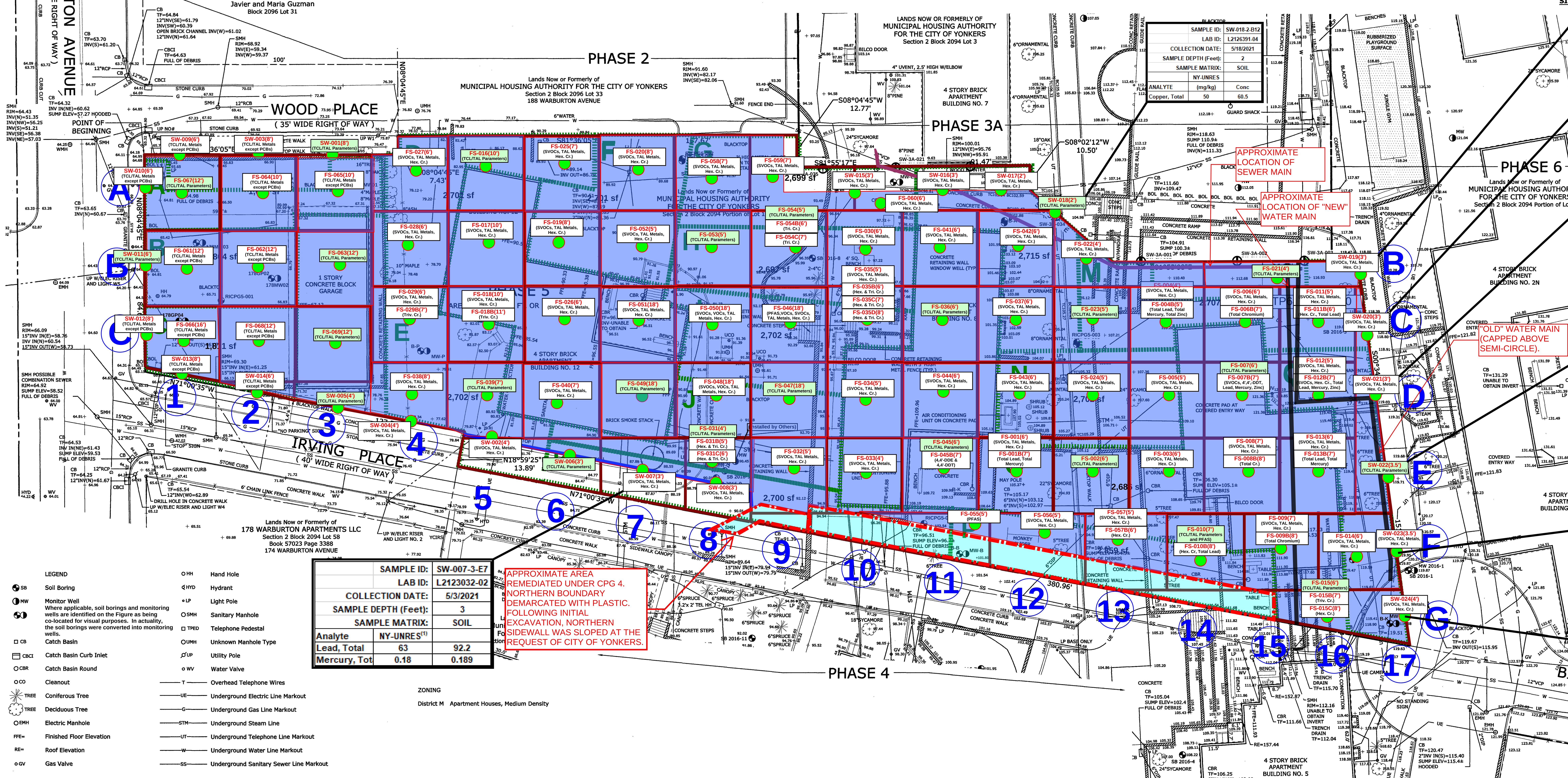
9. Utility mark out by others, field located January 03, 2017.
10. No delineation of wetlands observed on site.

LEGEND

- ● Denotes Sampling Location
- FS-001 (6') Denotes Floor Sample (FS) ID and Sample Depth.
- SW-001 (2.5') Denotes Sidewall (SW) Sample ID and Sample Depth
- FS-001 (6') / SW-001 (2.5') (green highlighted) Green Highlighted Sampling Location Identifiers Indicate that the Corresponding Samples were Analyzed for the Full TCL/TAL Parameters and Hexavalent Chromium.
- FS-001 (6') / SW-001 (2.5') Non-Highlighted Sampling Location Identifiers Indicate that the Corresponding Samples were Analyzed for a Reduced Subset of Analytes.
- Denotes Sampling Cells That Have Met Unrestricted Use SCOs
- P Waste characterization sampling cell
- Confirmatory Post-Excavation sampling cell



SITE/LOCATION MAP
NOT SCALE



SAMPLE ID:	SW-018-2-B12
LAB ID:	L2126391-04
COLLECTION DATE:	5/18/2021
SAMPLE DEPTH (Feet):	2
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Copper, Total	50	60.5

SAMPLE ID:	SW-007-3-E7
LAB ID:	L2123032-02
COLLECTION DATE:	5/3/2021
SAMPLE DEPTH (Feet):	3
SAMPLE MATRIX:	SOIL

Analyte	NY-UNRES[1]	
Lead, Total	63	92.2
Mercury, Tot	0.18	0.189

SAMPLE ID:	SW-019-3-B17
LAB ID:	L2126802-01
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	3
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Lead, Total	63	703
Mercury, Total	0.18	0.498
Zinc, Total	109	278

SAMPLE ID:	SW-020-3-C17
LAB ID:	L2126802-02
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	3
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Lead, Total	63	495
Mercury, Total	0.18	0.447
Zinc, Total	109	264

SAMPLE ID:	SW-021-3-D17
LAB ID:	L2126802-03
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	3
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Benzo(a)anthracene	1	1.2
Benzo(a)pyrene	1	1.2
Benzo(b)fluoranthe	1	1.5
Chrysene	1	1.1
Indeno(1,2,3-cd)pyr	0.5	0.92
Lead, Total	63	351
Mercury, Total	0.18	0.497
Zinc, Total	109	236

SAMPLE ID:	SW-022-3.5-E17
LAB ID:	L2126802-04
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	3.5
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Benzo(a)anthracene	1	4.2
Benzo(a)pyrene	1	3.7
Benzo(b)fluoranthe	1	4.6
Benzo(k)fluoranthe	0.8	1.5
Chrysene	1	3.6
Dibenzo(a,h)anthrac	0.33	0.91
Indeno(1,2,3-cd)pyr	0.5	2.8
4,4'-DDT	0.0033	0.00342
Barium, Total	350	499
Lead, Total	63	741
Mercury, Total	0.18	0.694
Zinc, Total	109	424

SAMPLE ID:	SW-023-3.5-F17
LAB ID:	L2126802-05
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	3.5
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Chromium, Hexaval	1	1.4
Lead, Total	63	2660
Mercury, Total	0.18	0.384
Zinc, Total	109	186

SAMPLE ID:	SW-024-4-G17
LAB ID:	L2126802-06
COLLECTION DATE:	5/20/2021
SAMPLE DEPTH (Feet):	4
SAMPLE MATRIX:	SOIL

ANALYTE	NY-UNRES (mg/kg)	Conc
Chromium, Hexaval	1	1.51
Lead, Total	63	91.7
Mercury, Total	0.18	0.334

LEGEND

Symbol	Description	Symbol	Description
SB	Soil Boring	HH	Hand Hole
MW	Monitor Well	HYD	Hydrant
	Where applicable, soil borings and monitoring wells are identified on the Figure as being co-located for visual purposes. In actuality, the soil borings were converted into monitoring wells.	LP	Light Pole
		SMH	Sanitary Manhole
		TPED	Telephone Pedestal
CB	Catch Basin	UMH	Unknown Manhole Type
CBCI	Catch Basin Curb Inlet	UP	Utility Pole
CBR	Catch Basin Round	WV	Water Valve
CO	Cleanout	——T——	Overhead Telephone Wires
TREE	Coniferous Tree	——UE——	Underground Electric Line Markout
TREE	Deciduous Tree	——G——	Underground Gas Line Markout
EMH	Electric Manhole	——STM——	Underground Steam Line
FFE=	Finished Floor Elevation	——UT——	Underground Telephone Line Markout
RE=	Roof Elevation	——W——	Underground Water Line Markout
GV	Gas Valve	——SS——	Underground Sanitary Sewer Line Markout

ZONING

District M Apartment Houses, Medium Density

To: 178 Warburton Limited Partnership

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS ,and includes Items 2, 3, 4, 5, 6, 7(a)(b)(c), 8, 9, 10(a)(b), 11, 13, 14, 16, 17, 18, 19, 20 and 21 of Table A thereof. The Fieldwork Was Completed on January 4, 2017.

BAR SCALE 20 0 10 20 40
1 inch = 20 ft.

"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY".

CAD DWG. FILE NAME: K:\Projects\155128\Survey\Drawings-Maps\ALTA PHASE 5.dwg

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
01/29/18	1	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MG	WJN
02/15/18	2	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MIG	WJN
03/21/18	3	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MIG	WJN
07/12/18	4	ADDED TEST BORING LOCATIONS	SB	SB	SB
	5				
	6				
	7				
	8				
	9				

APPROVED: WJN
DRAFTED : GLB/TCB
CHECKED : MG
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JUNE 23, 2017

FIGURE 3: PE END-POINT SAMPLES

COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 17-363

CAD DWG. FILE NAME: ALTA PHASE 5.dwg

XREFS: NONE

PROJECT NUMBER: 16.6669

CAD DWG. FILE NAME: K:\Projects\15512B\Survey\Drawings-Maps\BCA NO 2 EXHIBIT.dwg

CAD DWG. FILE NAME: BCA NO 2 EXHIBIT.dwg

WILLOW PLACE
WOOD PLACE
PHASE 5 PROJECT SITE
IRVING PLACE
COTTAGE PLACE
BISHOP WM J WALLS PLACE
NORTH BROADWAY
WARBURTON AVENUE
ASHBURTON AVENUE
US 9
9A

SITE LOCATION MAP
NOT SCALE

WOOD PLACE
(35' WIDE PUBLIC RIGHT OF WAY)
IRVING PLACE
(40' WIDE PUBLIC RIGHT OF WAY)
WARBURTON AVENUE
(50' WIDE PUBLIC RIGHT OF WAY)

POINT OF BEGINNING

Lands Now or Formerly of
Javier and Maria Guzman
Block 2096 Lot 31

Lands Now or Formerly of
178 WARBURTON APARTMENTS LLC
Block 2095 Lot 33
Book 55302 Page 3186

Lands Now or Formerly of
178 WARBURTON APARTMENTS LLC
Section 2 Block 2094 Lot 58
Book 57023 Page 3388
174 WARBURTON AVENUE

Lands Now or Formerly of
MUNICIPAL HOUSING AUTHORITY FOR THE CITY OF YONKERS
Section 2 Block 2096 Lot 33
188 WARBURTON AVENUE

LANDS NOW OR FORMERLY OF
MUNICIPAL HOUSING AUTHORITY
FOR THE CITY OF YONKERS
Section 2 Block 2094 Lot 3

Lands Now or Formerly of
MUNICIPAL HOUSING AUTHORITY
FOR THE CITY OF YONKERS
Section 2 Block 2094 Portion of Lot 1

Lands Now or Formerly of
Municipal Housing Authority
For The City of Yonkers
Section 2 Block 2094 Portion of Lot 1

PHASE 2
PHASE 3A
PHASE 4
PHASE 5
PHASE 6

BUILDING NO. 12
FOUNDATION REMAINS
4 STORY BRICK APARTMENT BUILDING NO. 12
4 STORY BRICK APARTMENT BUILDING NO. 8
4 STORY BRICK APARTMENT BUILDING NO. 4
4 STORY BRICK APARTMENT BUILDING NO. 2N

BCA NO. 2
AREA=61,027± SQ. FT. OR 1.401± ACRES

PROPOSED SITE BOUNDARY ADJUSTMENT

PROPOSED WATERMAIN EASEMENT
AREA=2,804±SQ.FT.
0.06±ACRE

WATERLINE EASEMENT
COTTAGE PLACE GARDENS
PHASE 3A GRANTED TO
THE CITY OF YONKERS
CONTROL NO. 583343223
SCHEDULE B, ITEM NO. 8

ACCESS EASEMENT PER
CONTROL NUMBER 583413067
SCHEDULE B, ITEM NO. 25

UTILITY EASEMENT NO. 1
COTTAGE PLACE GARDENS
PHASE 4, 5 AND 6 GRANTED
TO THE CITY OF YONKERS
CONTROL NO. 592463672
SCHEDULE B, ITEM NO. 9

ACCESS EASEMENT PER CONTROL
NUMBER 583413067
SCHEDULE B, ITEM NO. 25

ACCESS EASEMENT PER
CONTROL NUMBER 583413067
SCHEDULE B, ITEM NO. 25

ACCESS EASEMENT PER CONTROL
NUMBER 583413067
SCHEDULE B, ITEM NO. 25

LIMIT OF CONSTRUCTION

AREA UNDER CONSTRUCTION

PROPOSED PARKING STRUCTURE

	SAMPLE ID:	SW-018-2-B12
	LAB ID:	L2126391-04
	COLLECTION DATE:	5/18/2021
	SAMPLE DEPTH (Feet):	2
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Copper, Total	50	60.5

	SAMPLE ID:	SW-019-3-B17
	LAB ID:	L2126802-01
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	3
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Lead, Total	63	703
Mercury, Total	0.18	0.498
Zinc, Total	109	278

	SAMPLE ID:	SW-020-3-C17
	LAB ID:	L2126802-02
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	3
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Lead, Total	63	495
Mercury, Total	0.18	0.447
Zinc, Total	109	264

	SAMPLE ID:	SW-021-3-D17
	LAB ID:	L2126802-03
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	3
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Benzo(a)anthracene	1	1.2
Benzo(a)pyrene	1	1.2
Benzo(b)fluoranthene	1	1.5
Chrysene	1	1.1
Indeno(1,2,3-cd)pyren	0.5	0.92
Lead, Total	63	351
Mercury, Total	0.18	0.497
Zinc, Total	109	236

	SAMPLE ID:	SW-022-3.5-E17
	LAB ID:	L2126802-04
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	3.5
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Benzo(a)anthracene	1	4.2
Benzo(a)pyrene	1	3.7
Benzo(b)fluoranthene	1	4.6
Benzo(k)fluoranthene	0.8	1.5
Chrysene	1	3.6
Dibenzo(a,h)anthrace	0.33	0.91
Indeno(1,2,3-cd)pyren	0.5	2.8
4,4'-DDT	0.0033	0.00342
Barium, Total	350	499
Lead, Total	63	741
Mercury, Total	0.18	0.694
Zinc, Total	109	424

	SAMPLE ID:	SW-023-3.5-F17
	LAB ID:	L2126802-05
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	3.5
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Chromium, Hexavalen	1	1.4
Lead, Total	63	2660
Mercury, Total	0.18	0.384
Zinc, Total	109	186

	SAMPLE ID:	SW-024-4-G17
	LAB ID:	L2126802-06
	COLLECTION DATE:	5/20/2021
	SAMPLE DEPTH (Feet):	4
	SAMPLE MATRIX:	SOIL
	NY-UNRES	
ANALYTE	(mg/kg)	Conc
Chromium, Hexavalen	1	1.51
Lead, Total	63	91.7
Mercury, Total	0.18	0.334

	SAMPLE ID:	SW-007-3-E7
	LAB ID:	L2123032-02
	COLLECTION DATE:	5/3/2021
	SAMPLE DEPTH (Feet):	3
	SAMPLE MATRIX:	SOIL
Analyte	NY-UNRES[1]	
Lead, Total	63	92.2
Mercury, Total	0.18	0.189

DESCRIPTION ~ BCA AMENDMENT NO. 2
COTTAGE PLACE GARDENS
PHASE 5 PARCEL SITE (C360161)
CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK
AREA = 1.401 ACRES OF LAND

All that certain tract, piece or parcel of land situate in the City of Yonkers, County of Westchester, State of New York, lying Easterly of Warburton Avenue, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the Easterly street boundary of Warburton Avenue (50-foot-wide right-of-way) with the Southerly street boundary of Wood Place (35-foot-wide right-of-way) and runs thence from said point of beginning along said Southerly street boundary of Wood Place South 81 deg. 36 min. 05 sec. East 100.00 feet to a point, said point being the Easterly terminus of Wood Place; thence along said Easterly terminus of Wood Place North 08 deg. 04 min. 45 sec. East 7.43 feet to its point of intersection with the division line between Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the South and Phase 2 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2096 Lot 33 on the North; thence South 81 deg. 36 min. 05 sec. East along the last mentioned division line 150.67 feet to a point; thence through Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers the following two (2) courses: 1) South 08 deg. 04 min. 45 sec. West 24.81 feet to a point; and 2) South 81 deg. 55 min. 17 sec. East 100.21 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the Southwest and Phase 3A Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers on the Northeast; thence South 49 deg. 59 min. 36 sec. East along the last mentioned division line 39.33 feet to its point of intersection with the common division line between said Phase 5 Cottage Place Gardens on the South and said Phase 3A Cottage Place Gardens and Phase 6 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the North; thence South 81 deg. 55 min. 08 sec. East along the last mentioned common division line 96.36 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the West and said Phase 6 Cottage Place Gardens on the East; thence South 00 deg. 34 min. 23 sec. West along the last mentioned division line 151.28 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the North and Phase 4 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the South; thence North 71 deg. 00 min. 35 sec. West along the last mentioned division line 276.44 feet to a point; thence through said Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers the following two (2) courses: 1) North 58 deg. 30 min. 15 sec. East 18.01 feet to a point; and 2) North 71 deg. 00 min. 35 sec. West 115.98 feet to its point of intersection with the Northerly street boundary of Irving Place (40-foot-wide right-of-way); thence along said Northerly street boundary of Irving Place North 71 deg. 00 min. 35 sec. West 127.57 feet to its point of intersection with the above mentioned Easterly street boundary of Warburton Avenue; thence North 08 deg. 04 min. 45 sec. East along said Easterly street boundary of Warburton Avenue 84.63 feet to the point or place of beginning and containing 61,027± square feet or 1.401 acres of land, more or less.

LEGEND

SB	Soil Boring	HH	Hand Hole
MW	Monitor Well	HYD	Hydrant
TP	Test Pit	LP	Light Pole
BOL	Bollard	SMH	Sanitary Manhole
CB	Catch Basin	TPED	Telephone Pedestal
CBCI	Catch Basin Curb Inlet	UMH	Unknown Manhole Type
CBR	Catch Basin Round	UP	Utility Pole
CO	Cleanout	WV	Water Valve
TREE	Coniferous Tree	T	Overhead Telephone Wires
TREE	Deciduous Tree	UE	Underground Electric Line Markout
EMH	Electric Manhole	G	Underground Gas Line Markout
FFE=	Finished Floor Elevation	STM	Underground Steam Line
RE=	Roof Elevation	UT	Underground Telephone Line Markout
GV	Gas Valve	W	Underground Water Line Markout
SW	Excavation Pit Sample Location	SS	Underground Sanitary Sewer Line Markout

CURRENT OWNER OF RECORD

178 Warburton Apartments LLC
Municipal Housing Authority for the City of Yonkers

MAP REFERENCES:

1. "Boundary and Topographic Survey" Cottage Place, City of Yonkers, Westchester County, New York, Dated June 29, 2010. Prepared by Langan Engineers & Environmental Services.
2. "Cottage Gardens Pur, Yonkers, NY, Master Plan", prepared by Magnusson Architects & Planning PC., DWG No. A-04, dated September 30, 2015.
3. "ALTA/NSPS Land Title Survey Phase 5 Cottage Place Gardens Prepared For 178 Warburton Limited Partnership", prepared by C.T. Male Associates, D.P.C., dated June 23, 2017, last revised September 2, 2020, Dwg. No. 17-363.

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

WILLIAM J. NETTLETON
P.L.S. NO. 49513

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

APPROVED:
DRAFTED : GLB
CHECKED :
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE :

FIGURE 4: PE SIDE WALL END-POINTS SAMPLES EXCEEDING UU SCOs

COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 2 OF 2
DWG. NO: 21-375

XREFS: NONE

PROJECT NUMBER: 16.6669

MAP REFERENCES:

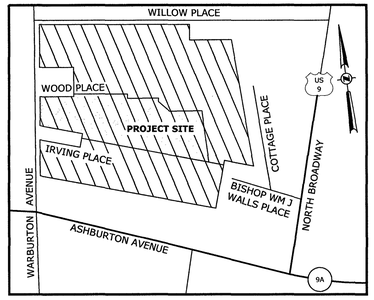
1. "Boundary and Topographic Survey" Cottage Place, City of Yonkers, Westchester County, New York, Dated June 29, 2010. Prepared by Langan Engineers & Environmental Services.
2. "Cottage Gardens Pur, Yonkers, NY, Master Plan", prepared by Magnusson Architects & Planning PC., DWG No. A-04, dated September 30, 2015.

MAP NOTES:

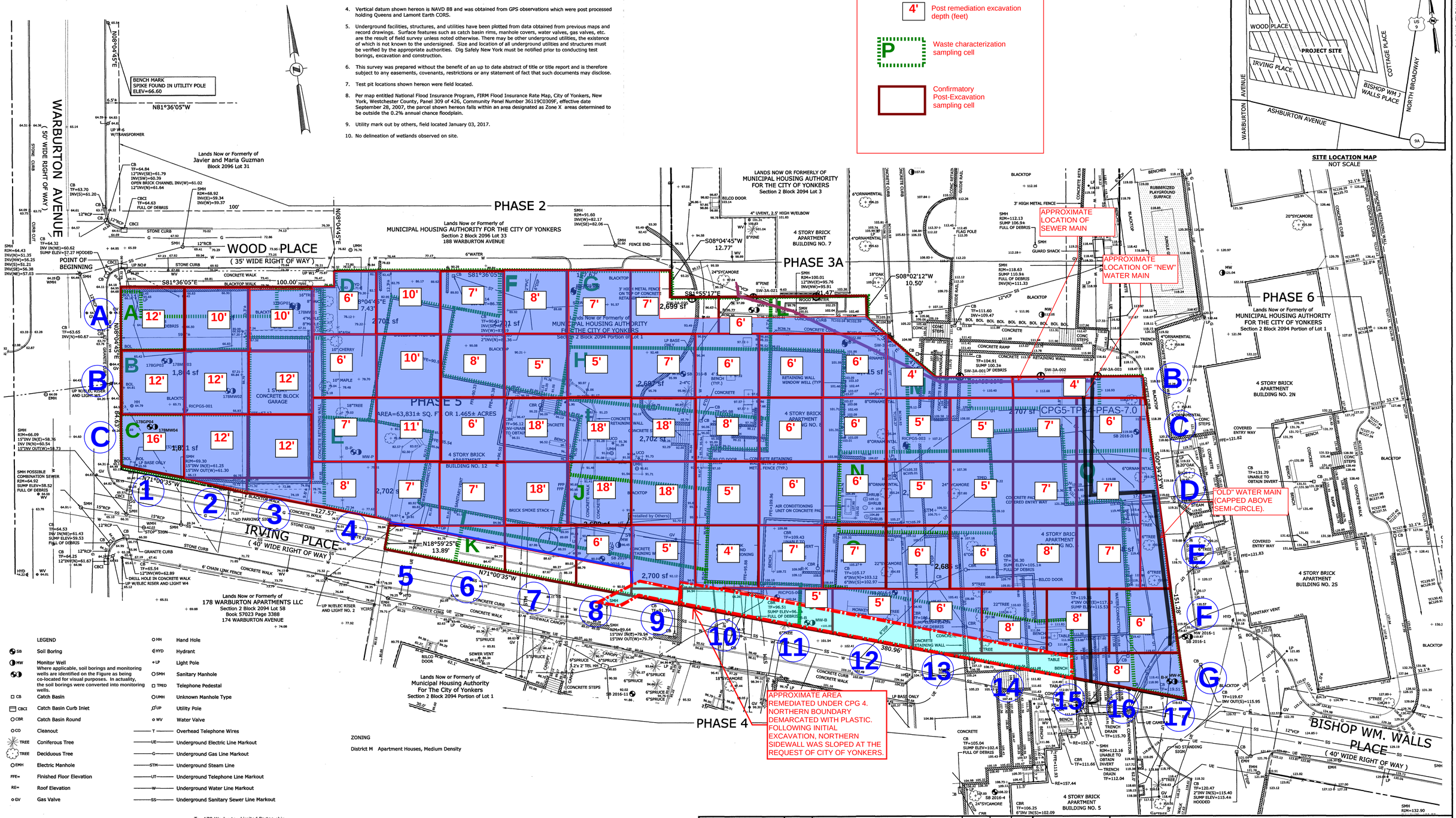
1. Boundary and topographic information shown hereon was compiled from an actual field survey conducted during the month of May 2015 and Septmeber 2015.
2. North orientation and bearings are referenced to Grid North and are based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00 as obtained from GPS observations
3. Objects shown on this drawing with a distance indicating how far that object is from a particular line, lie on the same side of the line that the offset distance is written.
4. Vertical datum shown hereon is NAVD 88 and was obtained from GPS observations which were post processed holding Queens and Lamont Earth CORS.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. This survey was prepared without the benefit of an up to date abstract of title or title report and is therefore subject to any easements, covenants, restrictions or any statement of fact that such documents may disclose.
7. Test pit locations shown hereon were field located.
8. Per map entitled National Flood Insurance Program, FIRM Flood Insurance Rate Map, City of Yonkers, New York, Westchester County, Panel 309 of 426, Community Panel Number 36119C0309F, effective date September 28, 2007, the parcel shown hereon falls within an area designated as Zone X areas determined to be outside the 0.2% annual chance floodplain.
9. Utility mark out by others, field located January 03, 2017.
10. No delineation of wetlands observed on site.

LEGEND

- 4' — Post remediation excavation depth (feet)
- P — Waste characterization sampling cell
- Confirmatory Post-Excavation sampling cell



SITE LOCATION MAP
NOT SCALE



ZONING

District M Apartment Houses, Medium Density

To: 178 Warburton Limited Partnership

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS ,and includes Items 2, 3, 4, 5, 6, 7(a)(b)(c), 8, 9, 10(a)(b), 11, 13, 14, 16, 17, 18, 19, 20 and 21 of Table A thereof. The Fieldwork Was Completed on January 4, 2017.

BAR SCALE
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1 inch = 20 ft.

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DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
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03/21/18	3	REVISED PHASE 5 PARCEL BOUNDARY	GLB	MG	WJN
07/12/18	4	ADDED TEST BORING LOCATIONS	SB	SB	SB
	5				
	6				
	7				
	8				
	9				

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.

© 2017 C.T. MALE ASSOCIATES

APPROVED: WJN
DRAFTED : GLB/TCB
CHECKED : MG
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JUNE 23, 2017

FIGURE 5: POST-REMEDIATION EXCAVATION DEPTHS

COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
518.786.7400 * FAX 518.786.7299

SHEET 1 OF 1
DWG. NO: 17-363

CAD DWG. FILE NAME: K:\Projects\15512B\Survey\Drawings-Maps\ALTA PHASE 5.dwg

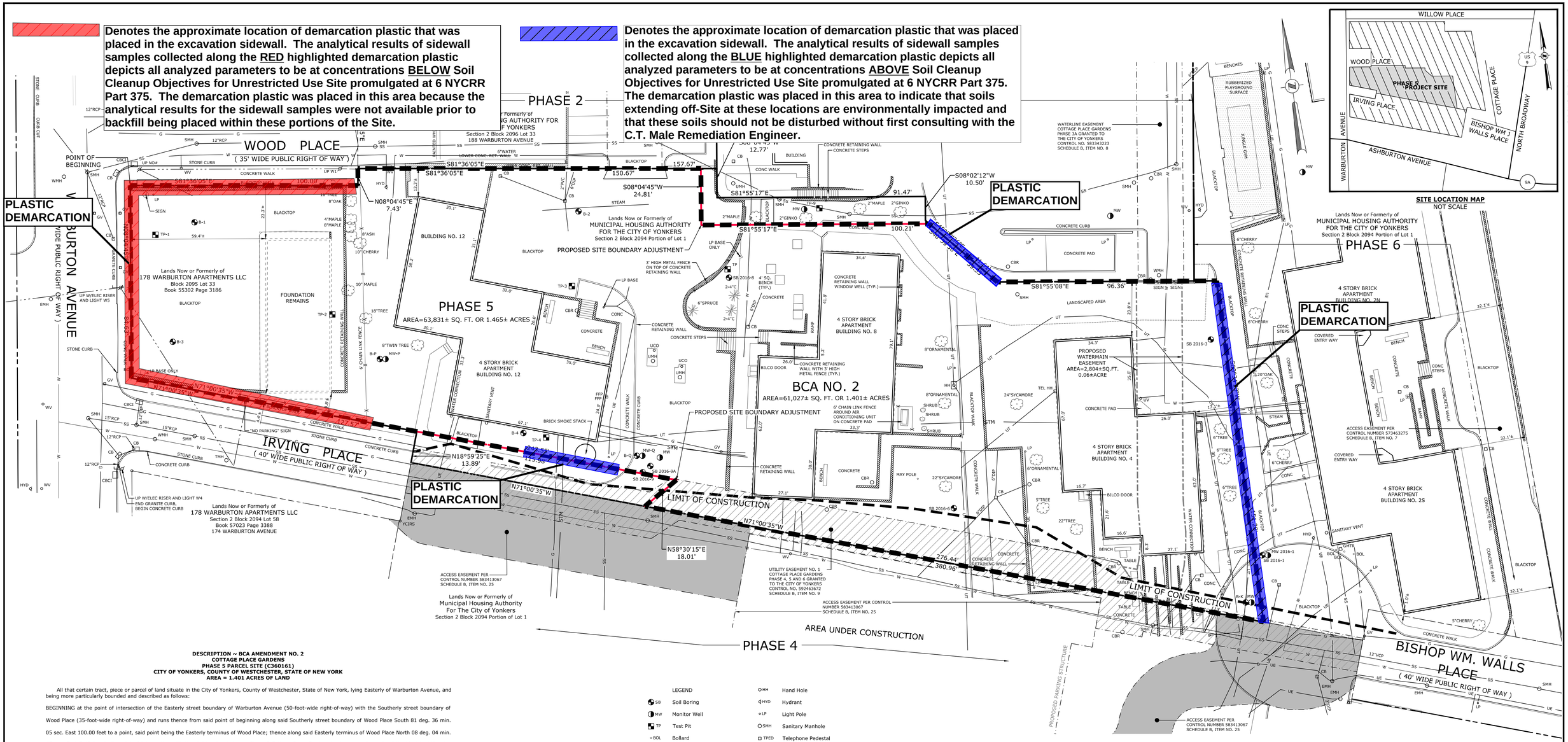
CAD DWG. FILE NAME: ALTA PHASE 5.dwg

XREFS: NONE

PROJECT NUMBER: 16.6669

Denotes the approximate location of demarcation plastic that was placed in the excavation sidewall. The analytical results of sidewall samples collected along the RED highlighted demarcation plastic depicts all analyzed parameters to be at concentrations BELOW Soil Cleanup Objectives for Unrestricted Use Site promulgated at 6 NYCRR Part 375. The demarcation plastic was placed in this area because the analytical results for the sidewall samples were not available prior to backfill being placed within these portions of the Site.

Denotes the approximate location of demarcation plastic that was placed in the excavation sidewall. The analytical results of sidewall samples collected along the BLUE highlighted demarcation plastic depicts all analyzed parameters to be at concentrations ABOVE Soil Cleanup Objectives for Unrestricted Use Site promulgated at 6 NYCRR Part 375. The demarcation plastic was placed in this area to indicate that soils extending off-Site at these locations are environmentally impacted and that these soils should not be disturbed without first consulting with the C.T. Male Remediation Engineer.



SITE LOCATION MAP
NOT SCALE

DESCRIPTION ~ BCA AMENDMENT NO. 2
COTTAGE PLACE GARDENS
PHASE 5 PARCEL SITE (C360161)
CITY OF YONKERS, COUNTY OF WESTCHESTER, STATE OF NEW YORK
AREA = 1.401 ACRES OF LAND

All that certain tract, piece or parcel of land situate in the City of Yonkers, County of Westchester, State of New York, lying Easterly of Warburton Avenue, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the Easterly street boundary of Warburton Avenue (50-foot-wide right-of-way) with the Southerly street boundary of Wood Place (35-foot-wide right-of-way) and runs thence from said point of beginning along said Southerly street boundary of Wood Place South 81 deg. 36 min. 05 sec. East 100.00 feet to a point, said point being the Easterly terminus of Wood Place; thence along said Easterly terminus of Wood Place North 08 deg. 04 min. 45 sec. East 7.43 feet to its point of intersection with the division line between Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the South and Phase 2 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2096 Lot 33 on the North; thence South 81 deg. 36 min. 05 sec. East along the last mentioned division line 150.67 feet to a point; thence through Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers the following two (2) courses: 1) South 08 deg. 04 min. 45 sec. West 24.81 feet to a point; and 2) South 81 deg. 55 min. 17 sec. East 100.21 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the Southwest and Phase 3A Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers on the Northeast; thence South 49 deg. 59 min. 36 sec. East along the last mentioned division line 39.33 feet to its point of intersection with the common division line between said Phase 5 Cottage Place Gardens on the South and said Phase 3A Cottage Place Gardens and Phase 6 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the North; thence South 81 deg. 55 min. 08 sec. East along the last mentioned common division line 96.36 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the West and said Phase 6 Cottage Place Gardens on the East; thence South 00 deg. 34 min. 23 sec. West along the last mentioned division line 151.28 feet to its point of intersection with the division line between said Phase 5 Cottage Place Gardens on the North and Phase 4 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers Section 2 Block 2094 Lot 1 on the South; thence North 71 deg. 00 min. 35 sec. West along the last mentioned division line 276.44 feet to a point; thence through said Phase 5 Cottage Place Gardens lands now or formerly of the Municipal Housing Authority for the City of Yonkers the following two (2) courses: 1) North 58 deg. 30 min. 15 sec. East 18.01 feet to a point; and 2) North 71 deg. 00 min. 35 sec. West 115.98 feet to its point of intersection with the Northerly street boundary of Irving Place (40-foot-wide right-of-way); thence along said Northerly street boundary of Irving Place North 71 deg. 00 min. 35 sec. West 127.57 feet to its point of intersection with the above mentioned Easterly street boundary of Warburton Avenue; thence North 08 deg. 04 min. 45 sec. East along said Easterly street boundary of Warburton Avenue 84.63 feet to the point or place of beginning and containing 61,027± square feet or 1.401 acres of land, more or less.

LEGEND

SB	Soil Boring	HH	Hand Hole
MW	Monitor Well	HYD	Hydrant
TP	Test Pit	LP	Light Pole
BOL	Bollard	SMH	Sanitary Manhole
CB	Catch Basin	TPED	Telephone Pedestal
CBCI	Catch Basin Curb Inlet	UMH	Unknown Manhole Type
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TREE	Coniferous Tree	T	Overhead Telephone Wires
TREE	Deciduous Tree	UE	Underground Electric Line Markout
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RE=	Roof Elevation	UT	Underground Telephone Line Markout
GV	Gas Valve	W	Underground Water Line Markout
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MAP REFERENCES:

1. "Boundary and Topographic Survey" Cottage Place, City of Yonkers, Westchester County, New York, Dated June 29, 2010. Prepared by Langan Engineers & Environmental Services.
2. "Cottage Gardens Pur, Yonkers, NY, Master Plan", prepared by Magnusson Architects & Planning PC., DWG No. A-04, dated September 30, 2015.
3. "ALTA/NSPS Land Title Survey Phase 5 Cottage Place Gardens Prepared For 178 Warburton Limited Partnership", prepared by C.T. Male Associates, D.P.C., dated June 23, 2017, last revised September 2, 2020, Dwg. No. 17-363.

CURRENT OWNER OF RECORD

178 Warburton Apartments LLC
Municipal Housing Authority for the City of Yonkers

BAR SCALE
20 0 10 20 40
1 inch = 20 ft.

WILLIAM J. NETTLETON
P.L.S. NO. 49513

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1				
	2				
	3				
	4				
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APPROVED:
DRAFTED : GLB
CHECKED :
PROJ. NO : 16.6669
SCALE : 1"=20'
DATE : JUNE 10, 2021

FIGURE 6: DEMARCATION LAYER

COTTAGE PLACE GARDENS PHASE 5 PARCEL SITE (C360161)

Prepared For

178 WARBURTON LIMITED PARTNERSHIP

CITY OF YONKERS — WESTCHESTER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110
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SHEET 2 OF 2
DWG. NO: 21-375

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