2020 PERIODIC REVIEW REPORT

AC DUTTON GREENWAY CITY SITE
DUTCHESS COUNTY, NEW YORK

NYSDEC Site # C314123

REPORTING PERIOD (April 1, 2020 – April 1, 2021)

prepared for:

THE O'NEILL GROUP – DUTTON, LLC
24 Hudson Street
Hackensack, New Jersey 07601

prepared by:

SESI CONSULTING ENGINEERS D.P.C.
12A Maple Avenue
Pine Brook, NJ 07058

June 2021

Project No.: 9046D

PERIODIC REVIEW REPORT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF SITE MANAGEMENT PLAN FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
AST	Aboveground Storage Tank
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	Below ground surface
CAMP	Community Air Monitoring Plan
C&D	Construction & Demolition Materials
COC	Contaminant of Concern
COPEC	Constituents of Potential Ecological Concern
CY	Cubic yard
DER	Division of Environmental Remediation
DER-10	NYSDEC Technical Guidance for Site Investigation & Remediation
DUSR	Data Usability Summary Report
ECs	Engineering Controls
ECL	Environmental Conservation Law
ESA	Environmental Site Assessment
FER	Final Engineering Report
FWRIA	Fish and Wildlife Resources Impact Analysis
gpm	Gallons per minute
HHEA	Human Health Exposure Assessment
ICs	Institutional Controls
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
ppm	Parts per million

Acronym	Definition
QAPP	Quality Assurance Project Plan
RA	Remedial Action
RASR	Remedial Action Selection Report
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDD	Remedial Design Document
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objectives
SESI	SESI Consulting Engineers, PC
SMP	Site Management Plan
SSDS	Sub-Slab Depressurization System
SVOCs	Semi-Volatile Organic Compounds
S&W	S&W Redevelopment of North America, LLC.
TAL	Target Analyte List
TOGS	Technical and Operations Guidance Series
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

1.1 SUMMARY

This is the Periodic Review Report (PRR) for the period April 1, 2020 to April 1, 2021. The PRR is required as an element of the remedial program at the AC Dutton Greenway City Site located in the City of Poughkeepsie, New York (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC).

The Site is located in the County of Dutchess, New York and is identified as Section 6062 Block 59 and Lots 737435 (Parcel A), 738405 (Parcel B), and 744432 (Parcel C) on the Dutchess County Parcel Access Property Card and City of Poughkeepsie Tax Map. The Site is situated on an approximately 1.844-acre area bounded by the Dutchess Avenue Riverwalk North and a Vassar College property to the north, Dutchess Avenue to the south, the AC Dutton Site to the east, and the Hudson River to the west as depicted in Figure 1.1 of the SMP. All SMP figures are included in **Appendix A** of this report. The boundaries of the Site are fully described in SMP Figure 3.1 in Appendix A.

The A.C. Dutton Greenway City Site is owned by the Dutchess Avenue Riverwalk LLC. Previously, the land was created by a historic site owner who apparently overfilled the river beyond the letters patent line. The Site was originally part of the adjacent BCP Site owned by O'Neill-Dutton and was fully investigated pursuant to a BCP Remediation Investigation. About halfway through the BCP process, as a result of detailed survey work, it was discovered that the Site was owned by the State Office of General Services (OGS). Since that time, pursuant to letters patent to O'Neill-Dutton on October 8, 2015, OGS has sold the Site to Dutchess Avenue Riverwalk LLC and they to performed the investigation and remediation work required by the BCP.

Engineering Controls (ECs) have been constructed on the Site to prevent exposure to the remaining residual contamination during Site use. An Environmental Easement granted to the NYSDEC and recorded with the Dutchess County Clerk requires compliance with the SMP dated December 2016 and all ECs and Institutional Controls

(ICs) placed on the Site. The ICs place restrictions on Site use and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs.

This PRR reports the required inspection and monitoring activities that were conducted during the current reporting period. The inspection and monitoring were conducted to ensure compliance with all ECs and ICs required by the Environmental Easement and as stated in the SMP as approved by NYSDEC.

1.2 EFFECTIVENESS OF REMEDIAL PROGRAM

Residual contamination remains on the Site, which has been managed according to the requirements of the SMP for commercial and restricted residential uses.

The composite cover system remains intact on the site. The cover system has been and will continue to be effective in minimizing public exposure to the residual contamination.

1.3 COMPLIANCE

SESI completed a Site inspection on March 2, 2021 to verify the integrity of the ECs in accordance with the Inspection Checklist provided in **Appendix B** of this report.

1.4 RECOMMENDATIONS

SESI has verified that the ECs and ICs developed for the Site are in compliance with the SMP. SESI recommends continuing the yearly monitoring of the cover system.

2.0 SITE OVERVIEW

2.1 SITE LOCATION AND DESCRIPTION

The SMP is a required element of the remedial program for the Site located in the City of Poughkeepsie, New York. The Site is currently Site No. C314123 in the New York State (NYS) BCP, which is administered by NYSDEC. Dutchess Avenue Riverwalk LLC (Volunteer) entered into a Brownfield Cleanup Agreement (BCA) on July 7, 2015 with the

NYSDEC to remediate the Site. A figure showing the site location and boundaries of this site is provided in **Figure1.1** of the SMP.

The A.C. Dutton Greenway City Site (the "Site") subject to this SMP was owned by the State OGS, since the land was created by a historic site owner who apparently overfilled the river beyond the letters patent line. The Site was originally part of the Adjacent BCP Site owned by O'Neill-Dutton and was fully investigated pursuant to a BCP Remediation Investigation. About halfway through the BCP process, as a result of detailed survey work, it was discovered that the Site was not owned by O'Neill-Dutton. Since that time, pursuant to New York Public Lands Law § 75(7)(a) and New York Codes Rules and Regulations Part 270-4, OGS has agreed to sell the Site to O'Neill-Dutton, as the upland adjacent property owner, and has provided O'Neill-Dutton with an Interim Permit for Use of State Owned Property (Permit Number LUW01369 2015) to perform the investigation and remediation work required by the Brownfield Cleanup Program.

2.2 SITE HISTORY

The Site was part of the AC Dutton Site, which has been in industrial use from the mid-1800s to 1995. Prior to 1913, the AC Dutton Site uses included an iron works and a glass works plant. There were several kilns associated with the glass works. Historical and empirical data suggest that solidified kiln ash, periodically cleaned out of the kilns, was used as fill material at the Site. Additionally, when the glass works building and loading dock were dismantled, this demolition debris was also utilized as fill. Between 1966 and 1995, the A.C. Dutton Lumber Corporation operated a wholesale lumber company on the Site and pressure-treated lumber using chromated copper arsenate (CCA).

The former owner, A.C. Dutton Corporation, was owned in part or in subsidiary by Miron Building Products Co., Inc. Raw lumber material was brought to the AC Dutton site by truck, boat, and rail. Lumber was processed in either of the two on-site treatment plants, known as the northern and southern treatment plants. The lumber stock was then temporarily stored in a sheltered drip pad area and allowed to partially drip dry, and then was transferred outside to large, open storage yards for additional drying. Exterior

drying of the lumber treated with the CCA caused much of the on-Site contamination. The Site contaminants of concern are arsenic, copper and chromium (breakdown products from chromated copper chromated arsenate, or CCA).

The findings of all previous environmental investigations performed to date are detailed in the Fuss and O'Neill RIR (August 2007), and Ecosystems Solutions Inc. (ESI's) Supplemental Investigation Report (SIR) (September 2008), which was performed according to the NYSDEC approved Supplemental Remedial Investigation Work Plan (SRIWP) (March 2008).

Fuss & O'Neill prepared the RIR (August 2007) for O'Neill-Dutton for submittal to NYSDEC in accordance with the requirements of the BCP for the adjacent BCP Site - C#314081, which in 2005 included the Site. Therefore, a complete and approved RIR has been completed for the Adjacent BCP Site - #C314081 and this Site.

2.2.1 REMEDIAL INVESTIGATION (RI) CONDUCTED AT SITE

Soil

Six (6) soil samples were collected from five (5) locations at the Site during the RIR work as follows:

- Z12: ACD-SS-Z12 at depth 0-0.5 feet bgs (17.0 ppm As)
- S10: ACD-SS-S10 at depth 0-1.0 feet bgs (did not exceed)
- L9: ACD-SS-L9 at depths 0-0. 5 (56.8 ppm As) and 0.5-2.5 feet bgs (did not exceed)
- Y12: ACD-SS-Y12 at depth 0.5-4.0 feet bgs (31.4 ppm As)
- T10: ACD-SS-T10 at depth 0.5-3.0 feet bgs (36.1 ppm As)

The sample locations are presented on Figure 4 of the RIR, and the sample results for arsenic are presented in Figure 5.A and 5.B and reported in Table 1 of the RIR. Figures 4, 5A, 5B, and 6 of the RIR are provided as Appendix D of the SMP. The samples collected from Z12 (0-0.5), L9 (0.0-0.5), Y12 (0.5-4.0), and T10 (0.5-3) exceeded the restricted residential arsenic soil clean-up objective (SCO), which is 16 mg/kg (ppm). However, a site-specific clean-up objective was raised from 32 mg/kg to 300 mg/kg on the AC Dutton Site per the NYSDEC.

The Site is not a petroleum AOC as per Figure 6 of the RIR (Appendix D of the SMP), which presents the extent of the petroleum AOCs at the AC Dutton Site.

A small brick office building was demolished from the Site in June 2010 and an underground storage tank was removed from the Site in October 2011 as part of the Former AC Dutton Site remedial action.

SESI prepared a Remedial Action Work Plan (RAWP), which was approved in a letter from the NYSDEC dated January 15, 2016. The approved remedy is to be implemented in accordance with the remedy selected by the NYSDEC in the January 2009 Decision Document for the Former AC Dutton Lumber Yard (#C314081).

2.2.2 DESCRIPTION OF REMEDIAL ACTIONS

The site was remediated in accordance with the remedy selected by the NYSDEC in the RAWP dated October 29, 2015.

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

1. Construction and maintenance of a soil cover system consisting of the following:

    - Minimum of 24 inches to planned grade layer of NYSDEC-approved fill that meets the restricted residential Soil Clean-up Objective (SCO) with a top layer (4-6 inches) that supports vegetation;
    - A demarcation layer consisting of orange geotextile or snow fence.

    The cover system will include an asphalt trail and small concrete slabs when the Site is fully developed into a Greenway Trail. The cover system will prevent human exposure to remaining contaminated soil/fill at the Site;

2. Installation of rip-rap along the embankment of the Hudson River. The rip-rap will provide long-term erosion control from the river flow. It will also prevent the sediment carried with the Site sheet flow from settling in the river bed;

3. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.

4. Development and implementation of a Site Management Plan for long-term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;

5. Periodic certification of the institutional and engineering controls listed above.

2.2.3 REMOVAL OF CONTAMINATED MATERIALS FROM THE SITE

No excavation was performed as part of this remedial action.

2.2.4 BACKFILL MATERIALS IMPORTED TO THE SITE

The total quantity of soils imported to construct the soil cover is 15,000 CY and 700 CY of rock to construct the rip-rap. A table of all sources of imported backfill with quantities for each source is shown in Table 4.1 of the FER. Tables summarizing chemical analytical results for backfill, in comparison to allowable levels, are provided in Appendix I of the FER. A figure showing the site locations where backfill was used at the site is shown in Figure 4.1 of the FER.

2.2.5 ON-SITE AND OFF-SITE TREATMENT SYSTEMS

No long-term treatment systems were required to be installed as part of the site remedy.

2.2.6 DESCRIPTIONOF RESIDUAL CONTAMINATION

Described in Section 2.2.1 of this report.

2.2.7 MANAGEMENT OF RESIDUAL CONTAMINATION THROUGH ENGINEERING AND INSTITUTIONAL CONTROLS IN THE ENVIRONMENTAL EASEMENT

The SMP lists the ECs and ICs required by the NYSDEC to manage the residual contamination present at this Site for the protection of public health and the environment in the future.. The remedy for the Site did not require the construction of any other engineering control systems.

The Site remedy requires that an Environmental Easement be placed on the property to (1) implement, maintain, and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the site to restricted residential uses only. The Applicant and Applicant's successors or assigns must manage the controls and monitoring in full compliance with the terms of the remedial program.

3.0 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The goal of the SMP is to manage the residual contamination at the Site through implementation of ICs and ECs. At present, SESI is conducting monitoring/inspection of the ICs and ECs on the Site in accordance with the SMP dated December 2016.

The overall Site remedy was designed to ensure that residual soil contamination that remains on-site in fill materials below the two-foot clean soil cap does not significantly exceed the more stringent of the applicable NYSDEC restricted residential SCO.

4.0 IC/EC PLAN COMPLIANCE

4.1 IC/EC REQUIREMENTS AND COMPLIANCE

Institutional Controls

A series of ICs is required by the RAWP to: (1) implement, maintain, and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to restricted-residential (public greenway/waterfront district) uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on **Figure 3.1**. These ICs are:

- The property may be used for restricted residential use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Dutchess County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 3.1, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

Engineering Controls

Exposure to remaining contamination at the Site is prevented by a cover system placed over the site. This cover system comprises, from top to bottom, the following:

- Minimum 24 inches to planned grade layer of NYSDEC-approved fill that meets the restricted residential SCO with a top layer (4-6 inches) that supports vegetation;
- A demarcation layer consisting of orange geotextile or snow fence.

The cover system will include an asphalt trail and small concrete slabs when the Site is fully developed into a Greenway Trail. The cover system will prevent human exposure to remaining contaminated soil/fill at the Site.

In addition, the controls include:

1. Installation of rip-rap along the embankment of the Hudson River. The rip-rap will provide long-term erosion control from the river flow. It will also prevent the sediment carried with the Site sheet flow from settling in the river bed;
2. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
3. Development and implementation of a Site Management Plan for long-term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;

4. Periodic certification of the institutional and engineering controls listed above.

4.2 IC/EC CERTIFICATION

The NYSDEC Institutional and Engineering Controls Certification Form has been completed and is included in **Appendix C** of this report.

5.0 MONITORING PLAN COMPLIANCE

Table 5.1: Monitoring Program Frequency

Monitoring/Inspection Schedule			
Monitoring Program	**Frequency***	**Matrix**	**Analysis**
Cover System (Soil cover and Rip-Rap)	Annual	Soil and vegetation	Visual

Monitoring Completed During Current Reporting Period

Inspection of composite cover system was conducted on March 2, 2021.

Comparison with Remedial Objectives

The remedial objectives for the composite cover system are being met. The cover system continues to be protective of human health and the environment for the intended restricted residential use of the property.

Exposure to remaining contamination in soil/fill at the Site is prevented by a soil cover system placed over the Site. This cover system comprises a 24-inch or greater layer of NYSDEC-approved fill that meets the restricted residential SCO, and a demarcation layer consisting of orange geotextile or snow fence. In addition to the soil cover, a rip-rap was installed along the embankment of the Hudson River. SMP **Figures 3.1 and 3.2** show the as-built survey of the top of the soil cover and the demarcation, respectively.

Monitoring Deficiencies

All aspects of the monitoring plan were in accordance with NYDEC applicable regulations.

Conclusions and Recommendations

All aspects of the remedial program appear to be meeting the Site remedy design goal.

We recommend the following for the next reporting period:

- Cover system: continue the annual visual inspection of the cover system.

6.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems, to protect public health and the environment. Therefore, the operation and maintenance of such components is not applicable.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Compliance with the SMP

All aspects of the SMP, including IC/EC and monitoring, have met the requirements. The O&M is not required at this time for the Site.

There are no new exposure pathways resulting in an unacceptable risk.

Performance and Effectiveness of the Remedy

Exposure to remaining contamination in soil/fill at the Site is prevented by a soil cover system placed over the Site. This cover system comprises a 24-inch or greater layer of NYSDEC-approved fill that meets the restricted residential SCO, and a demarcation layer consisting of orange geotextile or snow fence. In addition to the soil cover, a rip-rap was installed along the embankment of the Hudson River. Figures 3.1 and 3.2 of the SMP show the as-built survey of the top of the soil cover and the demarcation, respectively.

The proposed annual monitoring plan for the cover system is effective and protective of the previously approved overall Site remedy.

Future PRR Submittals

We do not recommend any changes to the frequency of the PRR submittal at this time because ICs and ECs remain in-place and are effective. The next PRR will be submitted in May 2022.

Recommendations

We recommend the following for the next reporting period:

- Cover system: continue the annual visual inspection of the cover system.

Appendix A:

Site Management Plan (SMP) Figures

FIGURE 1.1

PROPERTY LOCATION MAP
DUTCHESS AVE. RIVER WALK SOUTH
1 DUTCHESS AVENUE AND 2 HOFFMAN STREET
POUGHKEEPSIE, NEW YORK

SITE PLAN

SESI CONSULTING ENGINEERS, PC

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

DRAWN BY: YY
CHECKED BY: FD
SCALE: N.T.S.
DATE: 10/6/15
JOB NO.: 9046

N:\ACAD\9046\9046- FIG -1.1.dwg, Layout1, 10/6/2015 2:43:52 PM, 1:1

FIGURE 2.1

PROPERTY LOCATION MAP
DUTCHESS AVE. RIVER WALK SOUTH
1 DUTCHESS AVENUE AND 2 HOFFMAN STREET
POUGHKEEPSIE, NEW YORK

TAX MAP

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CONSULTING
ENGINEERS, PC

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

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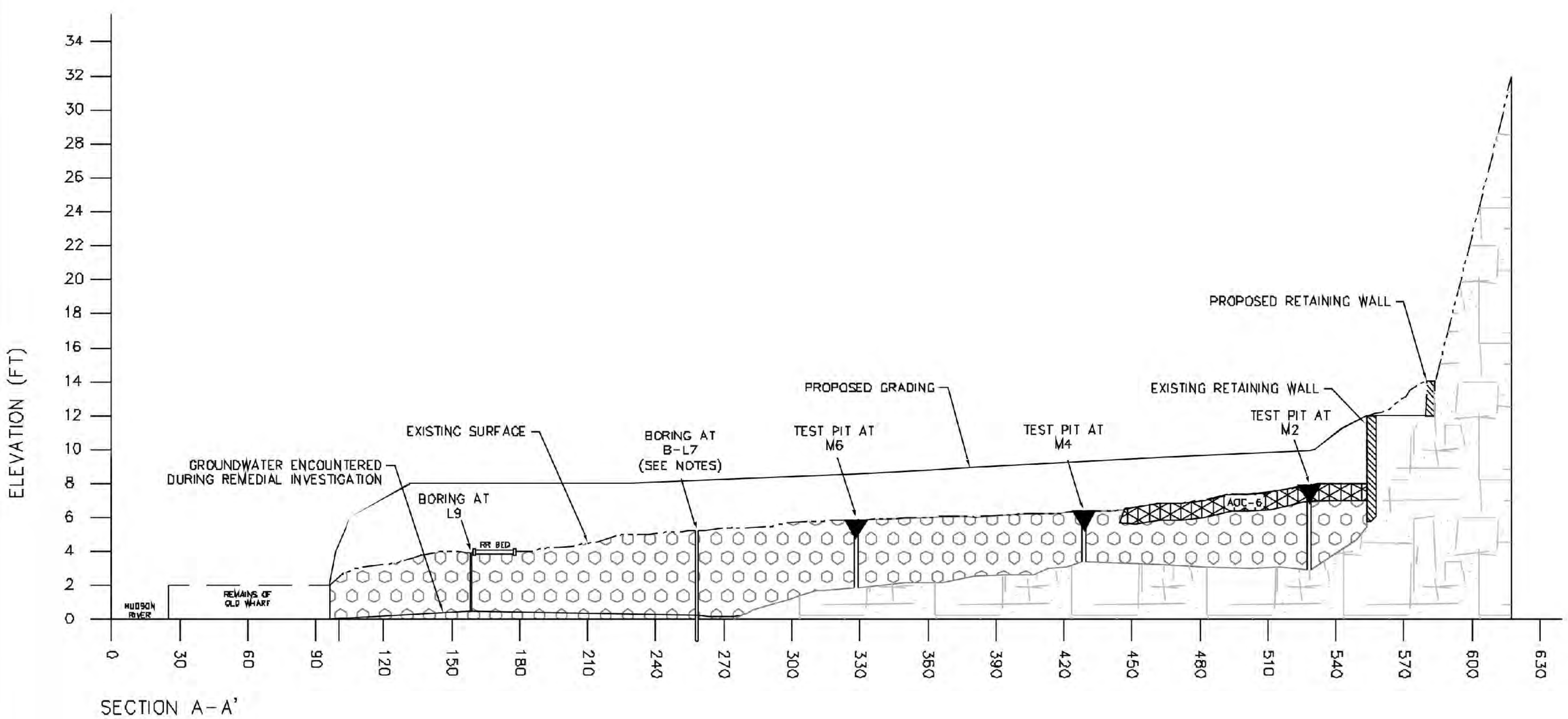
CHECKED BY:	FD
SCALE:	N.T.S.
DATE:	12/8/16
JOB NO.:	9046



LEGEND

- EXISTING SURFACE
- PROPOSED SURFACE
- APPROXIMATED ENTRANCE ROADWAY AND RAMPS INTO SITE
- ZONE OF METALS CONCENTRATIONS EXCEEDING ACTION LEVELS
- FILL MATERIAL
- BEDROCK

NOTES

1. FILL MATERIAL GENERALLY CONSISTS OF FINE TO MEDIUM SAND, GRAVEL, SOLIDIFIED KILN ASH, CRUSHED BRICK, AND CRUSHED SHALE/BLAST ROCK.

2. SUBSURFACE CONDITIONS ARE ESTIMATED BASED ON TEST PIT AND BORING DATA COLLECTED FROM THE LOCATIONS SHOWN, AS WELL AS LOCATIONS IN THE VICINITY OF THIS CROSS SECTION.

3. BORING B-L9 EXTENDS 1.5 FEET BELOW THE 0 FOOT ELEVATION (RIVER ELEVATION).

4. PROPOSED CONDITIONS (RAMP, ROAD, & RETAINING WALL) ARE APPROXIMATED. NO APPROVED SITE PLAN IS AVAILABLE FROM THE DEVELOPER FOR PLANNING PURPOSES. THIS SOIL RAP WAS DESIGNED IN GENERIC TERMS SO THAT IT MAY BE EASILY ADAPTABLE TO AN APPROVED SITE PLAN IN THE FUTURE.

No.	DATE	DESCRIPTION	BY
1.			

REVISIONS

PROJ. MANAGER:
CHIEF DESIGNER:
REVIEWED BY: DATE

TO MY KNOWLEDGE AND BELIEF, THESE MAPS ARE SUBSTANTIALLY CORRECT AS NOTED HEREON.

LAWRENCE R. GEISSLER, JR. — LICENSE No. 12327

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DATUM: HORZ: VERT:
0 NTS
GRAPHIC SCALE

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THE O'NEILL GROUP - DUTTON, LLC
CROSS SECTION A-A'
FORMER A.C. DUTTON LUMBER FACILITY
2 HOFFMAN STREET
POUGHKEEPSIE NEW YORK

PROJ. No.: 20040764.A2N
DATE: SEPTEMBER 2007

FIG. 9A

dwg by: LH
chk by: FD
scale: NTS
date: 12/16/14

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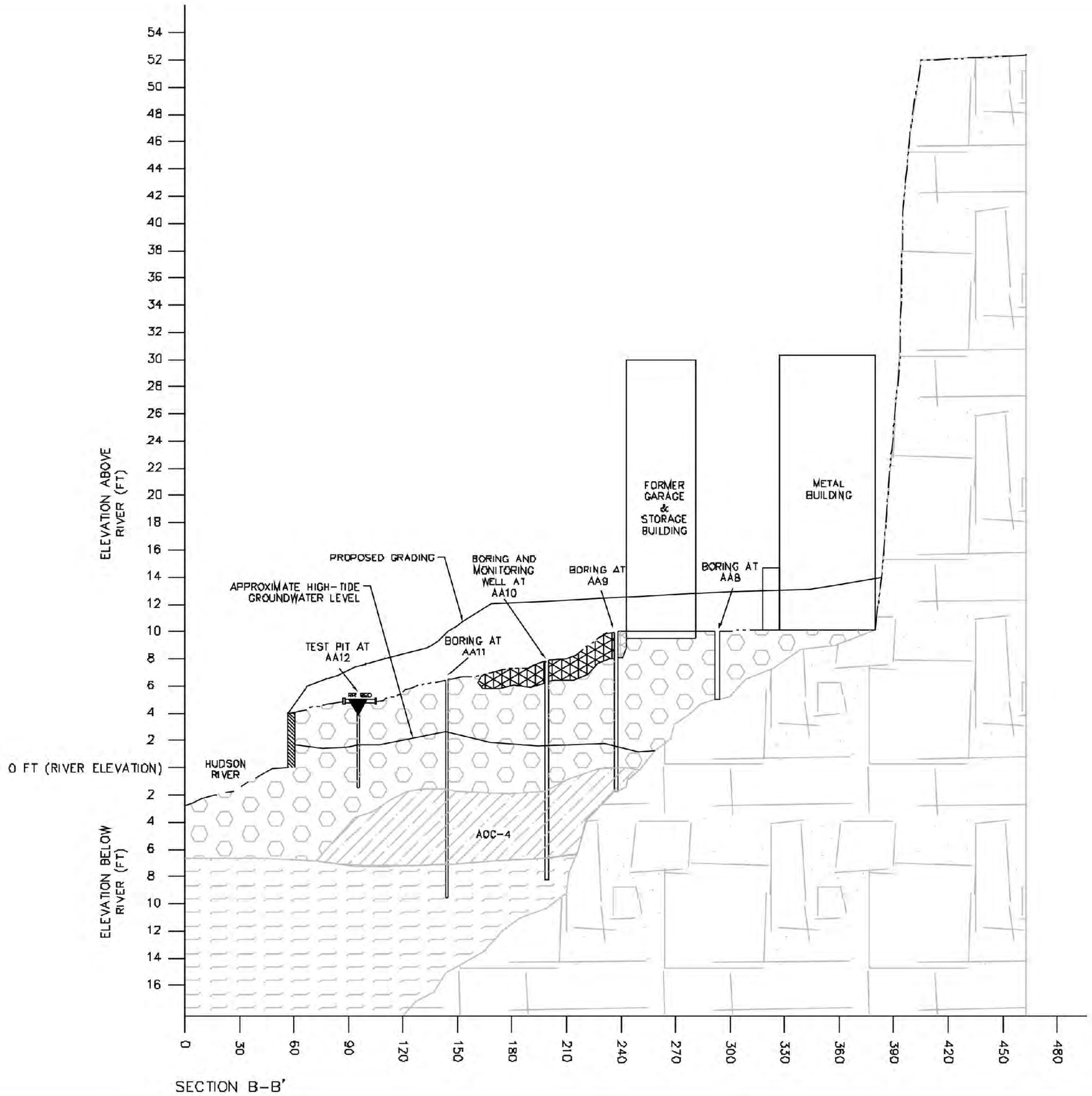
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE., PINE BROOK, N.J. 07058 PH: 973-808-9050

project: THE O'NEILL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: SITE GEOLOGICAL SECTIONS

job no:
drawing no:

FIG. A



LEGEND

- EXISTING SURFACE
- PROPOSED SURFACE
- APPROXIMATE PETROLEUM-IMPACTED AREA OF CONCERN
- ZONE OF METALS CONCENTRATIONS EXCEEDING ACTION LEVELS
- FILL MATERIAL
- NATIVE MATERIAL
- BEDROCK

NOTES

1. FILL MATERIAL GENERALLY CONSISTS OF FINE TO MEDIUM SAND, GRAVEL, SOLIDIFIED KILN ASH, CRUSHED BRICK, AND CRUSHED SHALE/BLAST ROCK.
2. NATIVE MATERIAL GENERALLY CONSISTS OF TIGHTLY PACKED LIGHT BROWN FINE SAND AND SILT.
3. SUBSURFACE CONDITIONS ARE ESTIMATED BASED ON TEST PIT AND BORING DATA.

No.	DATE	DESCRIPTION	BY
1.			

REVISIONS

PROJ. MANAGER:
CHIEF DESIGNER:
REVIEWED BY: DATE

TO MY KNOWLEDGE AND BELIEF, THESE MAPS ARE SUBSTANTIALLY CORRECT AS NOTED HEREON.

LAWRENCE R. GEISSLER, JR. 12327 LICENSE No.

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THE O'NEILL GROUP - DUTTON, LLC
CROSS SECTION B-B'
SOIL REMEDIAL ACTION PLAN
2 HOFFMAN STREET
POUGHKEEPSIE NEW YORK

PROJ. No.: 20040764A2N
DATE: SEPTEMBER 2007

FIG. 9B

dwg by: LH
chk by: FD
scale: NTS
date: 12/16/14

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SITE DESIGN
ENVIRONMENTAL
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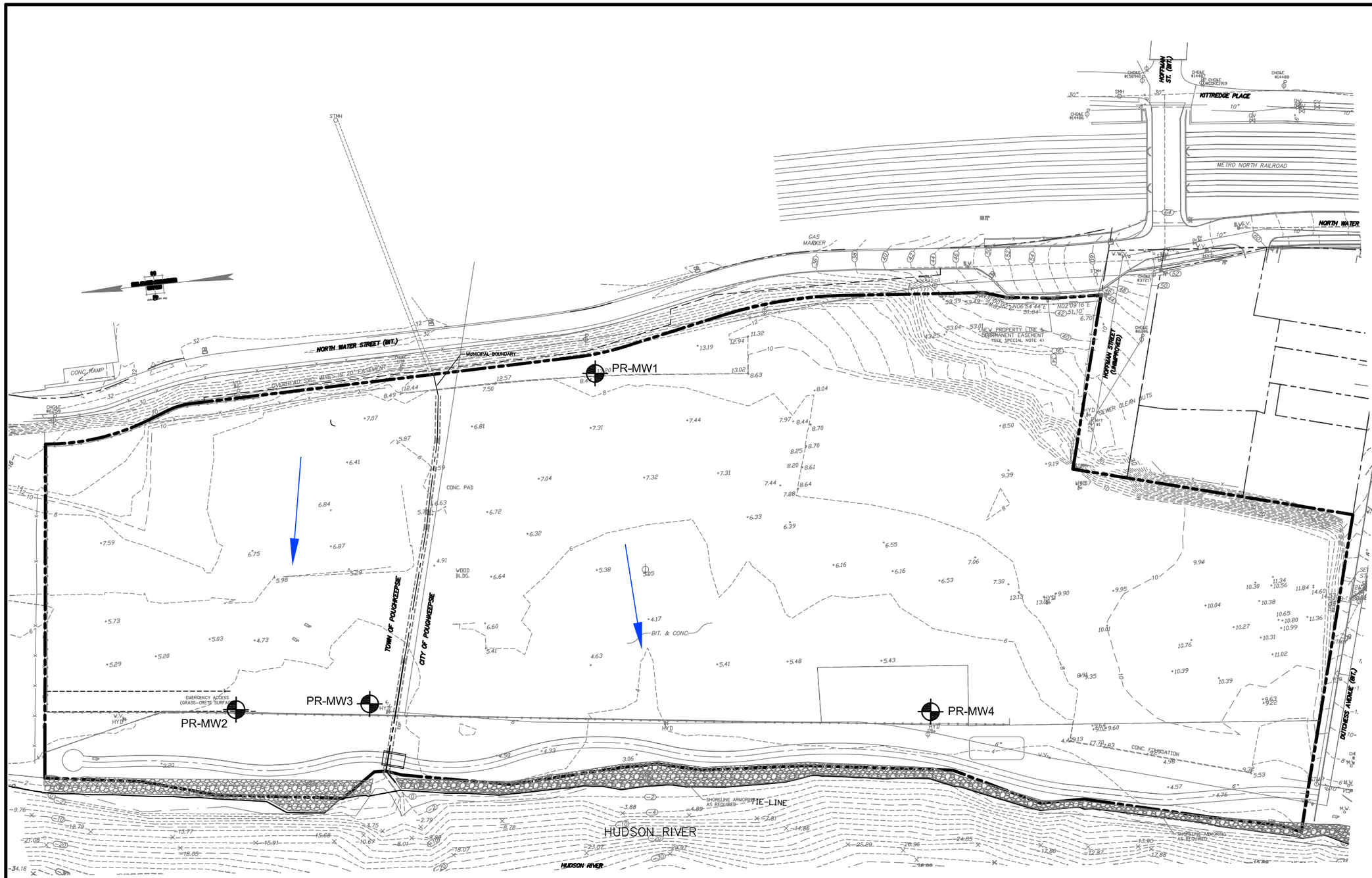
project: THE O'NEILL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: SITE GEOLOGICAL SECTIONS

job no:
drawing no:
FIG.



LEGEND

PR-MW1 — APPROX. LOCATION & NO. OF POST REMEDIATION MONITORING WELL

GROUNDWATER FLOW

REFERENCE:
1. SITE INFORMATION ARE TAKEN FROM "CONCEPT PLAN FOR THE O'NEILL GROUP" PREPARED BY MASER CONSULTING P.A. DATED3/20/13.

SESI
CONSULTING ENGINEERS, PC
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE., PINE BROOK, N.J. 07058 PH: 973-808-9050

drawn by: yy
checked by: FD
scale: N.T.S.
date: 9/15/14

FUAD DAHAN, P.E.
PROFESSIONAL ENGINEER
N.Y. LIC. NO. 090531

project: THE O'NEILL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: GROUNDWATER FLOW (2014 DATA)

job no. 8604
drawing no. FIG 1.3
of

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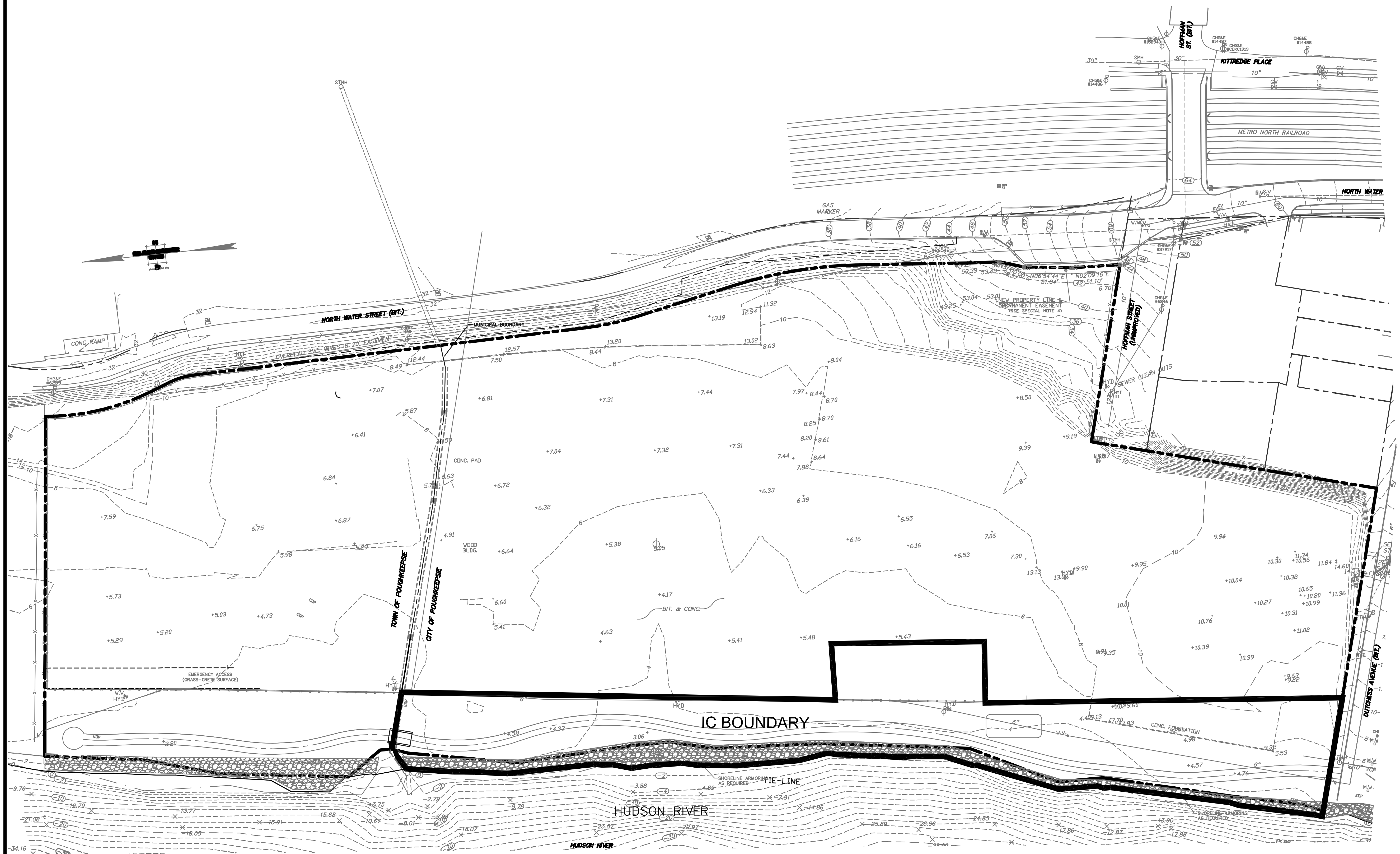

LEGEND

REFERENCE
1. SITE INFORMATION ARE TAKEN FROM "CONCEPT PLAN FOR THE O'NELL GROUP" PREPARED BY MASER CONSULTING P.A. DATED 3/20/13.

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SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

drawn by: YY
checked by: FD
scale: N.T.S.
date: 12/8/16

FUAD DAHAN, P.E.
PROFESSIONAL ENGINEER
N.Y. LIC. NO. 090531

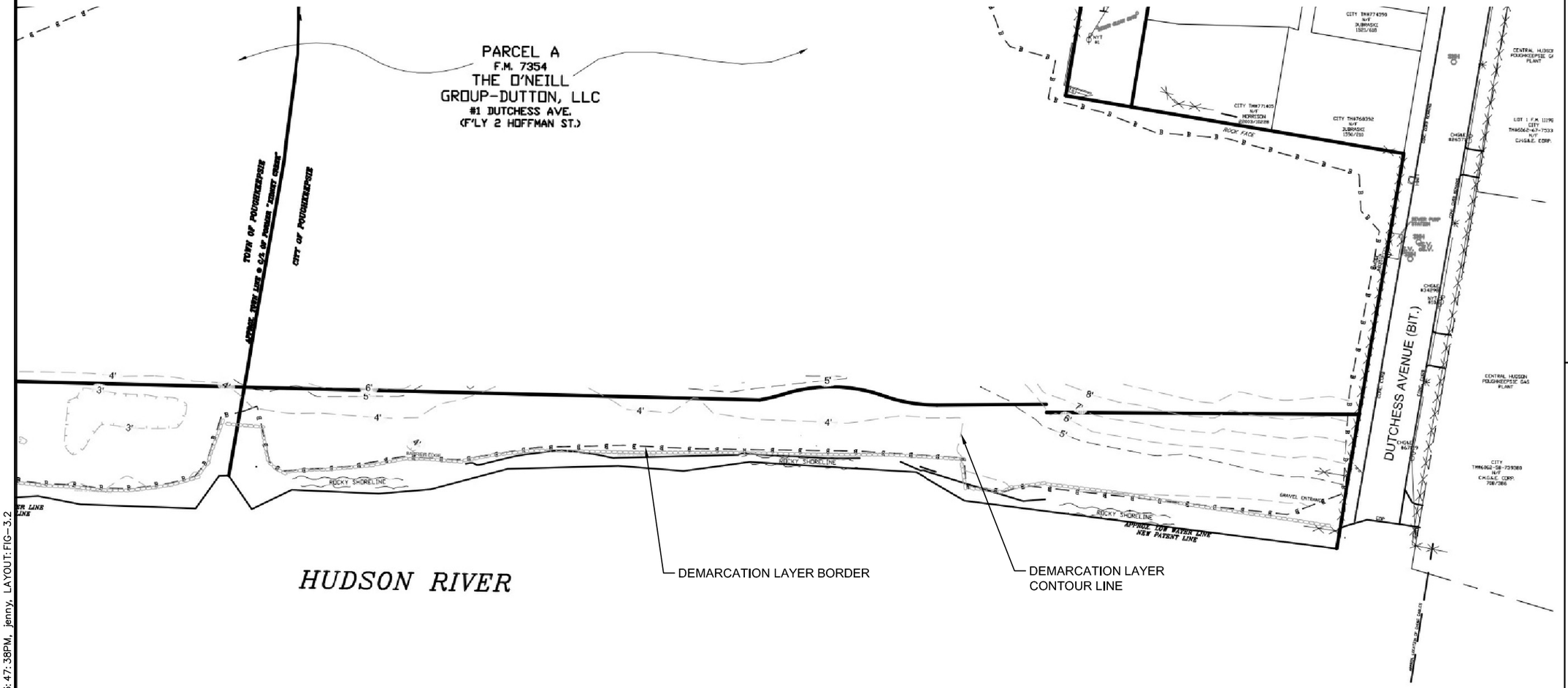
project: THE O'NELL GROUP - DUTTON LLC
CITY/TOWN OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: IC BOUNDARY

job no. 9046
drawing no.

FIG 3.1

N:\ACAD\9046\9046 SMP FIG -3.1.dwg, PRINT 11x17, 12/12/2016 4:38:34 PM, 1:2.72033



NOTES:
1. THE DEMARCATION LAYER IS MADE OF ORANGE GEOTEXTILE FABRIC
2. THE DEMARCATION LAYER INSTALLED ON THE RIVER WALK - CITY SIDE OVERLAPS THE LAYER PREVIOUSLY INSTALLED ON THE AC DUTTON SITE TO THE EAST

REFERENCE
1. SITE INFORMATION TAKEN FROM "A.C. DUTTON PARK LANDS BARRIER DETAILS". DATED 12/08/16.

FUAD DAHAN, P.E.
PROFESSIONAL ENGINEER
N.Y. LIC. NO. 090531

dwg by: yy
chk by: FD
scale: N.T.S.
date: 12/12/16

SESI CONSULTING ENGINEERS D.P.C.
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

project: DUTCHESS AVENUE RIVER WALK LLC
CITY OF POUGHKEEPSIE
DUTCHESS COUNTY, NY

drawing title: DEMARCATION LAYER AS BUILT PLAN

job no: 9046
drawing no: FIG-3.2

N:\ACAD\9046\9046 FIG-.DWG 12/12/16 03:47:38PM, jenny, LAYOUT:FIG-3.2

N:\ACAD\9046\9046 FIG-dwg, FIG-3.2, 12/12/2016 3:47:38 PM, 1:1

Appendix B:

Site Inspection Forms

INSPECTION CHECKLIST
AC DUTTON GREENWAY CITY SITE
POUGHKEEPSIE, NEW YORK
NYSDEC BCP No. C314123

SESI CONSULTING ENGINEERS **Inspection Date: 03.2.2021**

COMPOSITE COVER SYSTEM

- Is the integrity of the cover system in tact? Yes _X_ No ___
- Do the maintenance records indicate any invasive subsurface work has been completed after the last inspection? Yes __ No _X__
- Has any soil been removed or imported from the Site since the last inspection? Yes __ No __X_
- If soil has been disposed off-Site or imported, has this been completed in accordance with the NYSDEC approved Soil Management Plan for the Site? Yes __ No __
- If subsurface invasive work was undertaken, has the demarcation geotextile and the "clean soil cover" been restored? Yes __ No __
- Did a Professional Engineer or a qualified environmental professional (approved by the NYSDEC) oversee the above work? Yes _X_ No ___
- Was NYSDEC notified of disturbances to the "Clean Soil Cover" ? Yes __ No ___
- List of all reported disturbances since last inspection:

NONE

Appendix C:

NYSDEC IC and EC Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C314123

Site Name A.C. Dutton Greenway City

Site Address: 1 Dutchess Avenue Zip Code: 12601
City/Town: Poughkeepsie
County: Dutchess
Site Acreage: 1.844

Reporting Period: April 01, 2020 to April 01, 2021

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

	Box 2A	
	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	X
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	X	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C314123 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
6062-59-737435	The O'Neill Group-Dutton, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

The property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Dutchess County Department of Health to render it safe for use as drinking water or for industrial purpose, and the user must first notify and obtain written approval to do so from the Department;

Monitoring must be performed as defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

6062-59-738405	The O'Neill Group-Dutton, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

The property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Dutchess County Department of Health to render it safe for use as drinking water or for industrial purpose, and the user must first notify and obtain written approval to do so from the Department;

Monitoring must be performed as defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

6062-59-744432	The O'Neill Group-Dutton, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

The property may be used for Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Dutchess County Department of Health to render it safe for use as drinking water or for industrial purpose, and the user must first notify and obtain written approval to do so from the Department;

Monitoring must be performed as defined in the SMP;

All future activities on the property that will disturb remaining contaminated material must be conducted in

accordance with the SMP;

Box 4

Description of Engineering Controls

Parcel	Engineering Control
6062-59-737435	Cover System

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. The cover system is comprised of a minimum of two feet of clean soil. The cover system will include an asphalt trail and small concrete slabs when the site is fully developed.

Rip-rap has also been placed along the embankment of the Hudson River.

6062-59-738405	Cover System

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. The cover system is comprised of a minimum of two feet of clean soil. The cover system will include an asphalt trail and small concrete slabs when the site is fully developed.

Rip-rap has also been placed along the embankment of the Hudson River.

6062-59-744432	Cover System

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. The cover system is comprised of a minimum of two feet of clean soil. The cover system will include an asphalt trail and small concrete slabs when the site is fully developed.

Rip-rap has also been placed along the embankment of the Hudson River.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. C314123

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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 Fin O'Neill at 241 Hudson St Hackensack NJ 07601
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

6-18-21
Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 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 Fuad Dahan (print name) at SESI Consulting Engineers (print business address),

am certifying as a Qualified Environmental Professional for the _____
(Owner or Remedial Party)

06/18/2021

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.