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Division of Environmental Remediation, Remediation Bureau C
625 Broadway, 11th Floor
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March 8, 2016

RE: Final Engineering Report, Former Tappan Terminal, Western Parcel, AOC 1
Hastings on Hudson, Westchester County, New York
Site No. 3-60-015A

Dear Ms. Saucier:

In accordance with your letter of February 10, 2016 and our confirming email exchange on February 11, 2016, enclosed is an electronic copy of the revised Final Engineering Report (FER) for AOC1 at the Western Parcel of the Tappan Terminal Site in Hastings-on-Hudson, New York. The revisions are summarized as follows in accordance with the Department's comments:

1. Certification, Third Paragraph: Paragraph revised as requested.
2. Section 3 Final Remedial Design: Added Section 3.2 and Table 1, and revised Figure 3.
3. Section 4.5.3 Air Monitoring: Section revised as requested.
4. Section 5 Site Management Plan (SMP): Section revised as requested.
5. Section 6 Environmental Easement: Section revised as requested and added Appendix J.
6. Appendix C As-Builts: Updated (2015) Survey included in Appendix C.

Additionally other Sections have been updated, including:

- Section 1.1 has been updated to reflect the correct acreage per the Environmental Easement.
- Section 4.8 and Appendix I have been added, and the Site Plan in Appendix C has been updated, to include the soil unloading area for AOC 2.

Please contact me at (718) 404-0652 with any questions or comments pertaining to the enclosed document. Thank you for your time and assistance.

Sincerely,

S.P. Trifiletti

Steve P. Trifiletti
Project Manager

Electronic Copy: J. Nealon, M. Schuck, C. Westerman – NYSDOH, Troy, NY
E. Moore – NYSDEC, Region 3
A. Torrant – ExxonMobil, Houston, TX
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FINAL ENGINEERING REPORT for AOC 1

Former Mobil Terminal Property

Hastings-on-Hudson, New York

Former Tappan Terminal Site No. 3-60-015

Prepared for:

ExxonMobil Oil Corporation
38 Varick Street
Brooklyn, NY 11222

206925.09.008
ExxonMobil Oil Corporation
March 2016

Prepared by:

Woodard & Curran
1520 Highland Avenue
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CERTIFICATION

I , Anne E. Proctor, PE, certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Remedial Design/Remedial Action Work Plan (RDRAWP) and Final Remedial Design/Remedial Action Work Plan and Site Management Plan (Final RDRAWP) were implemented and that all construction activities were completed in substantial conformance with the DER-approved RDRAWP and Final RDRAWP.

All use restrictions, Institutional Controls, Engineering Controls and/or any operation and maintenance requirements applicable to the site will be contained in an Environmental Easement created and recorded pursuant to ECL 71-3605 and that any affected local governments, as defined in ECL 71-3603, will be notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

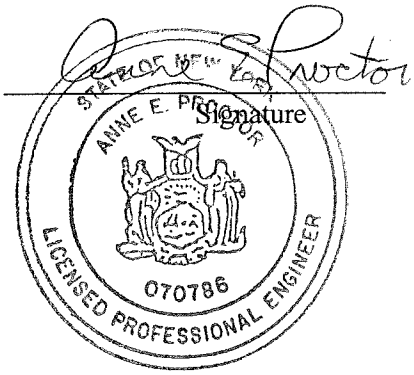
I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

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, Anne E. Proctor, PE, of Woodard & Curran, am certifying as Owner's Designated Site Representative for the site.

070786	3/8/2016	Anne E. Proctor
NYS Professional Engineer #	Date	Signature

PE Stamp:



1. INTRODUCTION

On September 8, 2006, a Record of Decision (ROD) was issued by the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation for the former Tappan Terminal in Hastings on Hudson, New York. Pursuant to the ROD, pre-design investigations were conducted on the two properties that comprise the former Tappan Terminal site in preparation for site remediation.

On March 14, 2010, Order on Consent No. A3-0612-1208 (the "Order") was finalized that separated the former Tappan Terminal into three Areas of Concern (AOCs): soil at the western former Mobil terminal property (AOC 1), soil at the eastern former Uhlich Color Company property (AOC 2), and groundwater at both properties (AOC 3).

Based on the pre-design investigation, a Remedial Design/Remedial Action Work Plan (RDRAWP) was submitted on June 15, 2010 for AOC 1 in accordance with the ROD and the Order. The Remedial Design/Remedial Action Report (RDRAR) dated May 31, 2011 documented implementation of the RDRAWP. A Final Remedial Design/Remedial Action Work Plan and Site Management Plan (Final RDRAWP) was then submitted and approved with modification on September 10, 2012 to complete remedial actions under the ROD at the former Mobil terminal property (AOC 1). In accordance with Section II.D.1 of the Order, the Final Engineering Report (FER) herein documents implementation of the Final RDRAWP in preparation for redevelopment of that property.

1.1 SITE DESCRIPTION

The former Mobil terminal property is 9.298 acres and part of the larger Tappan Terminal site, located along the Hudson River waterfront in the Village of Hastings-on-Hudson, Westchester County, New York. The Tappan Terminal is comprised of two properties, the former Mobil terminal property (the Western Parcel, hereafter referred to as the "Site"), which is located adjacent to the Hudson River (the subject of this report), and the former Uhlich Color Company property (the Eastern Parcel), which is located along the railroad tracks that define the eastern boundary of the Site (not included in this report). **Figure 1** shows the location of the Site, and **Figure 2** shows the Site boundaries and main features of the former petroleum distribution terminal that occupied the Western Parcel.

The Site was used as a petroleum distribution terminal from 1961 until Mobil ceased operations on the Site in 1985. The Site has remained vacant since that time. Mobil Oil Corporation (now ExxonMobil Oil Corporation) remains the Site owner. All former buildings and aboveground storage tanks have been removed from the Site. The Site is relatively flat, located on the eastern shore of the Hudson River. Of the 9.298 acres that comprise the property, approximately 8.088 acres are filled land above mean high tide and the balance of the property (approximately 1.21 acres) extends into the Hudson River for former docking facilities.

The northern two-thirds of the Site was surrounded by the remnants of an earthen containment berm that defined the former terminal tank farm and contained concrete foundations of four former aboveground storage tanks as depicted in **Figure 2**. Concrete pads are located in the former terminal loading area on the southern portion of the Site. The extreme southern end of the property borders a small section of land historically used by the Pioneer Boat Club as a marina.

The Site was historically accessed from Southside Avenue and Railroad Avenue over the Zinsser Bridge that crosses the railroad tracks at the southeast corner of the Site. This bridge fell into disrepair and is no longer open to vehicular traffic. The only vehicular access to the Site currently is from the ARCO property abutting the Site on the north.

1.2 SITE REGULATORY HISTORY

The Tappan Terminal has a long history of manufacturing and chemical use by several owners and occupants. The landmass of the Site itself was created by disposal of manmade fill into the Hudson River between 1868 and 1970. This fill material typically consisted of sand and gravel mixed with bricks, concrete, stone, timber, ash, slag, shells, and other debris. Filling progressed on the property between 1920 and 1960. Tappan Tanker Terminal purchased the property in 1961 and began operating a petroleum distribution facility on-site. From 1961 to 1971 waste chemicals were stored on the property prior to open ocean disposal. Mobil Oil Company purchased the Site in 1975 and continued petroleum distribution operations until 1985. The Site has been vacant since that time.

On-site sampling of various media was performed between 1985 and 1989. In 1987, the NYSDEC listed the Site as a Class 2 Site in the Registry of Inactive Hazardous Waste Disposal Sites in New York.

During a 1992 repair of a sewer pipe at the Site, evidence of a petroleum release on both the Mobil and abutting Uhlich properties was discovered. The extent of petroleum contamination was investigated between 1992 and 1994. In 1994, an oil remediation plan was approved by the NYSDEC. Mobil and Uhlich entered into a Stipulation Agreement to remediate this spill.

In 1996 Mobil entered into a Voluntary Agreement with the NYSDEC to investigate petroleum contamination on the Site. Multiple phases of investigation were conducted on-site between 1998 and 2008.

The Tappan Terminal site was the subject of a ROD issued by the NYSDEC Division of Environmental Remediation on September 8, 2006. The ROD addressed both the Mobil and Uhlich properties. This report only addresses activities for the western Mobil property of the Tappan Terminal site (AOC 1).

The NYSDEC issued draft versions of an Order on Consent in October 31, 2006 and February 13, 2009, and meetings were conducted on November 11, 2007 and March 26, 2009. The NYSDEC requested that work proceed for the pre-design investigation and a work plan was created in parallel with negotiations for the Order. The Order in its final form, Order on Consent No. A3-0612-1208, was signed and became effective March 14, 2010.

In accordance with the Order, ExxonMobil submitted a RDRAWP for AOC 1 on June 15, 2010 which was approved with modification to the schedule on June 17, 2010. The RDRAR documenting implementation of the RDRAWP was submitted on May 31, 2011. The Final RDRAWP to complete actions under the ROD was submitted on December 27, 2011 and revised July 13, 2012. Updated drawings and details for the Final RDRAWP were submitted by electronic mail to the NYSDEC on August 31, 2012 and the Final RDRAWP was approved with modification on September 10, 2012.

1.3 SITE GEOLOGY AND HYDROGEOLOGY

The Tappan Terminal property is underlain by four geologic units, the upper fill layer, the Marine Grey Silt, the Basal Sand unit, and bedrock. The upper fill layer ranges from 11 to 32 feet in thickness, and consists of sand, silt and gravel variably mixed with ash, slag, glass, metal debris, wood, concrete, crushed stone, paper, coal, sawdust and brick fragments. This material is typical of historic waterfront fill material deposited during the late 19th and early 20th centuries. The historic fill is considered to be relatively permeable; however, intermediate bulkheads were built in stages along the shoreline as filling proceeded. These bulkheads are now buried beneath the property, and in some places act to restrict the flow of groundwater towards the river. The upper fill layer was graded and covered with a two-foot soil cap between 2012 and 2013 (refer to **Section 3.0**).

Groundwater flows through the fill layer from east to west and discharges to the Hudson River, subject to the tide stage of the river. At high tide, the groundwater flow direction reverses along the immediate shoreline and water enters the Site from the river. Generally, tidal fluctuations in the river affect groundwater levels within 100 feet of the shoreline. Site groundwater is generally 2 to 7 feet below grade and quality is influenced by the influx of river/ocean water during tidal cycles.

Beneath the fill unit lays the Marine Grey Silt unit that represents the historic sediment of the Hudson River. This unit consists of grey to black silt with a trace of fine sand and layers of shell fragments. The Marine Grey Silt is at least 8 feet thick beneath the property, and ranges from 10 to 62 feet thick in the local area. The silt unit acts as a confining layer. This unit is believed to be continuous beneath the Site.

The Basal Sand Unit that underlies the silt layer consists of permeable, medium to coarse sands and gravels. Although this unit was not investigated at the Tappan Terminal site, measurements in the vicinity indicate that the Basal Sand Unit is a confined aquifer under artesian conditions. That is, groundwater pressure in the Basal Sand is greater than in the fill unit, and flow would be upward in the absence of the confining silt unit.

The underlying bedrock in the area is reported to be either Inwood Marble or Fordham Gneiss at 50 to 100 feet below grade.

2. PREVIOUS INVESTIGATION HISTORY

A Remedial Investigation/Feasibility Study (RI/FS) was conducted to evaluate alternatives for addressing threats to human health and the environment. The 2006 Record of Decision (ROD) was issued based on this work. A subsequent Pre-Design Investigation was conducted in February and March 2008 to further identify "grossly contaminated" soil on-site requiring removal per the ROD (refer to **Section 2.2**). Remedial activities were conducted between September 2010 and February 2011 (refer to **Section 2.3**).

2.1 SUMMARY OF THE REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

The purpose of the Remedial Investigation (RI) was to define the nature and extent of any contamination resulting from previous activities at the Tappan Terminal site. The RI was conducted between July 1998 and September 1999. The field activities and findings of the investigation are described in the "September 1999 Remedial Investigation Report" (RI Report). The RI Report included:

- A compilation of historic data and preparation of a comprehensive map;
- Collection of soil samples from surface and subsurface locations;
- Water level measurements in existing monitoring wells to determine groundwater flow characteristics, and an evaluation of tidal impacts from the Hudson River;
- Sampling of groundwater in existing wells and temporary well points;
- Analysis of all soil and groundwater samples for a comprehensive list of contaminants; and
- Collection and analysis of sediment samples adjacent to the Tappan Terminal site and background locations.

The soil and groundwater data from the RI Reports was compared to the following regulatory criteria:

- Groundwater, drinking water and surface water Standards, Criteria and Guidance (SCGs) are based on NYSDEC "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code;
- Soil SCGs are based on the NYSDEC "Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels;" and
- Sediment SCGs are based on the NYSDEC "Technical Guidance for Screening Contaminated Sediments."

Based on the RI Report results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the Tappan Terminal site were determined to require remediation.

The Feasibility Study (FS) included additional soil and groundwater sampling to determine the volume of soil potentially requiring remediation as well as a pilot test of air sparging, soil vapor extraction and enhanced bioremediation conducted in 2002. ExxonMobil also conducted a pilot test to investigate biosparging in 2004. These studies were performed to further evaluate technologies under consideration in the draft Feasibility Study.

The contaminants of concern included Semivolatile Organic Compounds (SVOCs), Total Petroleum Hydrocarbons (TPH), and metals: arsenic, beryllium, copper, mercury, nickel and zinc. The metals were found throughout the surface and subsurface fill, and are commonly associated with historic fill containing ash and furnace slag.

The potential exposure pathways for soil related to current use or development of the Site include:

- Inhalation, ingestion, or dermal contact of contaminated dust, vapors or soil by workers during on-site excavation activities;
- Inhalation of contaminated vapors in indoor air by future occupants of buildings that may be constructed on the Site; and
- Exposure of wildlife or recreational users of the Site to contaminants in Site soils beneath the cap (refer to Section 3.0).

2.2 DESCRIPTION OF THE SELECTED REMEDY

The Site was remediated in accordance with the remedy selected by the NYSDEC in the ROD as follows:

- Excavation and removal of soil/fill that was grossly contaminated with weathered petroleum;
- Removal of former piping and any other structures as necessary to allow adequate Site grading;
- Construction and maintenance of a soil cover system consisting a demarcation layer and 24 inches of soil meeting the restricted-residential and ecological Soil Cleanup Objectives (SCOs), as appropriate, to support re-vegetation and to prevent human exposure to remaining contaminated soil/fill remaining at the Site;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site;
- Institutional Controls including:
    - The property may only be used for restricted-residential (which includes commercial, light industrial, or recreational) use provided that the long-term Engineering and Institutional Controls included in the Site Management Plan (SMP) are employed;
    - All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
    - The use of the groundwater underlying the property is prohibited;
    - The potential for vapor intrusion must be evaluated for any buildings developed on-site and any potential impacts that are identified must be monitored or mitigated; and
    - Vegetable gardens and farming on the property are prohibited.
- 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: Institutional and Engineering Controls, monitoring, inspections, maintenance and reporting.

2.3 SUMMARY OF THE PRE-DESIGN INVESTIGATION

A Pre-Design Investigation (PDI) for soil at the Site was implemented in early 2008 and was based on historic investigation programs and the requirements of the 2006 Record of Decision (ROD). Soil sampling was conducted on a grid pattern across the Site, with additional sampling locations completed in the central area of the former tank farm to evaluate the potential presence of grossly contaminated soil. Field work commenced February 4, 2008, and was completed on March 31, 2008, with the NYSDEC in attendance. The findings were documented in the Pre-Design Investigation Report dated May 13, 2008, and are summarized below:

- Efforts in the field to visually identify grossly contaminated soil were highly subjective and visual observations were not supported by either field screening or analytical laboratory analysis. The Site mainly consists of fill material which is generally dark in color and includes random debris (glass bottles, etc.). A targeted sample of a discolored, darker layer at the water table had Total SVOCs plus Tentatively Identified Compounds (+TICs) of 198.2 parts per million (ppm), well below criteria in the ROD of 500 ppm. Visual coloration of soil was not a consistent indication of gross contamination;
- Using the criterion established in the ROD of 500 ppm Total SVOCs+TICs, laboratory analytical results were mapped to identify areas that exceeded this criterion. A total of forty-four samples were analyzed, of which only six centralized locations had concentrations of Total SVOCs+TICs in excess of the 500 ppm criteria. These locations that exceeded criteria were proposed to be excavated as part of the RDRAWP;
- Attempts were made at the time to sample below structures. The concrete pad south of the former tank farm could not be breached, nor could the interior of the tank rings within the former tank farm. A follow-up investigation of the tank rings was conducted on April 21, 2009. Three borings were spaced throughout each of the four former tank rings and completed using a hand auger. Refusal was encountered between 12 inches and 18 inches below the top of each concrete ring. Based on the sound and feel of the auger on the encountered material, the base was believed to be concrete. These structures were proposed to be demolished in-situ and investigated as part of the RDRAWP (refer to **Section 2.3**); and
- Attempts to visually catalogue and map surface and subsurface piping and structures on the Site (refer to Section 8 of the ROD) were incomplete due to dense vegetation and the scattered nature of the piping. Piping was observed to be primarily disconnected pieces on grade with a red-colored exterior indicative of water piping for fire suppression. Piping was proposed to be removed for scrap value to the extent practicable as part of the RDRAWP.

2.4 SUMMARY OF REMEDIAL ACTIONS

Remedial Activities were conducted and administered on behalf of ExxonMobil by Roux Associates, Inc. and Woodard & Curran. The selected remedy for the Site included excavation and removal of soil that was grossly contaminated with weathered petroleum, and removal of former piping and structures as necessary to allow adequate Site grading in preparation for capping (refer to **Section 3.0**). Remedial actions were conducted in the vicinity of well OW-5A, within the former tank pads/rings, and under the concrete pad south of the former tank farm as depicted on **Figure 2**. The following field screening “shake test” method and analytical protocol were used to identify grossly contaminated soil:

- If a soil layer in excess of six inches thick exhibited evidence of a petroleum sheen or petroleum globules, a sample of the soil was placed in a 4-ounce or 9-ounce soil jar and submerged in distilled water. The soil was stirred to break up any clumps and then allowed to settle for five minutes. If a continuous product layer developed, with a meniscus on the surface, the soil was considered "grossly contaminated" and removed.
- When excavation of "grossly contaminated" soil was completed, soil samples at the extent of the excavation (sidewalls and base) were collected and submitted for laboratory analysis of SVOCs[1]. If the total SVOC results exceeded 500 ppm, additional iterations of excavation and sampling were conducted at those locations until no further exceedances were encountered.

Field work commenced September 24, 2010, and was completed on February 16, 2011. Activities were documented in the Remedial Design Remedial Action Report dated May 31, 2011, and are summarized below (also refer to **Figures 2 and 3**):

- Soil under remaining concrete structures associated with the former terminal was investigated by mechanically breaching the concrete and excavating test pits into the underlying soil. Each test pit was excavated approximately two to three feet into the water table and inspected for evidence of grossly contaminated soil using the shake test method (above). All shake tests conducted during these test pitting activities were negative for gross contamination. Soil samples collected from each test pit were in compliance with the criterion for Total SVOCs of 500 ppm, with results ranging from no SVOCs detected to 51 ppm Total SVOCs. The smaller, northwestern tank pad (Tank Pad 3) was rubblized with a hoe-ram attachment which created hazards with concrete pieces and rebar. The remaining concrete structures were left as they were and test pits were backfilled with their source material. Protruding pieces of rebar were cut level with the concrete pieces from Tank Pad 3;
- In preparation for a pre-excavation meeting with the NYSDEC, surface soil was removed in accordance with the excavation area proposed in the RDRAWP. On September 27, 2010, a pre-excavation meeting was conducted at the Site. At the time, water in the excavation was deemed to interfere with the ability to determine if the soil was impacted. The NYSDEC and ExxonMobil exchanged correspondence between September 28 and November 8, 2010 regarding excavation and dewatering needs. Additional delineation of soil in the OW-5A excavation area was conducted by test pit and Geoprobe® and soil samples were screened for evidence of grossly contaminated soil using the shake test method. A temporary dewatering system was constructed on-site on November 15, 2010, including frac tanks, filtration, and treatment by granular activated carbon prior to discharge to the Hudson River under the Petroleum Spill Stipulation Agreement Guidance;
- The excavation was segregated into north, central and south sections by earthen berms constructed from excavated material. Following excavation of the north and central sections, shake test and analytical laboratory results for confirmation samples were in compliance with criteria and these sections were backfilled in December 2010. For the remaining south excavation

[1] Per discussion with NYSDEC, TICs were applicable only to dye impacts and not required to assess petroleum impacts.

area, four locations with a shake test that was positive for gross contamination were excavated. The south section was dewatered, excavated and backfilled in January and February 2011;

- Approximately 950 cubic yards of soil were removed from the AOC 1 excavation area during execution of the RDRAWP. All soil confirmation samples were in compliance with the criterion for Total SVOCs of 500 ppm, with results ranging from 0.57 to 53 ppm Total SVOCs;
- During excavation activities, piping and pipe fragments were found within the Site fill. A corrugated metal pipe and a clay pipe were encountered in the south end of the excavation. The corrugated metal pipe contained free-flowing clear water. The shake test for material found in the clay pipe was positive for gross contamination; however, a sample of material in the clay pipe submitted for laboratory analysis was in compliance with[2] the site-specific criteria for Total SVOCs of 500 ppm;
- A magnetometer was used to facilitate tracing subgrade pipe. Remnant pieces of pipe in the fill were removed and a 42" corrugated metal pipe was located and traced to a catch basin near the railroad tracks across the Eastern Parcel of the Tappan Terminal site (AOC 2) with no surface features on property (AOC 1). Attempts were made to locate the clay pipe. To the west, a concrete slab was removed with a 12 inch opening, presumably for the clay pipe; however, the pipe was not found. To the east of the excavation area, two trenches were installed parallel to the excavation; however, the clay pipe was not observed. The clay pipe and other pipes observed were believed to be remnant pieces in fill material ubiquitous to the excavation area; and
- Various additional items were removed from the Site area in preparation of the final remedy and future redevelopment. Removal of derelict boats related to the former Pioneer Boat Club south of the Site was completed on October 19, 2010. Demolition of the former terminal dock was conducted and completed between November 16 and 22, 2011. Roll-offs of scrap metal for recycling were removed on December 17, 2010 and March 8, 2011.

[2] Correction to May 31, 2011 RDRAR.

3. FINAL REMEDIAL DESIGN

In accordance with the ROD, ExxonMobil submitted the Final RDRAWP for a soil cap as an Engineering Control to render the Site vegetated and secure until such time as future Site use is determined and the Site is redeveloped.

As described in **Section 4.0**, the final Engineering Control includes a berm along the river shore for erosion protection, and a demarcation layer (geotextile filter fabric and existing concrete surfaces) at the existing on-site soil surface to identify the presence of potentially contaminated fill beneath it, and to provide a physical barrier against unintended penetration. The demarcation layer was nominally covered with two feet of clean soil with the top six inches capable of supporting vegetation. The Site surface was then mulched and hydroseeded, with shrubs additionally planted in the shore area, to promote a suitable ground cover.

Future redevelopment of the Site may include buildings, parking lots, and or paved areas that will additionally render Site soils inaccessible and act as barriers to incidental or accidental exposure. At that time, these improved features must be incorporated into the soil cap and SMP as described in **Section 5.0**.

So that future activity at the Site will not compromise the integrity of the Engineering Control, and to prevent future exposure to contaminated fill, an Environmental Easement was filed on the property deed (refer to **Section 6.0**). This easement specifies the requirements for conducting intrusive activities beneath the cover system. These requirements include NYSDEC, NYSDOH and Village of Hastings-on-Hudson notification and approval, health and safety planning, soil management and disposal planning, and barrier repair requirements prior to any work involving disturbance of the final cover. New structures will be permitted at the Site provided that an effective barrier to subsurface contamination is maintained and building foundations are properly ventilated to mitigate exposure to soil vapor.

3.1 REMEDIAL OBJECTIVES

Per the ROD, remedial goals for the Site were established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The remedy was selected to eliminate or mitigate all significant threats to the public health and/or the environment presented by the soil contamination identified at the Site, through the proper application of scientific and engineering principles. The remediation goals for AOC 1 are to prevent exposure (inhalation, direct contact with and/or ingestion) to impacted Site soil.

The selected remedy for the Site included remedial actions completed for AOC 1 in 2010 and 2011 including excavation and removal of soil that was grossly contaminated with weathered petroleum, removal of former piping and any other structures, as necessary, to allow adequate Site grading (refer to **Sections 2.3 and 4.3**). Finally, the entire Site was covered with an Engineered Control (i.e., soil cap) to render the Site soils inaccessible (refer to **Sections 4.1 and 4.2**).

3.2 CONTAMINATION REMAINING AT THE SITE

Table 1 and **Figure 3** summarize the results of all soil samples remaining at the Site after completion of Remedial Action that exceed the Track 1 (unrestricted) SCOs; no soil samples remain after completion of Remedial Action that exceed the site-specific Action Level of 500 ppm Total SVOCs+TICs.

Since contaminated soil and groundwater remain beneath the Site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls are described in **Sections 4.0 and 5.0**. Long-term management of these Engineering and Institutional Controls and residual contamination will be performed under the SMP approved by the NYSDEC (refer to **Section 5.0**).

3.3 SOIL CAP FOR AOC 1

Since operations shut-down in 1985, the Site had naturally vegetated. The vegetative cover was cleared and grubbed in preparation for a soil cap to be maintained under the SMP as outlined in **Sections 4.0 and 5.0**. If the Site is redeveloped, Site improvements such as new pavement or building slabs may be incorporated into the soil cap as supplemental barrier surfaces.

The cap consists of a layer of filter fabric nominally covered by two feet of clean soil (refer to **Section 4.0**) with the top six inches of a quality to support vegetation. Work for the cap was guided by the project specific Health and Safety Plan for the Site, including ExxonMobil's Loss Prevention System and Operations Integrity Management Systems requirements (reference to Appendix B of the November 2007 Pre-Design Investigation Work Scope, it is ExxonMobil policy that all personnel working on-site receive safety training commensurate with their task). Equipment decontamination and material management was implemented, as needed, in accordance with the Quality Assurance Project Plan and Contaminated Materials Management Plan included as Appendices C and D in the RDRAWP (also refer to **Section 4.5**).

3.4 PERMITTING

A review was conducted of potential permitting requirements for the cap installation work and the following permits were obtained as indicated.

NYSDEC State Environmental Quality Review Act (SEQRA) – Not Required

In accordance with 6 NYCRR Part 617.5(c)(29), the project qualified as a Type II (insignificant) action being a "particular course of action specifically required to be undertaken pursuant to an order". Such actions have been determined not to have a significant impact on the environment or are otherwise precluded from review under the SEQRA.

Village of Hastings-On-Hudson Tree Removal Permit

Construction of the cap required that all vegetation be cleared. Clearing included the removal of trees that were under the jurisdiction of the Village of Hastings-On-Hudson Tree Preservation ordinance. Preservation of these trees was not practical considering the grade changes and fill requirement. Without an established plan for re-development of the Site, tree replacement would be random and temporary until a development plan was implemented. Accordingly, in lieu of tree replacement on-site, an agreement was proposed to fund planting trees elsewhere in the Village of Hastings-On-Hudson. The Village granted the permit on December 6, 2011. Funding was provided to the Village of Hastings-on-Hudson to replace trees exclusive of invasive species (26 trees) at its discretion (refer to **Appendix A**).

Village of Hastings-On-Hudson Floodplain Development Permit:

A Floodplain Development Permit was required under the Village of Hastings-on-Hudson Flood Damage Prevention Ordinance. The parcel comprising AOC 1 is almost entirely within the 100-year flood hazard zone. The proposed capping project nominally covered the Site with two feet of soil subject to grading. The limit of the cap is just landward of Mean High Tide (elevation 1.85 feet). Beginning at that limit, the Site was bordered by an erosion protection berm nominally at elevation six feet, then graded to drain toward the Hudson River at a shallow slope. Because the adjacent Hudson River is a tidal waterbody, flood storage is not a requirement under the FEMA regulations, and the capping work would not alter the Flood Insurance Rate Map (Panel Number 36119C0307F). A formal Floodplain Development Permit application pursuant to the applicable provisions of the Village Code was submitted on July 20, 2012. A checklist/form for the Floodplain Permit Application was completed and submitted on July 30, 2012. Comments from the Village and its consultant were received by electronic mail on September 27, and a response was provided on October 1, 2012. Additional comments were exchanged by electronic mail on October 4, 2012 and the Flood Plain Development Permit was approved on October 5, 2012 (refer to **Appendix A**).

During cap construction, interim surveying activities were conducted on February 21, 2013 and a progress print was provided to the Village of Hastings-on-Hudson and NYSDEC on March 7, 2013. Surveying activities, including installation of five permanent survey monuments near the shore, were completed on March 22, 2013. A representative of the Village of Hastings-on-Hudson conducted an interim Site visit on April 19, 2013 and the completed as-built survey was forwarded as requested by the Village on July 1, 2013. There were no comments on the completed survey.

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (the "General Permit")

Conformance to the NYSDEC General Construction Stormwater Permit was required for the cap installation. A Stormwater Pollution Prevention Plan (SWPPP) and MSP SWPPP Acceptance form were drafted and submitted to the Village of Hastings-on-Hudson on September 20, 2012. Comments from the Village and its consultant were received on September 27, and a response was provided on October 1, 2012. The signed MS4 Acceptance Form was received and provided to the NYSDEC with the Notice of Intent on October 1, 2012 (refer to **Appendix A**). The SWPPP was finalized to include comments on both the SWPPP and Floodplain Development Permit, on October 5, 2012 and implemented with cap construction activities. On November 19, 2012, inspections were increased to twice per week to accommodate Site disturbance greater than 5 acres, and transitioned back to once per week following complete application of fill material on February 5, 2013. Site visits were conducted weekly through June 2013 while the main cap area vegetated; however, the area next to the river vegetated more slowly due to the slower growing process for the conservation seed and shrubs required near shore. Despite the slower vegetation rate, turkey vultures and geese, including goslings, were seen and deer tracks were visible with evidence of feeding on the shrubs and vegetation. With approximately 80% of the Site vegetated, inspections transitioned to monthly in July 2013, coordinated with significant rain events (greater than 3" of rain in 24 hours) as needed, in advance of final stabilization and monitoring under the Site Management Plan (refer to **Section 5.0**). Temporary erosion control measures, including silt fence and hay bales, will be maintained as needed until final stabilization.

4. CAP CONSTRUCTION

The Site cap required by the ROD was designed to act as a barrier to prevent incidental exposure to surface soils and to act as a warning layer to prevent accidental contact to soils during future on-site activities. The cap covers the entire Site and consists of a demarcation layer installed across open, unimproved areas covered by two feet of imported fill. The limit of the cap is just landward of Mean High Tide with no construction work performed below Mean High Tide. The Site was graded to drain toward the Hudson River at a shallow slope. The work generally progressed across the Site from north to south.

A pre-construction meeting was conducted on October 10, 2012 and Site activities commenced with mobilization on October 11, 2012. A "Notice to Mariners" was provided to the Coast Guard on October 11, 2012 and remedial program signs were posted at the Site. A pesticide application for bees and an herbicide application for phragmites were conducted on October 17, 2012. The construction equipment decontamination pad was completed on the neighboring eastern parcel (AOC 2) on November 14, 2012 (refer to **Section 4.5.1**).

The existing embankments were intended to be removed and spread into the low areas as part of the regrading process. Erosion control measures, including silt fencing and hay bales, were installed in preparation for Site work. On November 13, 2012, a high tide inundated silt fencing and hay bales installed the previous day. Alternate erosion controls were proposed to include filter fabric and stone in place of silt fence, hay bales, and erosion control blankets along the shore. The embankments were deemed beneficial to supplement erosion control for the Site, and NYSDEC requested that the existing berms be retained and incorporated into the cap to enhance erosion protection. Berms were made continuous at a nominal elevation of six feet and incorporated into the cap (refer to **Section 4.2**).

At the request of the Village of Hastings-on-Hudson, cap material was brought to the Site by barge to the extent practicable to mitigate truck traffic in the village. A crane barge was mobilized to the Site on November 19, 2012 and fill material was imported to the Site by hopper barge from November 19 until December 18, 2012 (refer to **Section 4.5.2**).

The NYSDEC identified the Hudson River and its adjacent area as a significant fish and wildlife resource. As such, cap materials meeting ecological criteria and plantings to restore habitat were required within 50 feet of shore (refer to **Section 4.2**).

4.1 CAP INSTALLATION

The Site was cleared throughout and grubbed. Vegetation (trees, brush and plants) were removed from the Site by Westwood Organic Recycling of White Plains, New York, including 690 cubic yards of material between October 24 and December 13, 2012 (refer to **Appendix B**). Native Site soil was graded toward the river (east to west) with variations for existing concrete structures to remain as added barriers to subsurface soils. The cap consists of a layer of filter fabric nominally covered by two feet of compacted, imported fill (1.9 to 4.2 feet) with the top six inches of a quality to support vegetation (refer to **Section 4.5.2**) except for a gravel-covered access road constructed at the gated entrance along the north property line on December 7, 2012 (refer to **Appendix C**). Air monitoring was conducted during grading and capping activities (refer to **Section 4.5.3**). The 42” storm sewer pipe that traverses the property (refer to **Appendix C**) was protected from the heavy truck traffic with temporary metal plates during

construction activities, and fill material was mounded over the pipe for passive settling in lieu of compaction.

Grading and capping activities (placement of fill material) were completed on February 6, 2013. Hydroseeding was postponed until an as-built survey could be reviewed by the Village of Hastings-on-Hudson. Interim surveying activities were conducted after weather-related delays on February 21, 2013 and a progress print was provided to the Village of Hastings-on-Hudson and NYSDEC on March 7, 2013. Grading was accepted by the Village and the soil cap was hydroseeded on March 28 and 29, 2013. Heavy equipment was progressively demobilized in March and was substantially completed with demobilization of the excavator on March 29, 2013. Information on the filter fabric demarcation layer (Geotex 401 nonwoven polypropylene geotextile) and hydroseeding materials is included in **Appendix A** and information on imported fill materials is included in **Appendix D**.

4.2 SHORE AREA

The former terminal earthen berm was retained and augmented with new construction to be continuous along the shore at a nominal elevation of six feet (5.9 to 6.7 feet). Existing berms were made elevation four feet, covered with filter fabric, and nominally capped with two feet of new 3-8" stone material to match existing stone (refer to **Appendix A**). New construction consisted of imported base material (refer to **Section 4.5.2**) wrapped in filter fabric to match the existing construction at elevation four feet. Stone rip rap to match existing (new 3-8" stone) was used to complete coverage of the new and existing construction to elevation six feet. The top two feet of stone rip rap was choked with soil and seeded with a conservation seed mix (refer to **Appendix A**) to promote erosion control on March 28 and 29, 2013. Air monitoring was conducted during grading and capping activities (refer to **Section 4.5.3**). Temporary erosion control measures, including silt fence and hay bales, were installed where the grade met the berm elevation in areas to the north and west (refer to **Appendix E**).

In addition to the conservation seed, the area inside the berms to fifty feet from shore was planted with shrubs consisting of 612 Speckled Alder plants (Alnus incana) with a wetland indicator status of FACW in two rows and 1,538 Black Chokeberry plants (Aronia melanocarpa) with a wetland indicator status of FAC in five rows. Upon their availability, shrubs were planted between April 29 and March 6, 2013. Shrubs were planted on 5-ft centers as seedlings or rooted stock and installed by hand with a rooting amendment to promote growth (refer to **Appendix A**). Remaining construction equipment was demobilized on May 6, 2013 upon completing shrub plantings.

4.3 PIPING AND OTHER STRUCTURES

Remnant aboveground piping, remnant structures and miscellaneous debris encountered during Site activities were removed from the Site. Following notification to the owner, the last derelict boat belonging to the Pioneer Boat Club was removed from the Site on December 3, 2012.[3] Miscellaneous debris (metal pipe, wood pilings, fencing, etc.) were segregated for scrap value as applicable, collected in roll-offs, and removed from the Site, including the removal of 40 cubic yards of scrap steel by Brookfield

[3] On May 3, 2013, the Village of Hastings-on-Hudson provided notice by electronic mail that the boat club structure south of the property was declared unsafe for occupancy and use.

Resource Management of Elmsford, New York. Power poles were removed from the Site with the exception of poles that service the AOC 3 groundwater treatment operations (refer to **Appendices B and C**).

Following initial clearing activities, a separation and exposed section was discovered in the 42" storm pipe that traverses the property. The breach was repaired on October 26, 2012 in advance of Hurricane Sandy. Filter fabric was placed over the separation and sealed with high strength concrete and reinforcing wire. The section of pipe was then covered with stone (refer to **Appendices C and E**).

According to Village records, the Village of Hastings-on-Hudson has a storm sewer easement along the north property line in an area that coincided with a drainage swale north of the former terminal earthen berm. The swale was reviewed by Village representatives on November 1, 2012 and did not appear to collect a large amount of water. The area was graded and capped per the ROD and project plans.

A large concrete vault was discovered on December 7, 2012 south of the former terminal tank farm near well MW-S1 (refer to **Figure 2** and **Appendix C**). Surface grates were connected to an in-ground vault approximately 20 feet x 12 feet x 9 feet deep that likely provided localized containment for the business portion of the terminal (trucking operations, loading rack, etc.). The feature was observed by representatives of the Village of Hastings-on-Hudson and NYSDEC on December 11, 2012. Trenches were dug on the west, east and south sides adjacent to the structure to approximately 9 feet (the depth of the structure). To the north (in the direction of the former terminal tank farm), soil removal was limited to a depth of 3 feet to avoid damaging wells. The water level in the structure remained steady at a level higher than the surrounding water table. Based on field observations, no pipes were deemed connected to the structure and the structure was backfilled with Item 4 stone material and openings were covered with steel plates before capping. Additional concrete features (pads in the vicinity of the former terminal loading rack and docking facilities) were also left in place and incorporated into the cap (refer to **Appendix C**).

4.4 WELLS

Existing monitoring wells were extended above the cap and protected with locking steel casings. A summary of wells and pertinent information is included in **Appendix A** and wells are depicted in **Appendix C**.

4.5 MATERIAL MANAGEMENT

Equipment decontamination and material management was implemented, as needed, in accordance with the Quality Assurance Project Plan and Contaminated Materials Management Plan included as Appendices C and D in the RDRAWP and as summarized below. Three drums of waste material were disposed off-site as non-hazardous waste by Veolia Environmental Solutions LLC in Flanders, New Jersey on May 8, 2013 (refer to **Appendix B**).

4.5.1 Construction Equipment Decontamination

The construction equipment decontamination pad was completed on November 14, 2012 off-property on the neighboring eastern parcel (AOC 2) near the concrete wall called out on **Figure 2** (also refer to field notes included in **Appendix E**). Construction equipment was decontaminated between grading and

capping activities when equipment transitioned from contact with existing Site material to contact with imported fill material. The equipment decontamination pad was removed on January 7, 2013 following completion of subgrade work.

4.5.2 Imported Fill Material

Fill material brought to the Site met the requirements for restricted residential Site use as specified in the ROD and set forth in 6 NYCRR Part 375-6.7(d). Fill material within 50 feet of the shore additionally meet the SGC values for protection of ecological resources. Documentation for each fill source, including base material and top soil, was provided to the NYSDEC for approval before use on-site in accordance with DER-10 5.4(e)5 and 6. Screening data and source information for imported fill material were sent to the NYSDEC and Village of Hastings-on-Hudson, and the NYSDEC provided a sampling plan by electronic mail on October 25, 2012. Sample results were forwarded on November 7 and November 20, 2012. Fill materials were accepted by the NYSDEC, including a visit by the NYSDEC to the supplier to view the top soil prior to delivery. The crane barge to transfer fill materials from hopper barges to the Site mobilized on November 19, 2012 and fill material was imported to the Site by barge from November 19 until December 18, 2012. On December 12, 2012, verbal approval was granted by NYSDEC for an additional 3,000 cubic yards of the base material to accommodate construction of continuous berms (refer to **Section 4.2**). Screening data and source information for additional top soil fill material were forwarded on January 16 and 23, 2013 for use greater than 50 feet from shore and on January 24, 2013 for use within 50 feet of shore. Use as proposed was approved (refer to **Appendix C**). An extra 35 tons of top soil, suitable for site-wide use, was stockpiled in reserve off property on the eastern parcel (AOC 2). Refer to **Appendix D** for fill material documentation and **Appendix F** for analytical laboratory data.

4.5.3 Air Monitoring

During active grading of native Site soils, air monitoring was conducted for volatile organic compounds (VOCs) and fugitive dust (particulate) monitoring to protect Site workers and the community. On each day of grading activity, air monitoring was completed upwind, near the activity in the worker's breathing zone, and downwind. Monitoring for VOCs included Photoionization Detectors equipped with 10.0 or greater eV lamps, both hand-held and monitoring stations capable of calculating 15-minute running average concentrations. Particulate monitoring stations were capable of measuring particulate matter less than 10 micrometers in size (PM-10) integrated over a period of 15 minutes. If the ambient air concentration of total VOCs at the downwind location exceeded 5 ppm above background for a 15-minute average, or if the downwind PM-10 particulate level exceeded 150 micrograms per cubic meter for a 15-minute period, or if visible airborne dust was observed, work activities were halted for responsive actions.

Upon complete application of base material on January 19, 2013, air monitoring transitioned to monitoring for particulates only until February 5, 2013 when application of topsoil was completed. Air monitoring data provided to the NYSDEC and Village of Hastings-on-Hudson during the course of the project is included in **Appendix G**. While some anomalous air monitoring readings were recorded due to maintenance needs, nearby vehicular traffic, and weather related interferences (fog, rain and snow), no exceedances of action levels were verified that required response actions during the grading activities.

4.6 SITE SECURITY

Gated fencing was installed at the west end of Zinsser Bridge on January 18, 2013 with signage posted to discourage trespassing. There is an existing gated entrance along the north property line and existing fencing along the rail line to the east. The erosion protection berm and Hudson River discourage Site access from the west.

4.7 DATA VALIDATION AND USABILITY

Ten percent of the laboratory analytical data for soil samples (five discrete samples and three composited samples) were reviewed by a third party independent data validation contractor, Alpha Geoscience of Clifton Park, New York, in accordance with the NYSDEC Data Usability Summary Report (DUSR) guidelines. Data validation criteria that were reviewed for representative samples included: sampling and analysis date, sample custody, holding times, sample handling and preservation procedures, field blank results, field and laboratory duplicate sample results, surrogate recoveries, matrix spike/matrix spike duplicate results, laboratory control standards, laboratory method blanks, lot assignment reports, and miscellaneous observations. Based on validation results, the data were acceptable and deemed usable with some issues that are identified and discussed in the DUSR included in **Appendix H**. Data that did not meet performance criteria was flagged with qualifiers describing the data's usability for project decisions and the report tables were updated to include such qualifiers (refer to **Appendix D**).

4.8 AOC 2 CAP SOIL UNLOADING AREA

Activities to cap the AOC 2 eastern parcel of the Former Tappan Terminal site commenced by others in July 2013. A soil unloading area was constructed on the AOC 1 western parcel for the transportation of imported material by barge to the AOC 2 eastern parcel. Representatives working on the cap for AOC 2 sent an email to NYSDEC requesting that a portion of the topsoil stockpiled from the soil unloading area on the AOC 1 western parcel be used for the AOC 2 eastern parcel within 50 feet of shore. Topsoil for areas greater than 50 feet from shore within the soil unloading area on the AOC 1 western parcel were replaced as needed with topsoil meeting Site use (restricted residential) criteria. The NYSDEC approved the proposal by electronic mail on October 1, 2013. Related activities for the AOC 2 soil cap on AOC 1 land, including replacing the soil cover and plantings, were completed in June 2014 (refer to **Appendices C and I**).

5. SITE MANAGEMENT PLAN (SMP)

The Site is presently in a stabilized state following implementation of the cap and will be maintained under the SMP, issued separately, which includes a description of the activities to be undertaken upon project completion when all disturbed areas of the Site have achieved final stabilization. Annual certification of the Institutional and Engineering Controls will be prepared and submitted by a professional engineer stating that the Controls remain in place and continue to protect the public health and the environment. Annual certification of the SMP and components of the remedy will continue until a reduced frequency is approved by the NYSDEC.

5.1 SMP FOR OPEN SPACE

The SMP was drafted for the Site cap as an Engineered Control and barrier surface during Site redevelopment and includes:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- Descriptions of the provisions of the Environmental Easement including any land use, and groundwater use restrictions;
- A provision for evaluation of the potential for soil vapor intrusion, if applicable, should the Site be re-developed;
- Provisions for the management and inspection of the Site cap (85% survival of plantings and less than 5% cover of invasive species within 50 feet of shore);
- Maintaining Site access controls and NYSDEC notification;
- Periodic reviews and certification of the Institutional and/or Engineering Controls; and
- A schedule of monitoring and frequency of submittals to the NYSDEC.

5.2 FUTURE REDEVELOPMENT

Upon redevelopment, once the development plan is known, the SMP will be implemented and/or modified for the following circumstances:

- Identification of any new use restrictions on the Site;
- Provisions for the construction of utility corridors;
- Provisions for the continued proper operation and maintenance of the components of the remedy (i.e., those required for AOC 1 and AOC 3);
- Provisions for evaluating the potential for vapor intrusion to any buildings developed on the Site, including provision for mitigation of such impacts if identified; and
- Update provisions for management of the Site cap to restrict excavation below the demarcation layer. Protocols will be updated and modified to handle necessary excavations including soil handling procedures, protections for the health and safety of workers and the nearby community, and cover restoration subject to approval of the NYSDEC.

6. ENVIRONMENTAL EASEMENT

Environmental Conservation Law [ECL 27-1318(b)] requires that the owner and/or responsible party of an inactive hazardous waste disposal site where Institutional or Engineering Controls are employed must execute an Environmental Easement. Upon approval of this FER, an Environmental Easement as required by the ROD will provide the following restrictions:

- Limit the use and development of the property to restricted-residential, recreational, commercial and industrial uses;
- Require compliance with the approved SMP (refer to **Section 5.0**);
- Restrict the use of groundwater as a source of potable or process water without proper treatment;
- Prohibit agriculture or vegetable gardens on-site; and
- Require a periodic certification of the Institutional and Engineering Controls.

The final Environmental Easement will include supporting documentation provided by ExxonMobil as follows:

- Copies of the current deeds;
- Survey drawings, and metes and bounds descriptions of the property;
- Subordination agreements for any existing easements;
- Updated title reports; and
- Title insurance policies naming the NYSDEC as an additional insured.

Upon receipt of the fully-executed Environmental Easement document from NYSDEC, ExxonMobil will undertake the following actions:

- Within 30 days of execution, file the easement with the recorder of Westchester county in which the Site is located;
- Provide a copy of the recorded easement to the Village of Hastings-on-Hudson; and
- Provide NYSDEC with a copy of the easement, a certification by the recording officer that it is a true and faithful copy, and a certification that a copy has been provided to the Village of Hastings-on-Hudson.

The Environmental Easement for the Site was executed by the NYSDEC on February 3, 2016, and filed with the Westchester County Clerk on February 12, 2016. The County Recording Identifier number for this filing is 560413480. A copy of the easement and proof of filing is provided in **Appendix J**.

7. REFERENCES

"Ground-water and Soil Quality Investigation at the Mobil Oil Corp. Tappan Terminal"; Leggette, Brashears & Graham, Inc.; Wilton, CT; March 1987.

"Monitor Well Replacement, Mobil Oil Corp. Tappan Terminal No. 31-020"; Leggette, Brashears & Graham, Inc.; Wilton, CT; December 1993.

"Remedial Investigation Report, Tappan Terminal Site"; Dvirka and Bartilucci Consulting Engineers; Syracuse, NY; September 1999.

"Feasibility Study, Tappan Terminal Site"; Dvirka and Bartilucci Consulting Engineers; Syracuse, NY; July 2000.

"New York Standards and Specifications for Erosion and Sediment Control; NYSDEC; August 2005.

"Record of Decision, Tappan Terminal Site"; New York State Department of Environmental Conservation; September 2006.

"Pre-Design Investigation Work Scope, Former Mobil Terminal Property, Hastings-on-Hudson, New York, Former Tappan Terminal Site No. 3-60-015"; Woodard & Curran; Cheshire, CT; November 19, 2007, Rev. 2.

"Pre-Design Investigation Report, Former Mobil Terminal Property, Hastings-on-Hudson, New York, Former Tappan Terminal Site No. 3-60-015"; Woodard & Curran; Cheshire, CT; May 13, 2008.

Letter responding to NYSDEC comments on the May 13, 2008 Pre-Design Investigation Report submitted by ExxonMobil on August 22, 2008.

"Draft Interim Remedial Design Work Plan, Former Mobil Terminal Property, Hastings-on-Hudson, New York, Former Tappan Terminal Site No. 3-60-015"; Woodard & Curran; Cheshire, CT; June 4, 2009.

"CP-43: Groundwater Monitoring Well Decommissioning Policy"; NYSDEC; November 3, 2009.

"SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-10-001"; NYSDEC; effective January 29, 2010.

"Site Management Plan Template"; NYSDEC; March 2010.

"Order on Consent and Administrative Settlement, Index # A3-0612-1208, Site # 360015"; New York State Department of Environmental Conservation; signed March 4, 2010 and effective March 14, 2010.

"DER-10/Technical Guidance for Site Investigation and Remediation"; NYSDEC; May 3, 2010.

Letter to ExxonMobil from NYSDEC with comments on the June 4, 2009 Interim Remedial Design Work Plan sent May 21, 2010.

"Remedial Design/Remedial Action Work Plan, Former Mobil Terminal Property, Hastings-on-Hudson, New York, Former Tappan Terminal Site No. 3-60-015"; Woodard & Curran; Cheshire, CT; June 15, 2010.

Letter to ExxonMobil from NYSDEC approving the June 15, 2010 Remedial Design/Remedial Action Work Plan sent June 17, 2010.

Correspondence between the NYSDEC and ExxonMobil regarding excavation of grossly contaminated soil and dewatering dated September 28, September 29, September 30, November 3, and November 8, 2010.

Letter responding to NYSDEC comments on excavation areas submitted by ExxonMobil on January 18, 2011.

"Remedial Design/Remedial Action Report, Former Mobil Terminal Property, Hastings-on-Hudson, New York, Former Tappan Terminal Site No. 3-60-015"; Woodard & Curran; Cheshire, CT; May 31, 2011.

"Revised Interim List of Invasive Plant Species in New York State"; NYSDEC; May 14, 2012.

Letter to ExxonMobil from NYSDEC with comments on the December 27, 2011 "Final Remedial Design/Remedial Action Work Plan and Site Management Plan" sent June 14, 2012.

Response to NYSDEC comments and a revised "Final Remedial Design/Remedial Action Work Plan and Site Management Plan" submitted by ExxonMobil on July 13, 2012 and updated August 31, 2012.

Letter to ExxonMobil from NYSDEC approving the August 31, 2012 update to the Final Remedial Design/Remedial Action Work Plan for the Western Parcel AOC 1 with modification sent September 10, 2012.

"Stormwater Pollution Prevention Plan (SWPPP), Former Mobil Tappan Terminal Soil Cap for AOC 1"; Woodard & Curran; Cheshire, CT; Revised October 5, 2012.

"FER Template"; NYSDEC; October 2015.

"Former Tappan Terminal, AOC1, Site Management Plan"; Woodard & Curran; Cheshire, CT; Revised March 2016".

Table 1. Summary of Remaining Soil Contamination Above Unrestricted Levels - Results of Soil Samples Under Concrete Structures, Former Tappan Terminal, Hastings-on-Hudson, New York (2010)

Parameter (Concentrations in µg/kg)	Site-Specific Standards	Unrestricted Use Criteria	**Sample Designation:**	CP	CP	TP1-1	TP1-1	TP1-2	TP1-2	TP1-3	TP1-3	TP2-1	TP2-1	TP2-2	TP2-2	TP2-3	TP2-3	TP2-3DUP	TP3	TP3	TP4	TP4
			Sample Date:	9/15/2010	9/15/2010	9/23/2010	9/23/2010	9/23/2010	9/23/2010	9/23/2010	9/23/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/20/2010	9/14/2010	9/14/2010	9/14/2010	9/14/2010
			Sample Depth (ft bls):	3	6	2	5	2.5	5	2	5	3	6	3	6	1.5	4	4	2	4	2	4
1,2,4,5-Tetrachlorobenzene				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2,2'-oxybis (1-chloropropane)				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
2,3,4,6-Tetrachlorophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2,4,5-Trichlorophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2,4,6-Trichlorophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2,4-Dichlorophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2,4-Dimethylphenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	947	217 J	187 J	1400 U	240 U	1300 U	1300 U
2,4-Dinitrophenol				980 U	1100 U	1100 U	1200 U	850 U	1100 U	990 U	1400 U	1100 U	790 U	940 U	1100 U	1100 U	1000 U	900 U	5700 U	960 U	5300 U	5200 U
2,4-Dinitrotoluene				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
2,6-Dinitrotoluene				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
2-Chloronaphthalene				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
2-Chlorophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2-Methylnaphthalene				448	110 U	110 U	120 U	85 U	110 U	99 U	140 U	84.3 J	46.3 J	94 U	110 U	175	89.8 J	76.3 J	570 U	96 U	2460	1860
2-Methylphenol		330		98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	104 J	100 U	90 U	570 U	96 U	530 U	520 U
2-Nitroaniline				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
2-Nitrophenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
3&4-Methylphenol		330		98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	764	100 U	90 U	570 U	96 U	530 U	520 U
3,3'-Dichlorobenzidine				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
3-Nitroaniline				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
4,6-Dinitro-2-methylphenol				980 U	1100 U	1100 U	1200 U	850 U	1100 U	990 U	1400 U	1100 U	790 U	940 U	1100 U	1100 U	1000 U	900 U	5700 U	960 U	5300 U	5200 U
4-Bromophenyl phenyl ether				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
4-Chloro-3-methylphenol				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
4-Chloroaniline				250 U	280 U	95.5 J	300 U	210 U	280 U	250 U	55.1 J	270 U	200 U	240 U	270 U	7140	376	522	1400 U	240 U	1300 U	1300 U
4-Chlorophenyl phenyl ether				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
4-Nitroaniline				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	1360	260 U	220 U	1400 U	240 U	1300 U	1300 U
4-Nitrophenol				490 U	560 U	540 U	600 U	430 U	550 U	490 U	710 U	530 U	390 U	470 U	530 U	570 U	520 U	450 U	2800 U	480 U	2600 U	2600 U
Acenaphthene		20,000		2120	56 U	80	38.9 J	28.3 J	55 U	34.4 J	145	613	224	47 U	53 U	150	173	158	280 U	48 U	2620	1040
Acenaphthylene		100,000		97.9	56 U	42.6 J	27 J	43 U	55 U	49 U	71 U	53 U	39 U	47 U	53 U	57 U	52 U	45 U	280 U	48 U	260 U	260 U
Acetophenone				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
Anthracene		100,000		1030	56 U	185	70.6	53.3	55 U	29.3 J	117	144	161	57.2	95.1	985	350	346	214 J	48 U	1480	1070
Atrazine				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
Benzaldehyde				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
Benzo[a]anthracene		1,000		693	41 J	356	145	129	55 U	107	96.8	178	270	140	194	3400	676	805	205 J	32.5 J	397	1280
Benzo[a]pyrene		1,000		317	30.5 J	306	143	113	55 U	97.7	61 J	137	231	126	146	2930	606	718	280 U	22.3 J	209 J	1040
Benzo[b]fluoranthene		1,000		554	43.2 J	276	157	114	55 U	115	77.1	130	249	136	188	3830	548	665	280 U	24.9 J	369	1420
Benzo[g,h,i]perylene		100,000		152	56 U	152	108	70.7	55 U	69.9	38.4 J	78.1	130	70	100	1700	362	448	280 U	48 U	153 J	617
Benzo[k]fluoranthene		800		232	22.6 J	199	103	82.6	55 U	69.7	49.4 J	128	82.6	107	139	1640	458	458	280 U	19.8 J	155 J	512
Bis(2-chloroethoxy)methane				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Bis(2-chloroethyl) ether				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Bis(2-ethylhexyl) phthalate				98 U	110 U	110 U	120 U	85 U	110 U	80.5 J	140 U	110 U	79 U	142	110 U	110 U	100 U	90 U	570 U	84 J	356 J	423 J
Butylbenzyl phthalate				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Caprolactam				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Carbazole				324	110 U	110 U	120 U	85 U	110 U	99 U	37.9 J	110 U	45 J	94 U	110 U	271	103	97	570 U	96 U	530 U	165 J
Chrysene		1,000		680	50.4 J	387	167	141	55 U	139	133	214	262	159	227	3220	749	858	201 J	45.6 J	503	1450
Dibenzo[a,h]anthracene		330		79.6	56 U	57.4	37.3 J	22.7 J	55 U	24.5 J	71 U	53 U	82.2	47 U	53 U	848	184	274	280 U	48 U	260 U	323
Dibenzofuran				1230	110 U	56.2 J	120 U	18 J	110 U	99 U	47.7 J	166	88.4	94 U	110 U	80.8 J	108	129	570 U	96 U	1190	451 J
Diethyl phthalate				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Dimethyl phthalate				103	98.5 J	128	120 U	85 U	110 U	63.9 J	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	316 J	81 J	530 U	520 U
Di-n-butyl phthalate				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Di-n-octyl phthalate				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Diphenyl				186	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	61.9 J	36.4 J	32.7 J	570 U	96 U	530 U	520 U
Fluoranthene		100,000		3660	80.5	769	273	267	55 U	206	502	470	557	348	476	9930	1610	1660	5290	86.9	1530	2560
Fluorene		30,000		1830	56 U	185	37.8 J	36.2 J	55 U	30 J	103	295	112	47 U	81.3	247	206	199	162 J	48 U	5020	1600
Hexachlorobenzene				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Hexachlorobutadiene				49 U	56 U	54 U	60 U	43 U	55 U	49 U	71 U	53 U	39 U	47 U	53 U	57 U	52 U	45 U	280 U	48 U	260 U	260 U
Hexachlorocyclopentadiene				980 U	1100 U	1100 U	1200 U	850 U	1100 U	990 U	1400 U	1100 U	790 U	940 U	1100 U	1100 U	1000 U	900 U	5700 U	960 U	5300 U	5200 U
Hexachloroethane				250 U	280 U	270 U	300 U	210 U	280 U	250 U	360 U	270 U	200 U	240 U	270 U	290 U	260 U	220 U	1400 U	240 U	1300 U	1300 U
Indeno[1,2,3-cd]pyrene		500		151	56 U	136	96.7	67.3	55 U	68.5	37.7 J	90.5	120	69.2	89.7	1730	335	396	280 U	48 U	260 U	630
Isophorone				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Naphthalene		12,000		193	107	47.6 J	60 U	43 U	55 U	49 U	36.7 J	189	157	67.4	49.8 J	290	177	162	280 U	48 U	260 U	650
Nitrobenzene				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
n-Nitrosodi-n-propylamine				98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
n-Nitrosodiphenylamine				250 U	280 U	410	300 U	210 U	280 U	250 U	715	270 U	200 U	240 U	270 U	290 U	260 U	64.1 J	1400 U	240 U	1300 U	1300 U
Pentachlorophenol		800		490 U	560 U	540 U	600 U	430 U	550 U	490 U	710 U	530 U	390 U	470 U	530 U	570 U	520 U	450 U	2800 U	480 U	2600 U	2600 U
Phenanthrene		100,000		5260	39.8 J	586	113	189	55 U	129	443	378	416	226	339	1310	1170	1140	282	30.7 J	10000	4480
Phenol		330		98 U	110 U	110 U	120 U	85 U	110 U	99 U	140 U	110 U	79 U	94 U	110 U	110 U	100 U	90 U	570 U	96 U	530 U	520 U
Pyrene		100,000		2720	79.6	769	282	274	55 U	228	436	436	547	293	386	7900	1260	1370	795	60.7	2000	3020
Total SVOC (in mg/kg)	500			22.0605	0.5931	5.2233	1.7993	1.6061	0	1.4924	3.1318	3.7309	3.7805	1.9408	2.5109	51.0137	9.7942	10.7651	7.465	0.4884	28.442	24.591

B - Analyte in associated blank
J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
mg/kg - Milligrams per kilogram
SVOC - Semivolatile Organic Compounds
Value exceeds or potentially exceeds NYSDEC Soil Cleanup Objective (SCO) for Unrestricted Use Criteria.

Table 1. Summary of Remaining Soil Contamination Above Unrestructed Levels - Results of Soil Samples in the Excavation Area, Former Tappan Terminal, Hastings-on-Hudson, New York

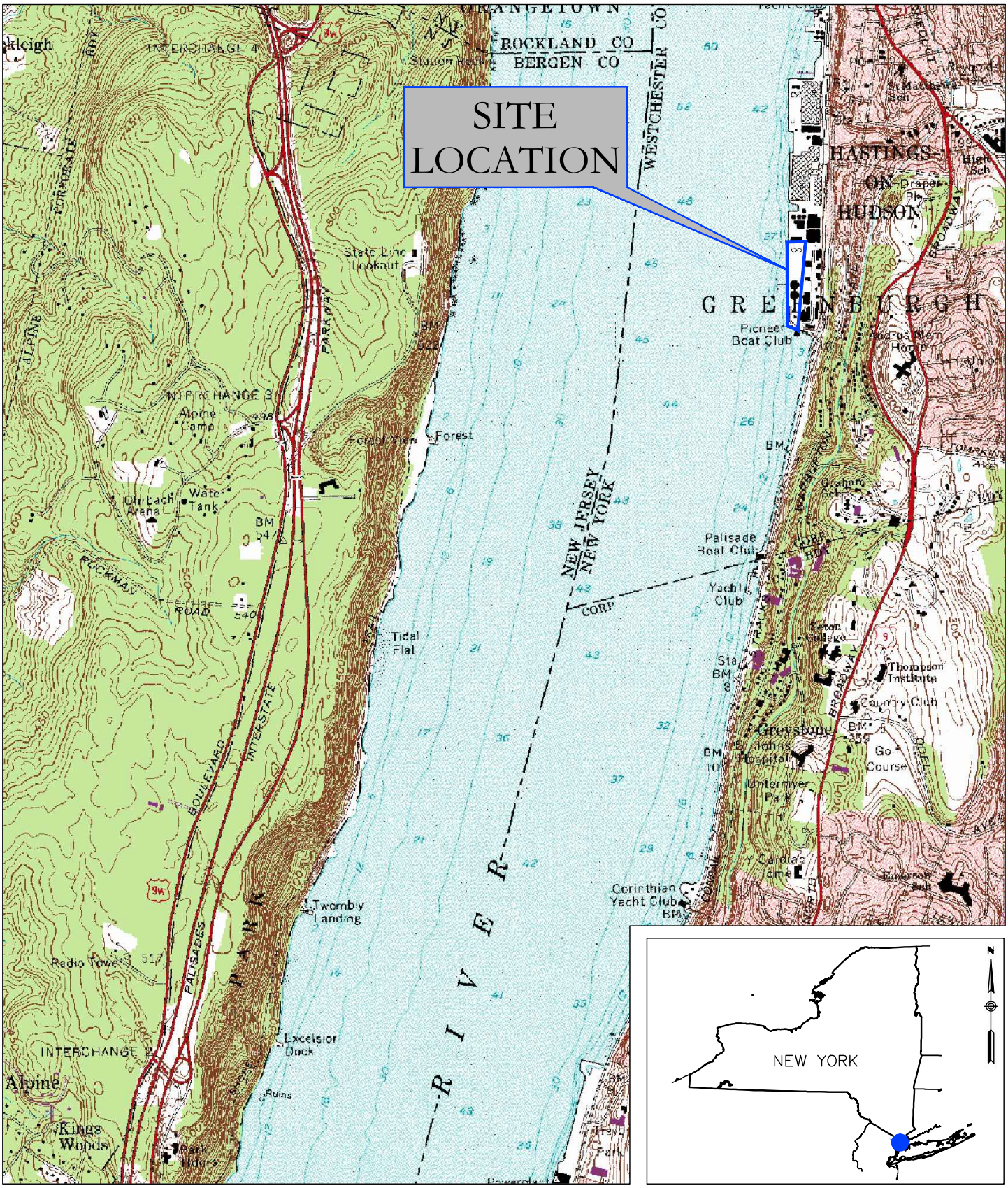
Parameter (Concentrations in µg/kg)	Site-Specific Criteria	Unrestricted Use Criteria	**Sample Designation:**	B1	B2	B3	B4	B5	B6	B6 DUP	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19
			Sample Date:	11/18/2010	11/18/2010	11/18/2010	11/19/2010	11/18/2010	11/18/2010	11/18/2010	11/19/2010	11/23/2010	11/22/2010	11/22/2010	11/22/2010	11/22/2010	11/23/2010	11/23/2010	11/22/2010	11/22/2010	11/30/2010	11/30/2010	12/3/2010
			Sample Depth (ft bls):	5.5-5.5	5.5-5.5	6-6	5.5-5.5	6-6	6-6	6-6	6-6	6.5-6.5	5.5-6	5.5-6	5.5-6	5.5-6	6-6	6-6	6.5-6.5	6.5-6.5	6.5-6.5	6.5-6.5	7.5
1,2,4,5-Tetrachlorobenzene				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2,2'-oxybis (1-chloropropane)				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
2,3,4,6-Tetrachlorophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2,4,5-Trichlorophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2,4,6-Trichlorophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2,4-Dichlorophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2,4-Dimethylphenol				340 U	250 U	370 U	350 U	649	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
2,4-Dinitrophenol				1400 U	990 U	1500 U	1400 U	950 U	1100 U	1300 U	1100 U	890 U	1000 U	720 U	750 U	1100 U	980 UJ	1600 U	1100 U	800 U	1100 U	840 U	1400 U
2,4-Dinitrotoluene				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
2,6-Dinitrotoluene				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
2-Chloronaphthalene				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	51.7 J	80 U	110 U	84 U	140 U
2-Chlorophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
2-Methylnaphthalene				9310	281	59.6 J	3740	348	59.3 J	270	264	89 U	398	664	62.3 J	5470	98 U	160 U	36.8 J	270	110 U	356	140 U
2-Methylphenol		330		140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
2-Nitroaniline				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
2-Nitrophenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
3&4-Methylphenol		330		140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
3,3'-Dichlorobenzidine				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 UJ	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
3-Nitroaniline				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
4,6-Dinitro-2-methylphenol				1400 U	990 U	1500 U	1400 U	950 U	1100 U	1300 U	1100 U	890 U	1000 U	720 U	750 U	1100 U	980 UJ	1600 U	1100 U	800 U	1100 U	840 U	1400 U
4-Bromophenyl phenyl ether				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
4-Chloro-3-methylphenol				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
4-Chloroaniline				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
4-Chlorophenyl phenyl ether				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
4-Nitroaniline				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
4-Nitrophenol				680 U	500 U	750 U	710 U	480 U	530 U	640 U	540 U	440 U	520 U	360 U	380 U	550 U	490 UJ	810 U	530 U	400 U	530 U	420 U	700 U
Acenaphthene		20,000		1120	137	75 U	323	216	53 U	30.5 J	122	44 U	283	297	38 U	2710	1950 J	468	53 U	20.8 J	52 J	278	56.6 J
Acenaphthylene		100,000		68 U	50 U	75 U	71 U	48 U	53 U	64 U	54 U	44 U	52 U	44.5	38 U	55 U	49 UJ	81 U	53 U	40 U	42.5 J	42 U	70 U
Acetophenone				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
Anthracene		100,000		68 U	50 U	75 U	130	48 U	53 U	64 U	294	44 U	52 U	605	38 U	541	1550 J	81 U	53 U	40 U	125	186	60.8 J
Atrazine				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
Benzaldehyde				340 U	250 U	327 J	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
Benzo[a]anthracene		1,000		367	43.3 J	75 U	156	48 U	59.1	64 U	667	235 J	69.4	989	105	510	2390 J	454	53 U	97.8	210	363	168
Benzo[a]pyrene		1,000		410	40.8 J	75 U	123	48 U	67.2	64 U	649	171 J	61.7	929	104	515	2520 J	475	58.7	107	243	318	139
Benzo[b]fluoranthene		1,000		423	42 J	75 U	71 U	48 U	108	64 U	561	199 J	79.2	957	108	480	2560 J	519	84.3	146	84.7	255	141
Benzo[g,h,i]perylene		100,000		255	50 U	75 U	71.1	48 U	60.8	64 U	440	103 J	45.4 J	538	71.9	371	1790 J	218	53 U	84.6	169	183	76.5
Benzo[k]fluoranthene		800		133	50 U	75 U	71 U	48 U	36.6 J	64 U	387	71.7 J	52 U	723	65.5	312	2250 J	230	53 U	45.6	193	229	71.3
Bis(2-chloroethoxy)methane				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
Bis(2-chloroethyl) ether				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
Bis(2-ethylhexyl) phthalate				365	56.5 J	150 U	159	340	111	130 U	1420	89 UJ	100 U	72 U	75 U	110 U	146 J	1670	1150	80 U	110 U	72.8 J	140 U
Butylbenzyl phthalate				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 UJ	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
Caprolactam				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
Carbazole				140 U	99 U	150 U	57.1 J	95 U	110 U	130 U	135	51.6 J	100 U	236	24.4 J	110 U	538 J	160 U	110 U	80 U	32 J	65.6 J	140 U
Chrysene		1,000		418	50 U	75 U	172	48 U	53 U	64 U	780	220 J	52 U	1100	79.2	782	2740 J	504	53 U	67.3	308	403	212
Dibenzo[a,h]anthracene		330		135	50 U	75 U	31.2 J	48 U	31 J	64 U	168	59.7 J	52 U	254	34.1 J	176	734 J	108	53 U	40 U	70.9	79.9	70 U
Dibenzofuran				390	89.3 J	150 U	258	165	110 U	130 U	110 U	30.9 J	144	211	25.9 J	1410	957 J	127 J	34.9 J	48.3 J	110 U	112	140 U
Diethyl phthalate				140 U	99 U	150 U	140 U	95 U	110 U	119 J	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
Dimethyl phthalate				140 U	87.4 J	133 J	140 U	95 U	113	145	140	89 U	62.5 J	63.3 J	45.3 J	110 U	98 UJ	451	73.9 J	66.7 J	87.8 JB	122 B	119 J
Di-n-butyl phthalate				140 U	99 U	150 U	140 U	95 U	110 U	488	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	102 J
Di-n-octyl phthalate				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 UJ	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
Diphenyl				140 U	99 U	150 U	140 U	95 U	110 U	130 U	47.2 J	89 U	100 U	41.5 J	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	30.1 J	140 U
Fluoranthene		100,000		444	80.9	33.3 J	365	64.3	84.8	64 U	970	304	124	2200	239	1150	5720	506	195	193	452	633	355
Fluorene		30,000		1320	271	123	618	433	53 U	220	201	48.5	461	404	59.8	3420	2620 J	514	171	142	53.7	349	46.7 J
Hexachlorobenzene				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 UJ	160 U	110 U	80 U	110 U	84 U	140 U
Hexachlorobutadiene				68 U	50 U	75 U	71 U	48 U	53 U	64 U	54 U	44 U	52 U	36 U	38 U	55 U	49 U	81 U	53 U	40 U	53 U	42 U	70 U
Hexachlorocyclopentadiene				1400 U	990 U	1500 U	1400 U	950 U	1100 U	1300 U	1100 U	890 U	1000 U	720 U	750 U	1100 U	980 UJ	1600 U	1100 U	800 U	1100 U	840 U	1400 U
Hexachloroethane				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 U	400 U	270 U	200 U	270 U	210 U	350 U
Indeno[1,2,3-cd]pyrene		500		198	50 U	75 U	74.7	48 U	58.9	64 U	369	102 J	45.3 J	518	61.2	317	1690 J	183	53 U	71.1	145	167	73
Isophorone				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
Naphthalene		12,000		68 U	50 U	75 U	312	48 U	71.5	172	91.3	60.5	241	275	64	55 U	49 U	144	129	125	74.4	178	31.3 J
Nitrobenzene				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
n-Nitrosodi-n-propylamine				140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	75 U	110 U	98 U	160 U	110 U	80 U	110 U	84 U	140 U
n-Nitrosodiphenylamine				340 U	250 U	370 U	350 U	240 U	270 U	320 U	270 U	220 U	260 U	180 U	190 U	280 U	240 UJ	400 U	270 U	200 U	270 U	210 U	350 U
Pentachlorophenol		800		680 U	500 U	750 U	710 U	480 U	530 U	640 U	540 U	440 U	520 U	360 U	380 U	550 U	490 UJ	810 U	530 U	400 U	530 U	420 U	700 U
Phenanthrene		100,000		3850	862	218	1570	1210	53 U	433	1010	367	1140	2630	163	11700	7300	1200	112	350	400	941	193
Phenol		330		140 U	99 U	150 U	140 U	95 U	110 U	130 U	110 U	89 U	100 U	72 U	165	110 U	98 U	160 U	110 U	80 U	110 U	84 U	79.7 J
Pyrene		100,000		750	95.5	43.8 J	346	75.5	108	64 U	1160	462 J	124	2020	255	1410	4620 J	543	265	215	409	858	281
Total SVOC (in mg/kg)	500			19.888	2.0867	0.9377	8.5061	3.5008	0.9692	1.8775	9.8755	2.4859	3.2785	15.6993	1.7326	31.274	42.075	8.314	2.3623	2.0502	3.152	6.1794	2.2059

B - Analyte in associated blank
J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
mg/kg - Milligrams per kilogram
SVOC - Semivolatile Organic Compounds
Value exceeds or potentially exceeds NYSDEC SCO for Unrestricted Use Criteria.

Table 1. Summary of Remaining Soil Contamination Above Unrestructed Levels - Results of Soil Samples in the Excavation Area, Former Tappan Terminal, Hastings-on-Hudson, New York

Parameter (Concentrations in µg/kg)	Site-Specific Criteria	Unrestricted Use Criteria	**Sample Designation:**	B19 DUP	B20	B21	B22	B22-1	A1-E1	A1-E2	A1-E3	A1-E4	A1-E5	A1-E6	A1-E7	A1-N1	A1-N2	A1-S1	A1-S2-1	A1-W1	A1-W2	A1-W3	A1-W4	A1-W5
			Sample Date:	12/3/2010	12/16/2010	12/16/2010	1/25/2011	2/10/2011	11/17/2010	11/17/2010	11/17/2010	11/22/2010	11/23/2010	12/16/2010	12/16/2010	11/23/2010	11/23/2010	11/18/2010	11/19/2010	11/17/2010	11/18/2010	11/18/2010	11/19/2010	11/18/2010
			Sample Depth (ft bls):	7.5	5.5-6	5.5-6	8.5-8.5	10-10	4-4.5	4-4.5	4-4.5	5.5-6	6-6	3.5-4	4.5-5	5.5-5.5	5.5-5.5	6-6	6-6	4-4.5	5-5	5.7-5.7	5.5-5.5	6-6
1,2,4,5-Tetrachlorobenzene				350 U	240 U	230 U	399 J	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,2'-oxybis (1-chloropropane)				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
2,3,4,6-Tetrachlorophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,4,5-Trichlorophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,4,6-Trichlorophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,4-Dichlorophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,4-Dimethylphenol				350 U	240 U	230 U	970 U	330 U	320 U	497	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2,4-Dinitrophenol				1400 U	980 U	910 U	3900 U	1300 U	1300 U	1300 U	970 U	710 U	950 U	710 U	800 U	1500 UJ	1400 U	1400 U	1400 U	1100 U	990 U	850 U	1200 U	890 U
2,4-Dinitrotoluene				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
2,6-Dinitrotoluene				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
2-Chloronaphthalene				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
2-Chlorophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2-Methylnaphthalene				140 U	98 U	206	660	66.2 J	718	70.3 J	103	396	117	71 U	40.3 J	150 U	101 J	100 J	140 U	110 U	113	1050	100 J	12600
2-Methylphenol		330		140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
2-Nitroaniline				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
2-Nitrophenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
3&4-Methylphenol		330		140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	177	99 U	85 U	120 U	89 U
3,3'-Dichlorobenzidine				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 UJ	360 U	340 U	270 U	250 U	210 U	290 U	220 U
3-Nitroaniline				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
4,6-Dinitro-2-methylphenol				1400 U	980 U	910 U	3900 U	1300 U	1300 U	1300 U	970 U	710 U	950 U	710 U	800 U	1500 UJ	1400 U	1400 U	1400 U	1100 U	990 U	850 U	1200 U	890 U
4-Bromophenyl phenyl ether				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
4-Chloro-3-methylphenol				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
4-Chloroaniline				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
4-Chlorophenyl phenyl ether				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
4-Nitroaniline				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
4-Nitrophenol				700 U	490 U	450 U	1900 U	660 U	650 U	650 U	490 U	360 U	480 U	350 U	400 U	750 UJ	710 U	710 U	680 U	530 U	490 U	420 U	590 U	450 U
Acenaphthene		20,000		63.2 J	50.1	58	1730	57.9 J	1390	65 U	63.2	305	48 U	35 U	88.7	3400 J	551	71 U	68 U	90.2	49 U	1510	23.3 J	1310
Acenaphthylene		100,000		70 U	49 U	34 J	190 U	66 U	65 U	53.7 J	49 U	36 U	48 U	19.3 J	40 U	75 UJ	97.4	103	68 U	53 U	49 U	42 U	59 U	45 U
Acetophenone				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
Anthracene		100,000		101	88.3	81.6	2600	65.3 J	65 U	119	40.1 J	36 U	48 U	17.8 J	285	75 UJ	519	71 U	68 U	138	49 U	189	25.2 J	45 U
Atrazine				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
Benzaldehyde				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	110 J	250 U	210 U	290 U	220 U
Benzo[a]anthracene		1,000		126	135	206	3350	167	86.8	288	124	72	84.4	73.8	370	210 J	797 J	380	61.3 J	647	34.9 J	92.5	25 J	209
Benzo[a]pyrene		1,000		93.9	89.5	143	2360	114	77.8	255	173	67.2	66.8 J	71.6	265	199 J	793 J	451	68 U	562	32.2 J	96	59 U	185
Benzo[b]fluoranthene		1,000		99.6	162	233	1300	98.9	74.8	213	161	75.8	92.6 J	152	324	257 J	1160 J	506	68 U	567	38.7 J	145	59 U	232
Benzo[g,h,i]perylene		100,000		62.6 J	55.8	102	1820	91.3	61.5 J	188	122	44.3	46.4 J	66.9	152	134 J	441 J	284	68 U	321	49 U	104	59 U	132
Benzo[k]fluoranthene		800		65.2 J	49 U	34 J	467	49.3 J	53.7 J	234	85.6	29 J	48 UJ	65.7	117	65.7 J	380 J	351	68 U	357	49 U	46.6	59 U	71.6
Bis(2-chloroethoxy)methane				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Bis(2-chloroethyl) ether				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Bis(2-ethylhexyl) phthalate				140 U	98 U	91 U	390 U	130 U	96.7 J	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	1810 J	140 U	465	612	81.1 J	189	70.6 J	603
Butylbenzyl phthalate				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 UJ	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Caprolactam				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Carbazole				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	24.5 J	150 UJ	101 J	140 U	140 U	82.7 J	99 U	85 U	120 U	89 U
Chrysene		1,000		122	207	262	5330	257	157	361	158	24.7 J	48.6	80.8	355	130 J	1050 J	485	98.8	638	49 U	74.4	59 U	305
Dibenzo[a,h]anthracene		330		70 U	49 U	28.9 J	190 U	66 U	65 U	96.6	53.8	36 U	48 UJ	23.6 J	52.9	75 UJ	199 J	147	68 U	140	49 U	52.4	59 U	45 U
Dibenzofuran				140 U	98 U	23.8 J	1090	26.6 J	726	130 U	97 U	142	95 U	71 U	57.7 J	150 UJ	259	140 U	140 U	110 U	99 U	739	24.7 J	616
Diethyl phthalate				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Dimethyl phthalate				281	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71.2	402	71 U	80 U	150 UJ	343	179	141	110 U	99 U	85 U	120 U	89 U
Di-n-butyl phthalate				130 J	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Di-n-octyl phthalate				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 UJ	71 U	80 U	150 UJ	140 UJ	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Diphenyl				140 U	98 U	91 U	1510	130 U	130 U	130 U	97 U	73	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	607
Fluoranthene		100,000		310	71.4	228	2280	175	187	439	190	141	99	110	1050	614 J	1770	331	65.7 J	893	64.4	289	50.7 J	491
Fluorene		30,000		58.2 J	33.5 J	109	3810	76.4	1930	65 U	51.4	398	32 J	35 U	87.6	4600 J	863	55.2 J	68 U	53 U	40.3 J	1920	48.2 J	1420
Hexachlorobenzene				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 UJ	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Hexachlorobutadiene				70 U	49 U	45 U	190 U	66 U	65 U	65 U	49 U	36 U	48 U	35 U	40 U	75 U	71 U	71 U	68 U	53 U	49 U	42 U	59 U	45 U
Hexachlorocyclopentadiene				1400 U	980 U	910 U	3900 U	1300 U	1300 U	1300 U	970 U	710 U	950 U	710 U	800 U	1500 UJ	1400 U	1400 U	1400 U	1100 U	990 U	850 U	1200 U	890 U
Hexachloroethane				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 U	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
Indeno[1,2,3-cd]pyrene		500		51.8 J	24.8 J	83.6	664	64.2 J	43.9 J	165	113	38.9	46.5 J	61.9	145	131 J	421 J	296	68 U	300	49 U	91.5	59 U	112
Isophorone				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Naphthalene		12,000		52.7 J	49 U	23.6 J	2200	60.6 J	65 U	263	42.6 J	268	126	35 U	24.9 J	75 U	255	148	68 U	53 U	49 U	520	37.5 J	2590
Nitrobenzene				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
n-Nitrosodi-n-propylamine				140 U	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
n-Nitrosodiphenylamine				350 U	240 U	230 U	970 U	330 U	320 U	320 U	240 U	180 U	240 U	180 U	200 U	380 UJ	350 U	360 U	340 U	270 U	250 U	210 U	290 U	220 U
Pentachlorophenol		800		700 U	490 U	450 U	1900 U	660 U	650 U	650 U	490 U	360 U	480 U	350 U	400 U	750 UJ	710 U	710 U	680 U	530 U	490 U	420 U	590 U	450 U
Phenanthrene		100,000		98.9	47.4 J	436	12100	169	6150	334	239	657	31.5 J	34.1 J	967	8200	3040	59.3 J	75.3	425	89.3	6650	145	4390
Phenol		330		130 J	98 U	91 U	390 U	130 U	130 U	130 U	97 U	71 U	95 U	71 U	80 U	150 U	140 U	140 U	140 U	110 U	99 U	85 U	120 U	89 U
Pyrene		100,000		227	255	349	9320	363	249	485	248	154	159	93.5	814	631 J	1980 J	437	141	869	71.5	278	51.5 J	683
Total SVOC (in mg/kg)	500			2.0731	1.2198	2.6415	52.99	1.9017	12.0022	4.0616	1.9677	2.9571	1.3518	0.871	5.2206	18.5717	16.9304	4.3125	1.0481	6.9289	0.5654	14.0364	0.6017	26.5566

B - Analyte in associated blank
J - Estimated value
U - Indicates that the compound was analyzed for but not detected
DUP - Duplicate sample
µg/kg - Micrograms per kilogram
ft bls - Feet below land surface
mg/kg - Milligrams per kilogram
SVOC - Semivolatile Organic Compounds
Value exceeds or potentially exceeds NYSDEC SCO for Unrestricted Use Criteria.



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COMMITMENT & INTEGRITY DRIVE RESULTS

SITE LOCATION MAP

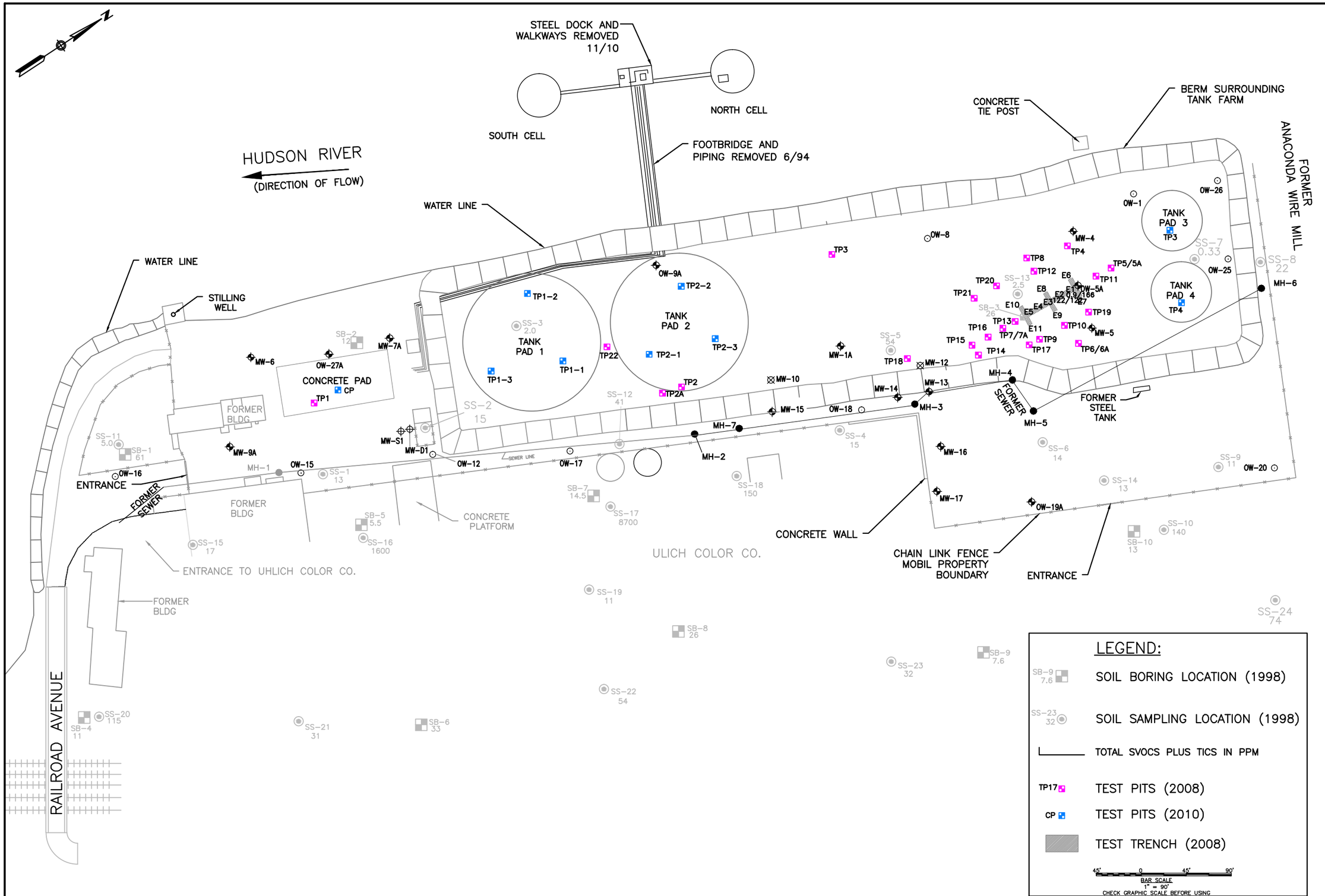
DESIGNED BY: JR	CHECKED BY: AP
DRAWN BY: PFF	206925_U1-RDRAR.dwg

FORMER MOBIL TAPPAN TERMINAL
HASTINGS-ON-HUDSON, NY

TOPO! INTERACTIVE MAPS ON CD
U.S.G.S YONKERS, NY.
7.5 MIN SERIES 1966 PHOTOREVISED 1979

JOB NO: 206925.03
DATE: MAY 2011
SCALE: AS NOTED

FIGURE 1



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SITE PLAN

DESIGNED BY: JR
DRAWN BY: PFF
CHECKED BY: AP
206925_U2-RDRAR.dwg

FORMER TAPPAN TERMINAL
HASTINGS-ON-HUDSON, NY

REMEDIAL DESIGN/REMEDIAL ACTION REPORT

JOB NO: 206925.03
DATE: DECEMBER 2011
SCALE: 1"= 90'

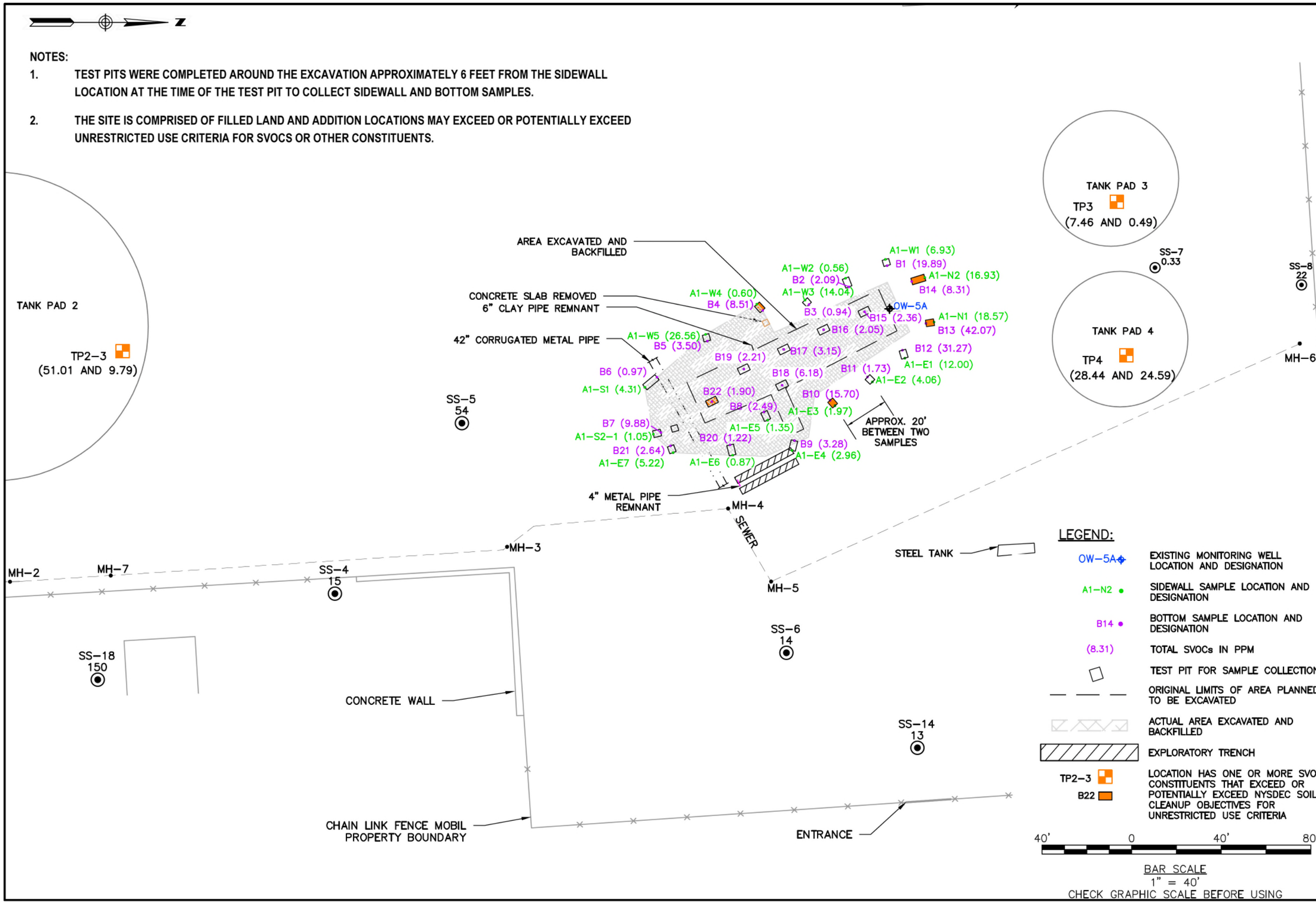
FIGURE 2

206629/wip/fig

NOTES:

1. TEST PITS WERE COMPLETED AROUND THE EXCAVATION APPROXIMATELY 6 FEET FROM THE SIDEWALL LOCATION AT THE TIME OF THE TEST PIT TO COLLECT SIDEWALL AND BOTTOM SAMPLES.

2. THE SITE IS COMPRISED OF FILLED LAND AND ADDITION LOCATIONS MAY EXCEED OR POTENTIALLY EXCEED UNRESTRICTED USE CRITERIA FOR SVOCS OR OTHER CONSTITUENTS.



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EXTENT OF REMEDIAL EXCAVATION AND LOCATION OF REMAINING SOIL ABOVE UNRESTRICTED LEVELS

DESIGNED BY: AP
DRAWN BY: PFF
CHECKED BY: AP
206925_U6–SMP.dwg

FORMER TAPPAN TERMINAL
HASTINGS–ON–HUDSON, NY

SITE MANAGEMENT PLAN

JOB NO: 206925.09
DATE: AUGUST 2013
SCALE: AS NOTED

FIGURE 3

APPENDIX A: PROJECT DOCUMENTATION

Village of Hastings-on-Hudson
TREE PERMIT APPLICATION

Name Steven P. Trifiletti, Major Projects - Project Manager

Telephone 516.239.5232

Address ExxonMobil Refining & Supply Company
464 Doughty Boulevard
Inwood, New York 11096

Tax Map No. Tax ID 4.100-93-18

Describe 1) Total land area of the parcel and land area involved in the cutting operations: Total land area of the parcel - 8.2 acres
Land area involved in the cutting - 8.2 acres

2) The number of trees to be removed and the size (dbh and height) and species of each: 26 hardwood trees to be removed; size ranging from 12" to 24" diameter.

3) The reason for the tree removal:
The former Mobil Tappan Terminal, Area of Concern 1 (AOC1) is required to be capped by a NYSDEC Record of Decision. Construction of the cap will involve regrading, placement of geotextile fabric over the entire property, covering the fabric with two feet of clean soil, and hydro seeding. All vegetation on the site will need to be cleared for the cap. Preservation of the trees is not practical considering the grade changes and fill requirement.

4) The method by which the tree(s) would be removed:
Trees to be cut by chain saw.

5) Name of the individual or entity that will undertake removal:
Contractor to be determined.

PLEASE NOTE: a) A tree survey shall be submitted to the Planning Board for subdivisions or site plan approvals. Where no subdivision or site plan is involved, a simple sketch on a survey copy or tax map is sufficient. The sketch shall include the location of the tree(s) requested for removal.

b) Proof that neighbors (adjacent property owners) have been notified at least two weeks in advance of filing of this permit.

S. P. Trifiletti
Applicants Signature

October 3, 2011
Date

Application approved, permit granted.

Deven Sharma

Dated: Dec 2, 2011

For Office Use Only: October 3, 2011 Original

Date Application Filed: October 25, 2011 Revised

Sketch Submitted: Yes X No ____

Proof of Neighbor Notification: Yes X No ____

Referred to Tree Board (date): October 13, 2011 by E-mail

Building Inspector _____
Signature

Tree Board Recommendation

Application Approval: Yes X No ____

Reason for Recommendation:

Verbally only, in consideration of terms to be worked out between the Village and the applicant.

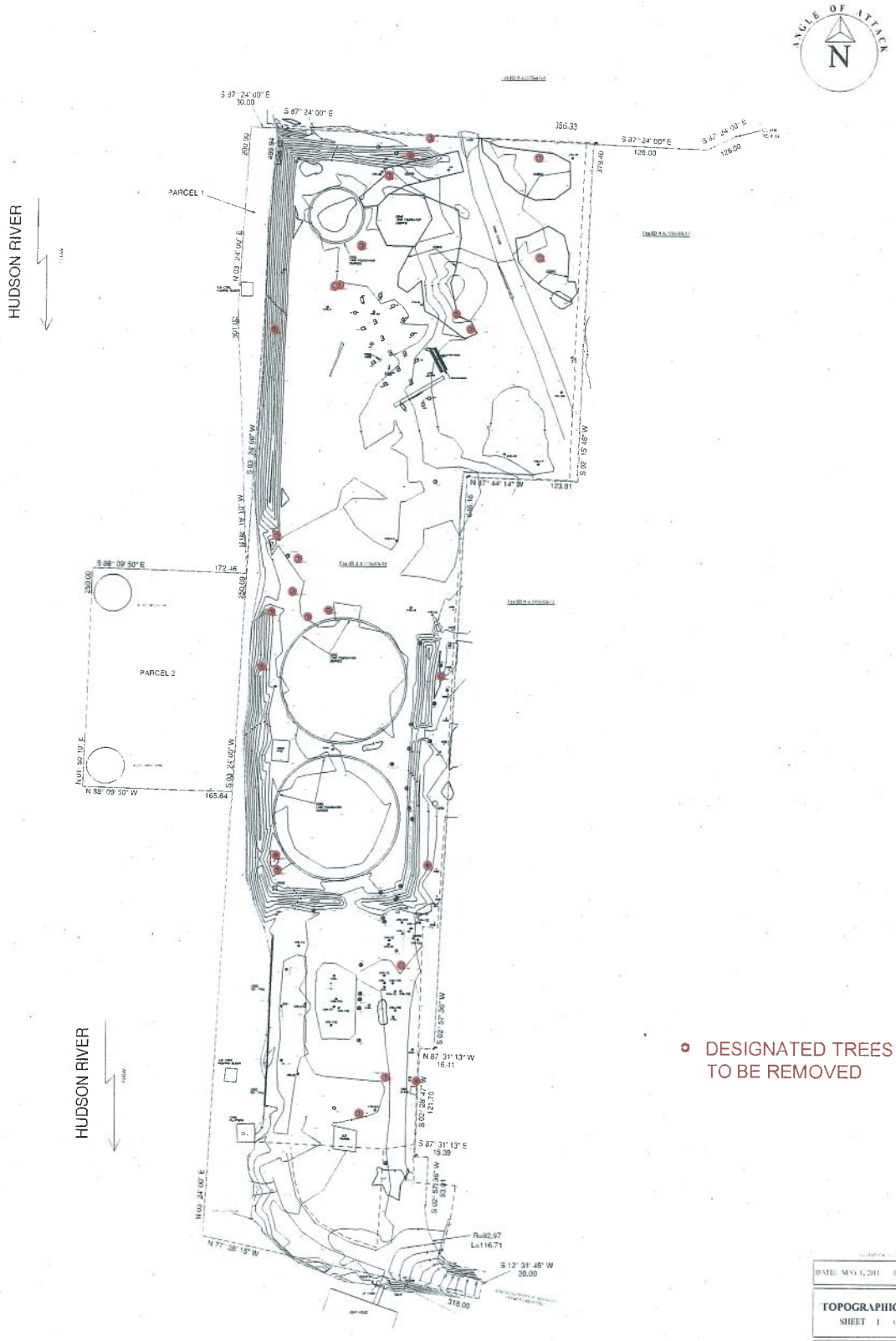
Tree Board Jenny Lee, Chairperson

Date: November 29, 2011

APPLICANT NOTIFIED OF PERMIT APPROVAL OR REJECTION? YES X NO ____

NUMBER AND TYPE OF TREES TO BE REPLACED

NUMBER	TYPE
	See attached sketch



DATE: MAY 1, 2011 SCALE: 1" = 40'

TOPOGRAPHIC SURVEY

SHEET 1 OF 1

MAP OF PROPERTY
91 RAILROAD AVENUE
SITUATE AT
VILLAGE OF HASTINGS ON HUDSON
TOWN OF GREENBURGH
WESTCHESTER COUNTY, NEW YORK

ANGLE OF ATTACK
LAND SURVEYING, LLC
100 S. JERSEY AVE. UNIT 7
SETAUKET, NY 11733
631-751-1901

SCALE: 1" = 40'
CONTOUR INTERVAL 1'

Code section	Code Section Provisions	Indicate how the applicable provisions are addressed* **Former Mobil Tappan Terminal (AOC 1) Application of 7/20/12**
146-10.B(1)	The proposed elevation, in relation to mean sea level, of the lowest floor (including basement or cellar) of any new or substantially improved structure to be located in Zones A1-A30, AE or AH, or Zone A if base flood elevation data are available. Upon completion of the lowest floor, the permittee shall submit to the local administrator the as-built elevation, certified by a licensed professional engineer or surveyor	NA. No structures (other than fencing) are proposed.
146-10.B(2)	The proposed elevation, in relation to mean sea level, to which any new or substantially improved nonresidential structure will be floodproofed. Upon completion of the floodproofed portion of the structure, the permittee shall submit to the local administrator the as-built floodproofed elevation, certified by a professional engineer or surveyor.	NA. No structures (other than fencing) are proposed.
146-10.B(3)	A certificate from a licensed professional engineer or architect that any utility floodproofing will meet the criteria in § 146-12C(3).	NA. No utilities are proposed.
146-10.B(4)	A certificate from a licensed professional engineer or architect that any nonresidential floodproofed structure will meet the floodproofing criteria in § 146-12E.	NA. No structures (other than fencing) are proposed.
146-10.B(5)	A description of the extent to which any watercourse will be altered or relocated as a result of proposed development. Computations by a licensed professional engineer must be submitted that demonstrate that the altered or relocated segment will provide equal or greater conveyance than the original stream segment. The applicant must submit any maps, computations or other material required by the Federal Emergency Management Agency (FEMA) to revise the documents enumerated in § 146-6, when notified by the local administrator, and must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained.	NA. NYSDEC confirmed that there is no regulatory floodway along the adjacent shoreline and flood storage is not a requirement of the National Flood Insurance Program. (See 9/15/11 email from NYSDEC Bureau of Flood Protection and Dam Safety)
146-10.B(6)	A technical analysis, by a licensed professional engineer, if required by the local administrator, which shows whether proposed development to be located in an area of special flood hazard may result in physical damage to any other property.	NA. NYSDEC confirmed that there is no regulatory floodway along the adjacent shoreline and flood storage is not a requirement of the National Flood Insurance Program. (See 9/15/11 email from NYSDEC Bureau of Flood Protection and Dam Safety)
146-10.B(7)	In Zone A, when no base flood elevation data are available from other sources, base flood elevation data shall be provided by the permit applicant for subdivision proposals and other proposed developments that are greater than either 50 lots or five acres.	NA. Flood Insurance Rate Map Panel No. 36119C0307F designates the flood hazard Zone AE with a 100-year flood elevation of 7 (NAVD88).

*Indicate by notes such as, “see Note/Detail on Dwg #___”, “See PE certification/note in the attached letter”, or “NA”, etc. where “NA” stands for “Not applicable”.

Anne Proctor

From: Deven Sharma AIA <DSharma@hastingsgov.org>
Sent: Friday, October 05, 2012 10:03 AM
To: 'Douglas Hahn'; Anne Proctor
Cc: steve.p.trifiletti@exxonmobil.com; 'Tracy Bispham'; 'George Pommer'
Subject: RE: SWPPP Acceptance Form - Former Tappan Landing Soil Cap

Thanks Doug. I will go ahead and issue the permit on Monday.

Deven Sharma AIA
Building Inspector
Hastings-on-Hudson

DISCLOSURE NOTICE

Any e-mail sent or received through the Hastings-on-Hudson e-mail system may be monitored in the normal course of Village business, may be released to the public under the New York State Freedom of Information Law, and is subject to discovery proceedings in legal actions.

-----Original Message-----
From: Douglas Hahn [mailto:dhahn@Hahn-Eng.com]
Sent: Friday, October 05, 2012 9:50 AM
To: Anne Proctor; Deven Sharma AIA
Cc: steve.p.trifiletti@exxonmobil.com; Tracy Bispham; George Pommer
Subject: RE: SWPPP Acceptance Form - Former Tappan Landing Soil Cap

Deven,

The applicant has addressed all of our comments and we have no objection to approval of the Flood Plain Development Permit. Please contact me with any questions or comments.

Thank you,

Doug

-----Original Message-----
From: Anne Proctor [mailto:aproctor@woodardcurran.com]
Sent: Friday, October 05, 2012 9:16 AM
To: Douglas Hahn; Deven Sharma AIA
Cc: steve.p.trifiletti@exxonmobil.com; Tracy Bispham; George Pommer
Subject: RE: SWPPP Acceptance Form - Former Tappan Landing Soil Cap

Doug,

Thank you again for your time yesterday, and please see the embedded responses in your email immediately below. Again, please let me know if there are any remaining questions.

COMMITMENT & INTEGRITY DRIVE RESULTS

WOODARD & CURRAN ENGINEERING, PA PC
709 Westchester Avenue | Suite L2
White Plains, New York 10604
www.woodardcurran.com

T 800.807.4080
T 914.448.2266
F 914.448.0147

WOODARD &CURRAN

October 1, 2012

NOTICE OF INTENT
NYSDEC Bureau of Water Permits
625 Broadway, 4th Floor
Albany, New York 12233-3505

Re: Notice of Intent
NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity
Former Mobil Tappan Terminal Soil Cap
Former Tappan Terminal Area of Concern 1 (AOC1)

On behalf of ExxonMobil Oil Corporation, Woodard & Curran is submitting the enclosed Notice of Intent and MS4 Stormwater Pollution Prevention Plan Acceptance Form in accordance with Part II.A.2 of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-10-001 (the "General Permit"). Coverage under the General Permit is needed for activities for the Former Mobil Tappan Terminal Capping Project located at One Southside Avenue in Hastings-on-Hudson, New York.

The Former Mobil Tappan Terminal is no longer in operation and the site has been a vacant lot since the mid 1980's. The land is being remediated as Area of Concern 1 under NYSDEC Record of Decision for Site No. 360015 dated September 2006. Part of this remediation includes capping the site. Construction of the cap will involve clearing, regrading, placing a demarcation layer over the entire property, covering the demarcation layer with two feet of clean soil, and re-vegetation. A Tree Removal Permit for the clearing activities has already been received from the Village of Hastings-on-Hudson, and an application for a permit to work in the flood plain is in progress. No structures or utilities are proposed other than fencing.

Temporary erosion control measures will be installed prior to beginning earthmoving activities and will be maintained throughout the duration of the project. The final grades will be compacted and seeded to promote re-vegetation and provide permanent erosion controls. Additional erosion control measures are proposed for steeper slopes in the form of biodegradable erosion control blankets and, in accordance with NYSDEC requirements, shrubs and a conservation seed mix are planned within 50 feet of shore.

Please contact Anne Proctor at (203) 271-0379 if you require any additional information, and thank you for your time and assistance.

Sincerely,

WOODARD & CURRAN

Anne E Proctor

Anne E. Proctor, PE
Principal Project Manager

Copy: S. Trifiletti – ExxonMobil
T. Bispham, N. Clarke – Roux Associates (electronic)

1358331598

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR [ ] (for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-10-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR **MUST SIGN FORM**

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
ExxonMobil Oil Corporation

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Trifiletti

Owner/Operator Contact Person First Name
Steve

Owner/Operator Mailing Address
38 Varick Street

City
Brooklyn

State
NY

Zip
11222-3817

Phone (Owner/Operator)
718-404-0652

Fax (Owner/Operator)
718-404-0681

Email (Owner/Operator)
steve.p.trifiletti@exxonmobil.com

FED TAX ID
13-5401570 (not required for individuals)

Project Site Information

Project/Site Name
Frm. Mobil Tappan Terminal Soil Cap AOC1

Street Address (NOT P.O. BOX)
One Southside Avenue

Side of Street
○ **North** ○ **South** ○ **East** ● **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Hastings-on-Hudson

State: NY
Zip: 10706-2703
County: Westchester
DEC Region: 3

Name of Nearest Cross Street
Railroad Avenue

Distance to Nearest Cross Street (Feet)
0

Project In Relation to Cross Street
○ **North** ○ **South** ○ **East** ● **West**

Tax Map Numbers
Section-Block-Parcel
4.100-93-18

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting): 593694

Y Coordinates (Northing): 4538034

2. What is the nature of this construction project?

○ **New Construction**

○ **Redevelopment with increase in imperviousness**

● **Redevelopment with no increase in imperviousness**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ● OTHER

Vacant

Post-Development Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ○ MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ● OTHER

Vacant/Capped

*note: for gas well drilling, non-high volume hydraulic fractured wells only

4. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law ? ○ **Yes** ● **No**

5. Is this a project which does not require coverage under the General Permit (e.g. Project done under an Individual SPDES Permit, or department approved remediation)? ○ **Yes** ● **No**

6. Is this property owned by a state authority, state agency, federal government or local government? ○ **Yes** ● **No**

7. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area. Round to the nearest tenth of an acre.

Total Site Acreage	Acreage To Be Disturbed	Existing Impervious Area Within Disturbed	Future Impervious Area Within Disturbed
8.1	7.5	1.6	0.0

8. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ● **No**

9. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
0 %	0 %	0 %	100 %

10. Is this a phased project? ○ Yes ● No

11. Enter the planned start and end dates of the disturbance

Start Date		End Date	
10/08/2012	-	06/30/2012	

12. Identify the nearest, natural, surface waterbody(ies) to which construction site runoff will discharge.

Name: Hudson River

12a. Type of waterbody identified in Question 12?

- ○ Wetland / State Jurisdiction On Site (Answer 12b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 12b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ● River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

12b. How was the wetland identified?

- ○ Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

13. Has the surface waterbody(ies) in question 12 been identified as a 303(d) segment in Appendix E of GP-0-10-001? ○ Yes ● No

14. Is this project located in one of the Watersheds identified in Appendix C of GP-0-10-001? ○ Yes ● No

15. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? **If no, skip question 16.** ○ Yes ● No

16. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? **If Yes, what is the acreage to be disturbed?** ○ Yes ○ No

17. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ Yes ● No

18. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ○ Yes ● No ○ Unknown

19. What is the name of the municipality/entity that owns the separate storm sewer system?

Village of Hastings-on-Hudson

20. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book) ? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes Water Quality and Quantity Control components (Post-Construction Stormwater Management Practices) **(If No, skip questions 23 and 27-35)** ○ Yes ● No

23. Have the Water Quality and Quantity Control components of the SWPPP been developed in comformance with the current NYS Stormwater Management Design Manual ? ○ Yes ○ No

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
Woodard & Curran Engineering, PA PC

Contact Name (Last, Space, First)
Anne E. Proctor P.E.

Mailing Address
709 Westchester Avenue, Suite L2

City
White Plains

State
NY

Zip
10604-3103

Phone
800-807-4080

Fax
914-448-0147

Email
aproctor@woodardcurran.com

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-10-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
Anne

MI
E

Last Name
Proctor

Signature
Anne E Proctor

STATE OF NEW YORK
ANNE E. PROCTOR
070786
LICENSED PROFESSIONAL ENGINEER

Date
09/26/2012

25. Has a construction sequence schedule for the planned management practices been prepared? ● Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ● Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ○ Storm Drain Inlet Protection
- ● Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ● Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ● Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ● Streambank Protection
- ○ Temporary Swale
- ○ Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ● Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

Shrubs+Conservation Seed Mix near shore

Erosion Control Blankets for slopes >15%

Water Quality and Quantity Control

Important: Completion of Questions 27-35 is not required if response to Question 22 is No.

Post-Construction Stormwater Management Practices

27. Indicate **all** Stormwater Management Practice(s) that will be installed/constructed on this site:

Ponds

- ○ **Micropool Extended Detention (P-1)**
- ○ **Wet Pond (P-2)**
- ○ **Wet Extended Detention (P-3)**
- ○ **Multiple Pond System (P-4)**
- ○ **Pocket Pond (P-5)**

Filtering

- ○ **Surface Sand Filter (F-1)**
- ○ **Underground Sand Filter (F-2)**
- ○ **Perimeter Sand Filter (F-3)**
- ○ **Organic Filter (F-4)**
- ○ **Bioretention (F-5)**
- ○ **Other** _____

Alternative Practice

- ○ **Rain Garden**
- ○ **Cistern**
- ○ **Green Roof**
- ○ **Stormwater Planters**
- ○ **Permeable Paving (Modular Block)**

Wetlands

- ○ **Shallow Wetland (W-1)**
- ○ **Extended Detention Wetland (W-2)**
- ○ **Pond/Wetland System (W-3)**
- ○ **Pocket Wetland (W-4)**

Infiltration

- ○ **Infiltration Trench (I-1)**
- ○ **Infiltration Basin (I-2)**
- ○ **Dry Well (I-3)**
- ○ **Underground Infiltration System**

Open Channels

- ○ **Dry Swale (O-1)**
- ○ **Wet Swale (O-2)**

Verified Proprietary Practice

- ○ **Hydrodynamic**
- ○ **Wet Vault**
- ○ **Media Filter**

28. Describe other stormwater management practices not listed above or explain any deviations from the technical standards.

29. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ○ **Yes** ○ **No**

If Yes, Identify the entity responsible for the long term Operation and Maintenance

30. Provide the total water quality volume required and the total provided for the site.

WQv Required ___.___ **acre-feet**

WQv Provided ___.___ **acre-feet**

31. Provide the following Unified Stormwater Sizing Criteria for the site.

Total Channel Protection Storage Volume (CPv) - Extended detention of post-developed 1 year, 24 hour storm event

CPv Required ___.___ **acre-feet**

CPv Provided ___.___ **acre-feet**

31a. The need to provide for channel protection has been waived because:

○ **Site discharges directly to fourth order stream or larger**

Total Overbank Flood Control Criteria (Qp) - Peak discharge rate for the 10 year storm

Pre-Development ___.___ **CFS**

Post-development ___.___ **CFS**

Total Extreme Flood Control Criteria (Qf) - Peak discharge rate for the 100 year storm

Pre-Development ___.___ **CFS**

Post-development ___.___ **CFS**

31b. The need to provide for flood control has been waived because:

○ **Site discharges directly to fourth order stream or larger**

○ **Downstream analysis reveals that flood control is not required**

IMPORTANT: For questions 31 and 32, impervious area should be calculated considering the project site and all offsite areas that drain to the post-construction stormwater management practice(s). (Total Drainage Area = Project Site + Offsite areas)

32. Pre-Construction Impervious Area - As a percent of the Total Drainage Area enter the percentage of the existing impervious areas before construction begins. ___ %

33. Post-Construction Impervious Area - As a percent of the Total Drainage Area, enter the percentage of the future impervious areas that will be created/remain on the site after completion of construction. ___ %

34. Indicate the total number of post-construction stormwater management practices to be installed/constructed. ___

35. Provide the total number of stormwater discharge points from the site. (include discharges to either surface waters or to separate storm sewer systems) ___

36. Identify other DEC permits that are required for this project.

DEC Permits

○ Air Pollution Control	○ Navigable Waters Protection / Article 15
○ Coastal Erosion	○ Water Quality Certificate
○ Hazardous Waste	○ Dam Safety
○ Long Island Wells	○ Water Supply
○ Mined Land Reclamation	○ Freshwater Wetlands/Article 24
○ Other SPDES	○ Tidal Wetlands
○ Solid Waste	○ Wild, Scenic and Recreational Rivers
● None	○ Stream Bed or Bank Protection / Article 15

● Other

Floodplain Development

37. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ● **No**
If Yes, Indicate Size of Impact. _____.__

38. Is this project subject to the requirements of a regulated, traditional land use control MS4? ● **Yes** ○ **No**
(If No, skip question 39)

39. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● **Yes** ○ **No**

40. If this NOI is being submitted for the purpose of continuing coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. _____

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name Steve **MI** P

Print Last Name Trifiletti

Owner/Operator Signature S.P. Trifiletti

Date 09/26/2012

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	ExxonMobil Oil Corporation
2. Contact Person:	Steve Trifiletti
3. Street Address:	38 Varick Street
4. City/State/Zip:	Brooklyn, New York 11222-3817
II. Project Site Information	
5. Project/Site Name:	Former Mobil Tappan Terminal Soil Cap for AOC1
6. Street Address:	One Southside Avenue off Railroad Avenue
7. City/State/Zip:	Hastings-on-Hudson, New York 10706-2703
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information *	
8. SWPPP Reviewed by:	Deven Sharma AIA
9. Title/Position:	Building Inspector - SMO
10. Date Final SWPPP Reviewed and Accepted:	September 28, 2012
IV. Regulated MS4 Information	
11. Name of MS4:	Village Hastings on Hudson
12. MS4 SPDES Permit Identification Number: NYR20A	219
13. Contact Person:	Deven Sharma AIA
14. Street Address:	7 Maple Avenue
15. City/State/Zip:	Hastings on Hudson, NY 10706
16. Telephone Number:	914-478-3400 ext. 612

(NYS DEC - MS4 SWPPP Acceptance Form - January 2010)

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).
Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:	Deven Sharma AIA
Title/Position:	Building Inspector - SMO
Signature:	
Date:	October 1, 2012

VI. Additional Information

SI® Geosolutions

Product Data Sheet

4 FOR UNDER 24" CAP "

GEOTEX® 401

GEOTEX 401 is a polypropylene, staple fiber, needlepunched nonwoven geotextile manufactured at one of SI Geosolutions' facilities that has achieved ISO-9002 certification for its systematic approach to quality. The fibers are needled to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils. **GEOTEX 401** conforms to the property values listed below[1] which have been derived from quality control testing performed by one of SI Geosolutions' GAI-LAP accredited laboratories:

PROPERTY	TEST METHOD	MARV[2] ENGLISH	MARV[2] METRIC
Physical			
Mass/Unit Area	ASTM D5261	3.5 oz/yd^2	119 g/m^2
Thickness	ASTM D5199	50 mils	1.3 mm
Mechanical			
Grab Tensile Strength	ASTM D4632	115 lbs	512 N
Grab Elongation	ASTM D4632	50%	50%
Puncture Strength	ASTM D4833	65 lbs	289 N
Mullen Burst	ASTM D3786	210 psi	1448 kPa
Trapezoidal Tear	ASTM D4533	50 lbs	222 N
Wide Width Tensile	ASTM D4595	480 lbs/ft	7.0 kN/m
Endurance			
UV Resistance @ 500 hrs	ASTM D4355	70%	70%
Hydraulic			
Apparent Opening Size (AOS)[3]	ASTM D4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D4491	2.00 sec^{-1}	2.00 sec^{-1}
Permeability	ASTM D4491	0.22 cm/sec	0.22 cm/sec
Water Flow Rate	ASTM D4491	140 gpm/ft^2	5704 l/min/m^2
Typical Roll Sizes		150 in x 120 yds 180 in x 120 yds	3.81 m x 109.8 m 4.57 m x 109.8 m

NOTES:

1. **The property values listed below are effective 12/2003 are subject to change without notice.**
2. Values shown are in weaker principal direction. Minimum average roll values are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
3. Maximum average roll value. Statistically, it yields a 97.7% degree of confidence that samples taken from QA testing will be below the value reported.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT FURNISHED HEREUNDER OTHER THAN AT THE TIME OF DELIVERY IT SHALL BE OF THE QUALITY AND SPECIFICATION STATED HEREIN. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED, AND, TO THE EXTENT THAT IT IS CONTRARY TO THE FOREGOING SENTENCE, ANY IMPLIED WARRANTY OF MERCHANTABILITY IS EXPRESSLY EXCLUDED. ANY RECOMMENDATIONS MADE BY SELLER CONCERNING THE USES OR APPLICATIONS OF SAID PRODUCT ARE BELIEVED RELIABLE AND SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED. IF THE PRODUCT DOES NOT MEET SI GEOSOLUTIONS' CURRENT PUBLISHED SPECIFICATIONS, AND THE CUSTOMER GIVES NOTICE TO SI GEOSOLUTIONS BEFORE INSTALLING THE PRODUCT, THEN SI GEOSOLUTIONS WILL REPLACE THE PRODUCT WITHOUT CHARGE OR REFUND THE PURCHASE PRICE.

4019 Industry Dr. • Chattanooga, Tennessee 37416 USA • (423) 899-0444 or (800) 621-0444 • FAX (423) 553-2900 • www.fixsoil.com

Wayne Wholesale Fertilizer Co.
10 Myrtle Ave
Wayne, NJ 07470
Phone: 973-628-7375
Fax: 973-633-1335

March 19, 2013

American Environmental Assessment Corp.
188 Long Island Avenue
Wyandanch, NY 11798

Attn: John Clemente, Sr. Project Mgr.

Re: Materials for Hastings on the Hudson

The material to be utilized per acre on berm will be:
Grass seed – New England Conservation mix – 25 lbs per acre
19-19-19 fertilizer – 250 lbs per acre
Hydro mulch – wood fiber with tack mix – 1500 lbs per acre

The material to be utilized on the balance of the site will be:
Grass seed – 60% red fescue, 30 % perennial rye, 10 % white clover will be 250 lbs per acre
19-19-19 fertilizer – 250 lbs per acre
Hydro mulch – wood fiber with tack mix – 1500 lbs per acre

If any questions, call me at the above number or on my cell 973-332-1707.

Sincerely,

ED
ES/jg

NATIONAL SEED

18 B Jules Lane, New Brunswick, NJ 08901
(732) 247-3100 Fax (732) 247-3514

March 13, 2013

CERTIFICATE OF COMPLIANCE

NATIONAL SEED does hereby certify that the seed to be supplied to Wayne Fertilizer, P. O. Box 504, Wayne, New Jersey 07474, is in full compliance with the below listed specifications.

GUARANTEED ANALYSIS

Special Mixture

Pure Seed		Germination
58.20%	Red Fescue, Creeping Type	85%
29.10%	Evening Shade Perennial Ryegrass	90%
9.90%	White Clover	57%+33% Hard Seed
0.90%	Other Crop Seed	
1.88%	Inert Matter	
0.02%	Weed Seed	

National Seed

Mary Griepentrog

Mary Griepentrog
Operations Manager

central fiber

Dependable. Smart. Naturally.

Material Safety Data Sheet – MSDS

Product Name:	Second Nature® Wood Fiber Plus
Last Revision Date:	7/26/2011

1. Product Identification

Product	Wood Based Hydromulch	
Trade Name	Second Nature Wood Fiber Plus	
CAS#	9004-34-6	
ACGIH TVL	5 mg/m3 (respirable)	
OSHA	15 mppcf	
HMIS Rating:	Flammability	1
	Personal Protection	E
	Health	2
	Reactivity	0
Filler:		
Guar Gum	CAS# 9000-30-0	

2. Hazardous Ingredients

Wood Dust is considered a hazardous substance as defined by the Hazardous Communications Standards 29CFR1910.1200.

3. Physical Properties

Boiling Point (F)	Not Applicable
Vapor Pressure (mm Hg)	Not Applicable
Vapor Density	Not Applicable
Solubility in Water	Insoluble, Dispersible
Bulk Density	22 lb/ft3
Reactivity in Water	Dispersible
Melting Point	Not Applicable
Appearance & Odor	Coarse material, green in color. No discernible odor.

4. Fire & Explosion Data

Flash Point	>550F
Flammability Limits:	
LEL	Not Applicable
UEL	Not Applicable
Extinguishing Media	Water
Special Fire Fighting Procedures	None
Unusual Fire & Explosion Hazards	None

central fiber

Dependable. Smart. Naturally.

Material Safety Data Sheet – MSDS

Product Name:	Second Nature® Wood Fiber Plus
Last Revision Date:	7/26/2011

5. Reactivity

Stability	Stable
Conditions to Avoid	Avoid extreme heat & flame
Hazardous Decomposition	May produce carbon monoxide & carbon dioxide
Hazardous Polymerization	Will not occur

6. Health Hazards

Material is primarily a Nuisance Dust

Overexposure	May cause irritation to eye & respiratory system. Avoid breathing dust.
Inhalation	Can cause irritation to mucous membrane & upper respiratory system. Remove to fresh air.
Ingestion	May cause vomiting or diarrhea.
Eyes	In case of eye contact flush with copious amount of water
Skin	In case of broken skin, wear gloves. Wash dust with soap & water.

7. Special Precautions Spill/Leak Procedures

Spill	Sweep up excess material
Disposal	In accordance with Federal, State & local refuse regulations

8. Special Protection Control Measures

Respiratory Protection	Use NIOSH approved respiratory masks
Eye Protection	Use goggles or eye glasses
Hand Protection	If sensitive, wear gloves
Other Protective Clothing	None
Ventilation	Normal & ventilation
Work/Hygiene	Practices standard hygiene

Information presented herein has been compiled from sources considered dependable and is accurate and reliable to the best of our knowledge and belief, but it is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patents or in violation of any laws or regulations. It is the user's responsibility to determine the suitability of any material for a specific purpose and adopt necessary safety precautions. We make no warranty as to results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.

central fiber

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Specifications

Product Name:	Second Nature® Wood Fiber Plus Mulch
Last Revision Date:	July 2011
Manufacture Facility:	Canton, OH

1. Product Identification

Second Nature Wood Fiber Plus Mulch is manufactured from virgin wood chips. It is non-toxic, 100% biodegradable, and contaminant free. Guar Gum tackifier is premixed during the manufacturing process.

2. Mixing

Mix Second Nature Wood Fiber Plus Mulch with approximately 100 gallons of water per 50 pound bag. Seed, fertilizer and soil amendments may be added at specified rates for one step installation of hydro seeding and erosion control projects.

3. Application

Second Nature Wood Fiber Plus Mulch can be applied after adding seed and fertilizer or as a separate application. Good soil preparation is essential. Slurry containing seed and fertilizer is best applied from the hose by pointing the nozzle straight down to drive the material into the soil. The application should then be topped-off by allowing the material to "rain on" the surface to achieve approximately 85%coverage.
Minimum Application Rate: 1,500 Pounds / Acre.

4. Equipment

Second Nature Wood Fiber Plus Mulch is mixed and applied with a standard hydro seeding machine.
Note: A mechanically agitated hydro seeding machine is recommended. Follow equipment manufacturer's installation instructions and recommendations.

5. Product Composition / Property Values

Wood Fiber *(minimum)*	97%
Tackifier	3% (±1%)
Moisture Content	12% (±3%)
Toxicity	non-toxic
Water Holding Capacity *(minimum)*	1200%
Applied Color	Green

6. Packaging and Shipping

Bag Dimensions, Net Weight	18" x 10" x 29", 50lbs *(Bags are UV & Weather-Resistant Plastic)*
Pallet Dimensions, Quantity	95"H x 47"W x 47"D, 40 Bags *(Pallets are Stretched-Wrapped with UV & Water Resistant Plastic Cover)*
Full Truckload	22 pallets, 880 bags

7. Technical Assistance

For additional technical information contact our Technical Department: (800) 654-6117.

2400 E ERWIN
TYLER, TX 75702
PHONE: (903) 531-2211
FAX: (903) 531-2312

4814 FIBER LANE
WELLSVILLE, KS 66092
PHONE: (785) 883-4600
FAX: (785) 883-4429

1525 WAYNESBURG DR. SE
CANTON, OH 44707
PHONE: (330) 452-2630
FAX: (330) 452-2644

www.centralfiber.com

MATERIAL SAFETY DATA SHEET

PRODUCT NAME:	GREENYARD PROFESSIONAL FERTILIZER 19-19-19 ALL MINERAL

SECTION I

MANUFACTURER'S NAME:	EMERGENCY TELEPHONE NUMBER CALL
GROWMARK FS LLC	DAY OR NIGHT 1-800-424-9300
3150 STONEY POINT RD	TELEPHONE NUMBER FOR INFORMATION:
EAST BERLIN, PA 17316 (717)-259-9573	(888)-222-4405

SECTION II CHEMICAL INGREDIENTS/IDENTITY INFORMATION

CHEMICAL COMPONENTS	OSHA PEL	ACGIH TLV	OTHER LIMITS	CAS #	%
UREA	5mg/M^3	10mg/M^3		57-13-6	
Potassium Chloride		10mg/M^3		7447-40-7	
Ammoniated Phosphate	15mg/M^3	10mg/M^3		7783-28-0	
Limestone					

SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	NA	SPECIFIC GRAVITY	>1
VAPOR PRESSURE	NA	MELTING POINT	132.7^{0}C
VAPOR DENSITY	NA	EVAPORATION RATE	NA
SOLUBILITY IN WATER	Soluble	APPEARANCE AND ODOR	Granular & mixed color

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): NA

EXTINGUISHING MEDIA: FOAM & WATER

SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus, to protect against the decomposition products of Urea and Sulfur Coated Urea which can be toxic.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Avoid breathing vapors or dust.

SECTION V REACTIVITY DATA

STABLE	X	CONDITIONS TO AVOID	Decomposes when heated above melting point
UNSTABLE		CONDITIONS TO AVOID	

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid Contact with Strong Acids,
Mildly Corrosive to Metals in Presence of Moisture

HAZARDOUS DECOMPOSITION OR BY PRODUCTS: NDA

HAZARDOUS POLYMERIZATION:			
MAY OCCUR		CONDITIONS TO AVOID	
WILL NOT OCCUR	X	CONDITIONS TO AVOID	N A

SECTION VI HEALTH HAZARD DATA

ROUTES OF ENTRY: Inhalation, Eyes, Skin, and Ingestion

HEALTH HAZARDS:
SIGNS AND SYMPTOMS OF EXPOSURE: EYES: Dust and vapors can cause irritation and pain. SKIN: Can cause irritation. INHALATION: Dust can cause sore throat, coughing, and shortness of breath. INGESTION: Can cause sore throat and abdominal pain.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NDA

EMERGENCY AND FIRST AID PROCEDURES: EYES & INGESTION: Flush immediately with plenty of water, seek medical attention if necessary. SKIN: Remove contaminated clothing immediately and flush contaminated area with water. INHALATION: Move to fresh air and rest. Seek medical attention if necessary.

SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep up and reuse as product.

WASTE DISPOSAL METHOD: Sanitary Landfill. Dispose in compliance with local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry location, remote from acids.

OTHER PRECAUTIONS:

SECTION VII CONTROL MEASURES / PROCESS AREAS

RESPIRATORY PROTECTION (SPECIFY TYPE):

VENTILATION	LOCAL EXHAUST	as necessary to maintain low dust levels
	MECHANICAL	N A
	SPECIAL	dust mask or respirator in dusty situations

PROTECTIVE GLOVES: Gloves recommended EYE PROTECTION: None required

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Optional

WORK / HYGIENIC PRACTICES: Normally accepted practices.

SECTION IX REGULATORY COMPLIANCE

THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUTES:

REPORTABLE QUANTITY (RQ), EPA REGULATION 40 CFR 302 (CERLA Section 102):

CHEMICAL NAMES	CAS#	RQ
		NA

THRESHOLD PLANNING QUANTITY (TPQ), EPA REGULATION 40 CFR 355 (SARA Sections 301-304):

CHEMICAL NAME:	CAS#:	TPQ:

TOXIC CHEMICAL RELEASE REPORTING, EPA REGULATION 40 CFR 372 (SARA Section 313):

CHEMICAL NAME:	CAS #:	% BY WEIGHT IN PRODUCT

HAZARDOUS CHEMICAL REPORTING, EPA REGULATION 40 CFR 370 (SARA Sections 311-312):

CHEMICAL NAME:	CAS#:

EPA HAZARD CLASSIFICATION CODE:

ACUTE HAZARD	CHRONIC HAZARD	FIRE HAZARD	PRESSURE HAZARD	REACTIVE HAZARD	NOT APPLICABLE
					X

HAZARD RATING: NFPA

0 FIRE 0 TOXICITY 0 REACTIVITY U CORROSIVENESS

HAZARD RATING CODE	0 None	1 Slight	2 Moderate	3 High	U Unknown

SECTION X TRANSPORTATION INFORMATION

For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Material Incidents. DOT P 5800.5

DOT IDENTIFICATION: RQ:

OSHA REQUIRED LABEL INFORMATION:
In compliance with hazard and right-to-know requirements, the following OSHA Hazard Warnings should be found on a label, bill of lading or invoice accompanying this shipment. NA

NOTE: Product label will contain additional non-OSHA related information.

DATE: March 14, 2013 SUPERSEDES: ALL PREVIOUS

The information herein was given in good faith but no warranty, expressed or implied was made. Consult for further information.

NA = NOT APPLICABLE NDA = NO DATA AVAILABLE

NEW ENGLAND WETLAND PLANTS, INC

820 West Street, Amherst, MA 01002
Phone: 413.548.8000 Fax: 413.549.4000
email: info@newp.com web address: www.newp.com

New England Conservation/Wildlife Mix

Botanical Name	Common Name	Ind.
Elymus virginicus	Virginia Wild Rye	FACW-
Schizachyrium scoparium	Little Bluestem	FACU
Andropogon gerardii	Big Bluestem	FAC
Festuca rubra	Creeping Red Fescue	FACU
Panicum virgatum	Switch Grass	FAC
Chamaecrista fasciculata	Partridge Pea	FACU
Panicum clandestinum	Deer Tongue	FAC+
Sorghastrum nutans	Indian Grass	UPL
Asclepias syriaca	Common Milkweed	FACU-
Heliopsis helianthoides	Ox Eye Sunflower	UPL
Eupatorium purpureum	Purple Joe Pye Weed	FAC
Euthamia graminifolia	Grass Leaved Goldenrod	FAC
Verbena hastata	Blue Vervain	FACW
Zizia aurea	Golden Alexanders	FAC
Aster umbellatus	Flat Topped/Umbrella Aster	FACW
Solidago juncea	Early Goldenrod	NI

Price per lb. $30.00
Min. quantity: 2 lbs.
Total $60.00
Apply: 25 lbs/acre
Minimum quantity: 2 lbs

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers and legumes to provide both good erosion control and wildlife habitat value. This mix is designed to be a no maintenance seeding, and it is appropriate to cut and fill slopes, detention basin slopes, and disturbed areas adjacent to commercial and residential projects. Always apply on clean bare soil. The mix may be applied by hydro-seeding, by mechanical spreader, or on small sites it can be spread by hand. Lightly rake, or roll to ensure proper seed to soil contact. Best results are obtained with a Spring seeding. Late Spring through early Summer seeding will benefit with a light mulching of weed-free straw to conserve moisture. If conditions are drier than usual, watering will be required. Late Fall and Winter dormant seeding require an increase in the seeding rate. Fertilization is not required unless the soils are particularly infertile. Preparation of a clean weed free soil surface is necessary for optimal results.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged.

Price is $/bulk pound. FOB warehouse, plus S&H and applicable taxes.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015

Shoreline Stone Material – November 29, 2012

New (upper left) and Existing (lower right) Stone
(Note: Foot in center of photo is approximately along line between new and existing stone material)

JRM Chemical, Inc.

SOIL MOIST TRANSPLANT PLUS 3-3-3

Soil Moist Transplant Plus is formulated to inoculate transplant shrubs and trees during planting time. Soil Moist Transplant Plus contains a diverse blend of five species of healthy viable ectomycorrhizal propagules and seven species of healthy viable endomycorrhizal propagules that are adapted to a wide range of plants and habitat conditions. This formulation will provide the inoculated area to colonize on the newly planted stock in a wide variety of growing conditions.

The mycorrhizal fungi colonize plant roots and extend far into the soil resource. The fungi improves the ability of the plants to utilize the soil resources. The fungi increases water and nutrient uptake by providing a larger root mass. The improvement in the plant / soil ecosystem increases plant establishment.

Each pound of Transplant Plus contains over five billion colony forming units (CFU) of bacteria in the biostimulant formulation. There are over fifty (50) strains of beneficial bacteria and soil microbes as well as natural plant extracts that promote root growth and formulation. Three strains of Trichoderma and two strains of Gliocladium fungi are included in the formulation to produce natural growth hormones and enhance disease suppression.

Transplant Plus contains a 8-9 month timed release 3-3-3 fertilizer.

Soil Moist™ water storing polymers are included in the formulation to reduce transplant stress and water maintenance while increasing the establishment of newly planted stock.

PRODUCT BENEFITS

- Improves soil and plant ecosystem
- Increases plant establishment and growth
- Reduces transplanting stress and plant loss
- Increases nutrient and water uptake
- Improves soil structure and porosity
- Reduces fertilizer use

COMPATIBILITY

Soil Moist Transplant Plus is effective on all types of trees, shrubs and plants with the exception of Laurels, Rhododendrons and Azaleas.

Fungicides: Do not use fungicides for three weeks before and after applying Soil Moist Transplant Plus. The following fungicides should not be used: Ridomil, Benlate, Bravo, Daconil, PCNB, Bayleton, Dithane, Zineb and Ziram.

STORAGE

Store in a cool, dry location. Avoid direct sunlight and high temperatures. Reseal any remaining materials in their original container. Product shelf life is up to twenty-four months.

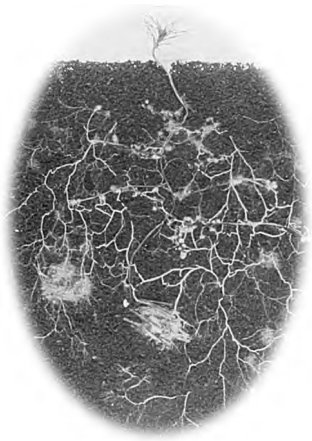
PLANT FOOD INGREDIENTS

Fertilizer	Guaranteed analysis of 3.0% Total Nitrogen (1.8% Ammoniacal Nitrogen, 1.2% Nitrate Nitrogen), 3.0% Available Phosphate (P_2O_5), 3.0% Soluble Potash (K_2O).

NON PLANT FOOD INGREDIENTS

Endomycorrhizal Fungi	Minimum of 5760 viable propagules per pound of material derived from seven species: Glomus intraradices, Glomus aggregatum, Glomus mosseae, Glomus clarum, Glomus deserticola, Glomus monosporum and Gigaspora margarita.
Ectomycorrhizal Fungi	Minimum of 586 million viable propagules per pound of material derived from seven species: Pisolithus tinctorius, Rhizopogon rubescens, Rhizopogon fulvigleba, Rhizopogon villosuli and Rhizopogon amylopogon.

Soil Moist™	Crosslinked polyacrylamide, 1000-2000 micron size. Minimum of 5.4 ounces per pound.
Sea Kelp extract	Ecklonia maxima
Humic acid	Leonardite humates
Fungi	Three strains of Trichoderma and two strains of Gliocladium to produce natural growth hormones and enhance disease suppression.
Beneficial bacteria	Over fifty (50) strains of bacteria which include fifteen strains of Bacillus, five strains of Psuedomonas and ten strains of Streptomycetes. Minimum of five billion colony forming units (CFU) per pound.
Vitamins and other ingredients	Folic and fulvic acid, biotin, natural sugars and vitamins (B, B1, B2, B3, B12, C & K)



Glass cutaway showing mycorrhizal filaments and root system.

APPLICATION RATES

Mix Soil Moist Transplant Plus with backfill in the top ten inches of the planting hole around the root ball. Water after applying. Soil Moist Transplant Plus must be placed in contact with the root ball when applying.

Each six ounce package will treat two one inch caliper trees.

Container Size	Amount	Caliper Size	Amount
1 Gallon	.75 oz.	1”	3.0 oz.
2 Gallon	1.5 oz.	2”	6.0 oz.
3 Gallon	1.5 oz.	3”	9.0 oz.
5 Gallon	2.0 oz.	4”	12.0 oz.
7 Gallon	3.0 oz.	5”	15.0 oz
10 Gallon	3.0 oz.	6”	18.0 oz
15 Gallon	4.0 oz.	7”	21.0 oz
20 Gallon	5.0 oz.	8”	24.0 oz
Plant Height	**Amount**	**Box Size**	**Amount**
2’	1.5 oz.	16”	4.0 oz.
3’	2.0 oz.	20”	5.0 oz.
4’	3.0 oz.	24”	7.0 oz.
5’	4.0 oz.	30”	10.0 oz.
6’	5.0 oz.	36”	14.0 oz
7’	6.0 oz.	42”	19.0 oz
		60”	24.0 oz.

Soil Moist Transplant Plus is packaged in premeasured six ounce packages and in five and thirty pound resealable plastic pails. Custom blends on Soil Moist Transplant Plus are available to meet any specific requirements. Special bulk package sizes are available, minimum quantities apply.

JRM Chemical, Inc.
4881 NEO Parkway
Cleveland, OH 44128
800-962-4010
(216) 475-8488
Fax: (216) 475-6517
email: jrm@en.com
www.soilmoist.com

Distributed by:

©2002 JRM Chemical, Inc. Form 782A 11/02

Well Construction Information

Former Mobil Tappan Terminal
AOC1, Former Tappan Terminal
Hastings-on-Hudson, New York

Well ID		Year Installed	Well Diameter (inches)	Total Depth (feet)	Screen Length (feet)	Comments
ExxonMobil Wells (AOC1)	MW-1A	1993	4	11	10	Well extended above cap
	MW-4	1986	4	11	10	Well extended above cap
	MW-5	1986	4	10	10	Well extended above cap
	MW-6R	2012	2	10.5	10	Well replaced by others for AOC3
	MW-7A	1993	4	11	10	Well extended above cap
	MW-9A	1993	4	12	10	Well extended above cap
	MW-10R	2012	2	13	10	Well replaced by others for AOC3
	MW-12R	2012	2	13	10	Well replaced by others for AOC3
	MW-15	1994	4	11	10	Well extended above cap
	MW-16	1994	4	11	10	Well extended above cap
	MW-17	1994	4	13	10	Well extended above cap
	MW-D1	1988	4	66.5	20	Well extended above cap
	MW-S1	1988	6	28	20	Well extended above cap
	OW-5AR	2012	2	13	10	Well replaced by others for AOC3
	OW-8R	2013	2	13	10	Well replaced by others for AOC3
	OW-9A	1994	4	12	10	Well extended above cap
	OW-12	1986	2	15	14	Well extended above cap
	OW-15	1986	2	16	14	Well extended above cap
	OW-18	1986	2	11	10	Well decommissioned by others for AOC3
	OW-19A	1993	4	11	10	Well extended above cap
	OW-20	1986	2	12	10	Well extended above cap
	OW-25	1986	2	11	10	Well extended above cap
	OW-27A	1993	4	11	10	Well extended above cap
	SVE Well	2002	4	7	5	Well extended above cap
	AS-1	2002	2	23	3	Well extended above cap
	AS-2	2004	2	20	5	Well extended above cap
	MW-T1	2002	4	20	15	Well extended above cap
	MW-T2	2002	2	20	15	Well extended above cap
	MW-T3	2002	2	23	20	Well extended above cap
	MW-T4 (MW-1/TW4)	2004	2	20	15	Well extended above cap
	MW-T5 (MW-2/TW5)	2004	2	20	15	Well extended above cap
	MW-T6	2004	2	20	15	Well decommissioned by others for AOC3
Wells Installed by Others (AOC3)	AB-MW-1R	2012	2	13	10	Well installed by others for AOC3
	AB-MW-2	2008	2	13	10	Well installed by others for AOC3
	AB-MW-3	2008	2	13	10	Well installed by others for AOC3
	AB-MW-4	2008	2	18	15	Well decommissioned by others for AOC3
	AB-MW-5	2008	2	18	15	Well decommissioned by others for AOC3
	AMW-6	2012	2	15	10	Well installed by others for AOC3
	AMW-7	2012	2	14	10	Well installed by others for AOC3
	AMW-8	2013	2	14	10	Well installed by others for AOC3
	AMW-9	2012	2	13	10	Well installed by others for AOC3
	EW-1	2012	6	20	5	Well installed by others for AOC3
	EW-2	2012	6	20	5	Well installed by others for AOC3
	MW-T3E	2008	2	20	15	Well installed by others for AOC3
	MW-T3S	2008	2	19.5	15	Well installed by others for AOC3
	MW-T3N	2008	2	18	15	Well installed by others for AOC3
	MW-T3W	2008	2	19	15	Well installed by others for AOC3
	MW-T4E	2008	2	19.5	15	Well installed by others for AOC3
	MW-T4N	2008	2	19.5	15	Well installed by others for AOC3
	MW-T4S	2008	2	19.5	15	Well installed by others for AOC3
	MW-T4W	2008	2	19.5	15	Well installed by others for AOC3
	OW-12E	2008	2	18	15	Well decommissioned by others for AOC3
	OW-12N	2008	2	18	15	Well decommissioned by others for AOC3
	OW-12S	2008	2	19	15	Well decommissioned by others for AOC3
	OW-12SW	2009	2	17	15	Well installed by others for AOC3
	OW-12W	2008	2	17	15	Well installed by others for AOC3

APPENDIX B: DISPOSAL DOCUMENTATION

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Shipping Document Tracking Number
	NYD 5 8 0 9	1	(877) 318-0987	ZZ 00297500

GENERATOR

5. Generator's Name and Mailing Address
EXXONMOBIL-FORMER TAPPAN TERMINAL
1 RAILROAD AVE
HASTINGS ON HUDSON, NY 10706
Generator's Phone: 718 [illegible]

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: N J D 0 8 0 6 3 1 4 6 9

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347 2111
U.S. EPA ID Number: N J D 0 8 0 5 7 6 5 9 3

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Codes
	1. NON-REGULATED MATERIAL, NON-RCRA, NON-DOT.	3	D M	1200	P	H027 L
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS

15. **GENERATOR S/OFFEROR S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

On behalf of ExxonMobil

Generator's/Offeror's Printed/Typed Name: Steve P. Tafiatt
Signature: [signature]
Month 05 Day 08 Year 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Shipment
Transporter 1 Printed/Typed Name: [illegible]
Signature: [signature]
Month Day Year

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Shipping Document Tracking Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year

GENERATOR / SHIPPER'S INITIAL COPY

WORK ORDER TICKET

Brookfield Resource Management
100 Lamont Street
Elmsford, NY 10523
914-592-5250

Customer: AMERICAN ENVIRONMENTAL
Description: 20 Yard Container
Location: Hastings on Hudson
1 River St.
Hastings on Hudson, NY

SCRAP STEEL Dumpster

Work Order #: 12353
Scheduled Date: 10/24/2012
Service Date: 10/24/2012
Truck #: 160
Trip # / Line #: 12555 / 2
Driver: Jim Stone
Hauling Fee: $107.38

	REQUESTED		ACTUAL	
	Container Type	**Containter #**	**Container Type**	**Containter #**
Deliver:	20Y		20Y	218

DIRECTIONS:

Contact; John- 516-852-0605

For pickup/delivery service call (914) 592-5250
or fax request to (914) 592-5337

We are not responsible for sidewalks, curbs, driveways or any property damage which may result from this service.

CUSTOMER IS RESPONSIBLE FOR:
FINES DUE TO SPILLAGE OF OVERFILLED CONTAINERS.
FINES DUE TO OVERWEIGHT CONTAINERS.
DAMAGE TO CONTAINER WHILE AT CUSTOMER SITE.

DRIVER SIGNATURE

Dctn DL-H-AGK / H-O-H
CUSTOMER SIGNATURE

WORK ORDER TICKET

Brookfield Resource Management
100 Lamont Street
Elmsford, NY 10523
914-592-5250

Customer: AMERICAN ENVIRONMENTAL
Description: 20 Yard Container
Location: Hastings on Hudson
1 River St.
Hastings on Hudson, NY

2nd Steel Dumpster

Work Order #: 12466
Scheduled Date: 11/09/2012
Service Date: 11/09/2012
Truck #: 160
Trip # / Line #: 12666 / 2
Driver: Jim Stone
Hauling Fee: $107.38

	REQUESTED		ACTUAL	
	Container Type	Containter #	Container Type	Containter #
Deliver:	20Y		20Y	215
Pickup:	20Y	218	20Y	218

DIRECTIONS:

Contact; John- 516-852-0605

For pickup/delivery service call (914) 592-5250
or fax request to (914) 592-5337

We are not responsible for sidewalks, curbs, driveways or any property damage which may result from this service.

CUSTOMER IS RESPONSIBLE FOR:
FINES DUE TO SPILLAGE OF OVERFILLED CONTAINERS.
FINES DUE TO OVERWEIGHT CONTAINERS.
DAMAGE TO CONTAINER WHILE AT CUSTOMER SITE.

DRIVER SIGNATURE

CUSTOMER SIGNATURE

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No.	Phone No.	Date 10/24/12

Sold To: DFAC

Address:

City:

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out	

Qty.	Description	Price	Amount
1	30 yds Garbage		
		Tax	
		Total	

Curbside delivery only.

Rec'd. By

3401

Thank You

240139 76696V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No.	Phone No.	Date 12/4/12
Sold To	Amer. Env.	
Address		
City		

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out	

Qty.	Description	Price	Amount
1	30 yds Garbage		
	Curbside delivery only.	Tax	
Rec'd. By		Total	

3675 **Thank You**

0139 76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No.	Phone No.	Date 12/4/12
Sold To	EAC	
Address		
City		

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out	

Qty.	Description	Price	Amount
1	30 yds Garbage		
	Curbside delivery only.	Tax	
Rec'd. By		Total	

3460 **Thank You**

240139 76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No. | Phone No. | Date 12/7/12

Sold To DEDC

Address

City

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out

Qty.	Description	Price	Amount
	30 yds debris		

Curbside delivery only.

Tax

Total

Rec'd. By

3407 **Thank You**

76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No. | Phone No. | Date 12/10/12

Sold To DEDC

Address

City

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out

Qty.	Description	Price	Amount
	30 yd debris		

Curbside delivery only.

Tax

Total

Rec'd. By

3425 **Thank You**

240139 76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

stomer's Order No. | Phone No. | Date 12/10/12

ld To DFAC

dress

By | Cash | C.O.D. | Charge | On Acct. | Mdse. Ret'd. | Paid Out

Description	Price	Amount
30 yd debris		

Curbside delivery only.

Tax

Total

3424

Thank You

896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No. | Phone No. | Date 12/12/12

Sold To

Address Amer. Env.

City

Sold By | Cash | C.O.D. | Charge | On Acct. | Mdse. Ret'd. | Paid Out

Qty.	Description	Price	Amount
1	30 yd. debris		

Curbside delivery only.

Tax

Rec'd. By

Total

3674

Thank You

240139 76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

tomer's Order No.	Phone No.	Date 12/12/12

d To DEDL

lress

By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out	

.	Description	Price	Amount	
	30 yds debris			

Curbside delivery only.

Tax		
Total		

'd.

3594 **Thank You**

9 76896V

ROBERT BENZ TRUCKING, LLC
61 BROAD STREET
HAWTHORNE, NY 10532

Customer's Order No.	Phone No.	Date 1/1/13

Sold To DEDL

Address

City

Sold By	Cash	C.O.D.	Charge	On Acct.	Mdse. Ret'd.	Paid Out	

Qty.	Description	Price	Amount	
	30 yd debris			

Curbside delivery only.

Tax		
Total		

Rec'd. By

3593 **Thank You**

240139 76896V

For Demo Debris

19

A.T.N.M. CORP.

130 WOODSIDE AVENUE
BRIARCLIFF MANOR, NEW YORK 10510
(914) 762-7145

Del. Date: 11-09-12 Del. Time: _____

Co. Name: ROBERT BENZ

Address: 1 RAILROAD AVE.

Town: HASTINGS-ON-HUDSON
OFF N. MAIN OVER TRACKS

Cross Street: _____
ROUX / AMERICAN ENV

Location on Site: GO TO OFFICE TRAILER

Amount	Size	Deliver	Pick Up
	10 yards		
	12 yards		
	20 yards		
1	30 yards	1	
	40 yards		
Compactor			

Customer will be responsible for damage done to container besides normal wear and tear.

Person or Company which is renting container will not hold A.T.N.M. CORP. responsible for damage to property that truck or container may cause to: a) sidewalks, b) driveways, c) sewer or gas lines.

Signed by: _____

TO BY 7:00

6

A.T.N.M. CORP.

130 WOODSIDE AVENUE
BRIARCLIFF MANOR, NEW YORK 10510
(914) 762-7145

Del. Date: 10-15-12 Del. Time: _____

Co. Name: ROBERT BENZ

Address: 1 RIVER STREET

Town: HASTINGS-ON-HUDSON

Cross Street: MAPLE AND SUMMIT SIDE AVE

Location on Site: SEE ROB ON SITE

Amount	Size	Deliver	Pick Up
	10 yards		
	12 yards		
	20 yards		
1	30 yards	1	OLD FENCE & BRUSH
	40 yards		
Compactor			

Customer will be responsible for damage done to container besides normal wear and tear.

Person or Company which is renting container will not hold A.T.N.M. CORP. responsible for damage to property that truck or container may cause to: a) sidewalks, b) driveways, c) sewer or gas lines.

Signed by: Dennis H. Neal
HOH - Fine Mobil Tr.

P.O.#
TRUCK#
BOX#

INVOICE# 14101

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

3

Bill To: _____ Date: 10/24/12
Job Location: 1 River Rd Hastings on Hudson

CONTACT INFO: PO BOX (2)

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator			
	Mini Excavator			
	W-Loader			
	Screener/Grinder	P/U DATE		
	Hammer			
	Crusher	DESCRIPTION		
	Labor/Foreman			
		30 yds Box Brush (Trees)		
	Containers			
	20 YD			
	30 YD			
YARDS				
	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature: Dutchy-AEAC / HOH			TOTAL	

F1001

P.O.#
TRUCK#
BOX#

INVOICE# 12844

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

2

Bill To: Rob Benz Date: 10/24/12
Job Location: 1 River Rd Hastings on Hudson

CONTACT INFO: Rob 760-0693

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator			
	Mini Excavator			
	W-Loader			
	Screener/Grinder	P/U DATE		
	Hammer			
	Crusher	DESCRIPTION		
	Labor/Foreman			
		30 yd Container (Trees)		
	Containers			
	20 YD			
	30 YD			
YARDS				
	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature: Dutchy-AEAC / HOH			TOTAL	

74401-MC

P.O. #
TRUCK #
BOX #

INVOICE # 12849

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 10/24/12
Job Location: 1 River Rd Hastings on Hudson

QTY

Tri-Axle
Dump Trailer
Trailer Move
Excavator
Mini Excavator
W-Loader
Screener/Grinder
Hammer
Crusher
Labor/Foreman

Containers
20 YD
30 YD
YARDS
Stumps
Chips
Brush
Logs
Leaves
Mix

Compost
Topsoil
Reg. Mulch
Prem. Dark
Prem. Light
West Blend™
Fill/Screened
Stone
Rec. Item 4

CONTACT INFO: John 516-852-0605
Rob Benz 760-0693

CONTAINER	PRICE	AMOUNT
DROP DATE		
P/U DATE		
DESCRIPTION		
30yd Container		

P.O. #
TRUCK #
BOX #

INVOICE # 14103

WESTWOOD ORGANIC RECYCLING

(6)

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605

30 yards

938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 10/25/12

Job Location: 1 River St Hastings on Hudson

QTY		CONTACT INFO:		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move	P/U DATE		
	Excavator	DESCRIPTION		
	Mini Excavator			
	W-Loader			
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman	30 yds		
		container		
	Containers			
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend ™			
	Fill/Screened			
	Stone			
	Rec. Item 4			

Signature: D. Mp/H. Acc/HCH

TAX
TOTAL

P.O. #
TRUCK #
BOX #

INVOICE # 14102

WESTWOOD ORGANIC RECYCLING

(5)

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605

30 yd

938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 10/25/

Job Location: 1 River St Hastings on Hudson

QTY		CONTACT INFO:		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move	P/U DATE		
	Excavator	DESCRIPTION		
	Mini Excavator			
	W-Loader			
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman			
		30 yds		
	Containers	container		
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend ™			
	Fill/Screened			
	Stone			
	Rec. Item 4			

Signature: D. Mp/H. Acc/HCH

TAX
TOTAL

103572

P.O. #
TRUCK #
BOX #

INVOICE # 14111

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605

938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 10/26/12
Job Location: 1 River st Hasting on Hudson

CONTACT INFO: PO #(7)

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle	DROP DATE		
	Dump Trailer			
	Trailer Move	P/U DATE		
	Excavator			
	Mini Excavator	DESCRIPTION		
	W-Loader			
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers	30 yds		
	20 YD	container		
	30 YD	Brush Logs		
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend ™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
			TOTAL	

Signature

P.O. #
TRUCK #
BOX # (6)

INVOICE # 14110

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605

938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 11/01/12
Job Location: 1 River st Hastings on Hudson

CONTACT INFO: PO# BOX (8)

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle	DROP DATE		
	Dump Trailer			
	Trailer Move	P/U DATE		
	Excavator			
	Mini Excavator	DESCRIPTION		
	W-Loader			
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman	30 yds		
	Containers	container		
	20 YD	Brush Logs		
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend ™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
			TOTAL	

Signature

PO #
TRUCK #
BOX #

INVOICE # 14187

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

10

Bill To: Rob Benz Date: 11/1/12
Job Location: 1 River Rd Hastings on Hudson

CONTACT INFO: P.O. # 9 760-0693

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle	DROP DATE		
	Dump Trailer			
	Trailer Move	P/U DATE		
	Excavator			
	Mini Excavator	DESCRIPTION		
	W-Loader	30yd Container		
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

Dump H-1 Site / Turner Mob / Turner Drive

PO #
TRUCK #
BOX #

INVOICE # 14115

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 11/02/12
Job Location: 1 River St Hastings on Hudson

CONTACT INFO: P.O. # 10

QTY		CONTAINER	PRICE	AMOUNT
	Tri-Axle	DROP DATE		
	Dump Trailer			
	Trailer Move	P/U DATE		
	Excavator			
	Mini Excavator	DESCRIPTION		
	W-Loader	30 yds		
	Screener/Grinder	Container		
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

Dump H-1 / Hob

P.O. #
TRUCK #
BOX #

INVOICE # 14117

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 11/6/12
Job Location: 1 River St Hastings on Hudson

QTY

Tri-Axle
Dump Trailer
Trailer Move
Excavator
Mini Excavator
W-Loader
Screener/Grinder
Hammer
Crusher
Labor/Foreman

Containers
20 YD
30 YD
YARDS
Stumps
Chips
Brush
Logs
Leaves
Mix

Compost
Topsoil
Reg. Mulch
Prem. Dark
Prem. Light
WestBlend™
Fill/Screened
Stone
Rec. Item 4

CONTACT INFO: PO # BOX (11)

CONTAINER	PRICE	AMOUNT
DROP DATE		
P/U DATE		
DESCRIPTION		
30 yds		
Container		
Stumps Brush Logs		
Mix		
	TAX	
	TOTAL	

Signature
Patrick Gamble

P.O. #
TRUCK #
BOX #

INVOICE # 14118

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 11/6/12
Job Location: 1 River St Hastings on Hudson

QTY

Tri-Axle
Dump Trailer
Trailer Move
Excavator
Mini Excavator
W-Loader
Screener/Grinder
Hammer
Crusher
Labor/Foreman

Containers
20 YD
30 YD
YARDS
Stumps
Chips
Brush
Logs
Leaves
Mix

Compost
Topsoil
Reg. Mulch
Prem. Dark
Prem. Light
WestBlend™
Fill/Screened
Stone
Rec. Item 4

CONTACT INFO: PO # BOX (12)

CONTAINER	PRICE	AMOUNT
DROP DATE		
P/U DATE		
DESCRIPTION		
30 yds		
Container		
Stumps Brush Logs		
Mix		
	TAX	
	TOTAL	

Signature
Daniel Gamble

P.O. #
TRUCK #
BOX #

INVOICE # 14132

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rod Benz Date: 11/19/12
Job Location: 1 River St Hastings on Hudson

CONTACT INFO: P.O # 130x (13)
John 516 852 0605

QTY

Tri-Axle
Dump Trailer
Trailer Move
Excavator
Mini Excavator
W-Loader
Screener/Grinder
Hammer
Crusher
Labor/Foreman

Containers
20 YD
30 YD

YARDS
Stumps
Chips
Brush
Logs
Leaves
Mix

Compost
Topsoil
Reg. Mulch
Prem. Dark
Prem. Light
West Blend™
Fill/Screened
Stone
Rec. Item 4

CONTAINER	PRICE	AMOUNT
DROP DATE		
P/U DATE		
DESCRIPTION		
30 yds Container		
Brush		
	TAX	
	TOTAL	

Signature

P.O. #
TRUCK #
BOX #

INVOICE #: 7489

WESTWOOD ORGANIC RECYCLING

1160 Mamaroneck Avenue • White Plains, NY 10605
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-948-2602
www.westwoodorganic.com

Date: 12/04/12

Bill To: Rod Benz
Job Location: River St Hastings on Hudson

CONTACT INFO: #4
John 516 852 06 05

QTY

Tri-Axle
Dump Trailer
Trailer Move
Excavator
W-Loader

Containers
10 - 12 YD
20 YD
30 YD

YARDS
Stumps
Chips
Brush
Logs
Leaves
Mix
Compost
Reg. Mulch
Prem. Dark
Prem. Light
West Blend™
Fill
Stone

CONTAINER	PRICE	AMOUNT
DROP DATE		
P/U DATE		
DESCRIPTION		
P/U Brush Logs		30.40
	TAX	
	TOTAL	

Signature

P.O. #
TRUCK #
BOX #

INVOICE # 7490

WESTWOOD ORGANIC RECYCLING

1160 Mamaroneck Avenue • White Plains, NY 10605
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-948-2602
www.westwoodorganic.com

Date: 12/5/2012

Bill To: TO Rod Benz

Job Location: River st Hastings on Hudson

QTY		CONTACT INFO:		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator	P/U DATE		
	W-Loader	DESCRIPTION		
	Containers			
	10 • 12 YD			
	20 YD			
	30 YD	30 yds		
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill			
	Stone			
			TAX	
Signature	Heather Dria		TOTAL	

P.O. #
TRUCK #
BOX #

INVOICE # 10102

WESTWOOD ORGANIC RECYCLING

1160 Mamaroneck Avenue • White Plains, NY 10605
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-948-2602
www.westwoodorganic.com

Date: 12/05/12

Bill To: Rod Benz

Job Location: 1 River St Hastings on Hondson

QTY		CONTACT INFO: John 516 852 06 05		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator	P/U DATE		
	W-Loader	DESCRIPTION		
	Containers	60 yds P/U		
	10 • 12 YD	dump Trailer		
	20 YD	Brush. Logs.		
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill			
	Stone			
			TAX	
Signature			TOTAL	

P.O. #
TRUCK #
BOX #

INVOICE # 13920

WESTWOOD ORGANIC RECYCLING

(18)

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 12/6/12
Job Location: 1 Rivers St. Hastings on Hudson

QTY		CONTACT INFO: John 516-852-0608		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move	P/U DATE		
	Excavator	DESCRIPTION		
	Mini Excavator	760 yds P/U		
	W-Loader	Brush, logs etc		
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

P.O. #
TRUCK #
BOX #

INVOICE # 13935

WESTWOOD ORGANIC RECYCLING

(19)

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 12/10/12
Job Location: 1 Rivers St. Hastings on Hudson

QTY		CONTACT INFO: Rob Benz 760-0693 John 516-852-0605		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move	P/U DATE		
	Excavator	DESCRIPTION		
	Mini Excavator	60 yds organic materials		
	W-Loader	brush, wood		
	Screener/Grinder			
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD			
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

P.O. #
TRUCK#
BOX#

INVOICE # 13738

WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rob Benz Date: 12/12/12
Job Location: 1 River St Hastings on Hudson

QTY		CONTACT INFO: John 516-857-0605		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator	P/U DATE		
	Mini Excavator			
	W-Loader	DESCRIPTION		
	Screener/Grinder	30yd Container		
	Hammer			
	Crusher			
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD	Brush Logs		
YARDS	Stumps			
30	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

P.O. #
TRUCK#
BOX#

INVOICE # 13860

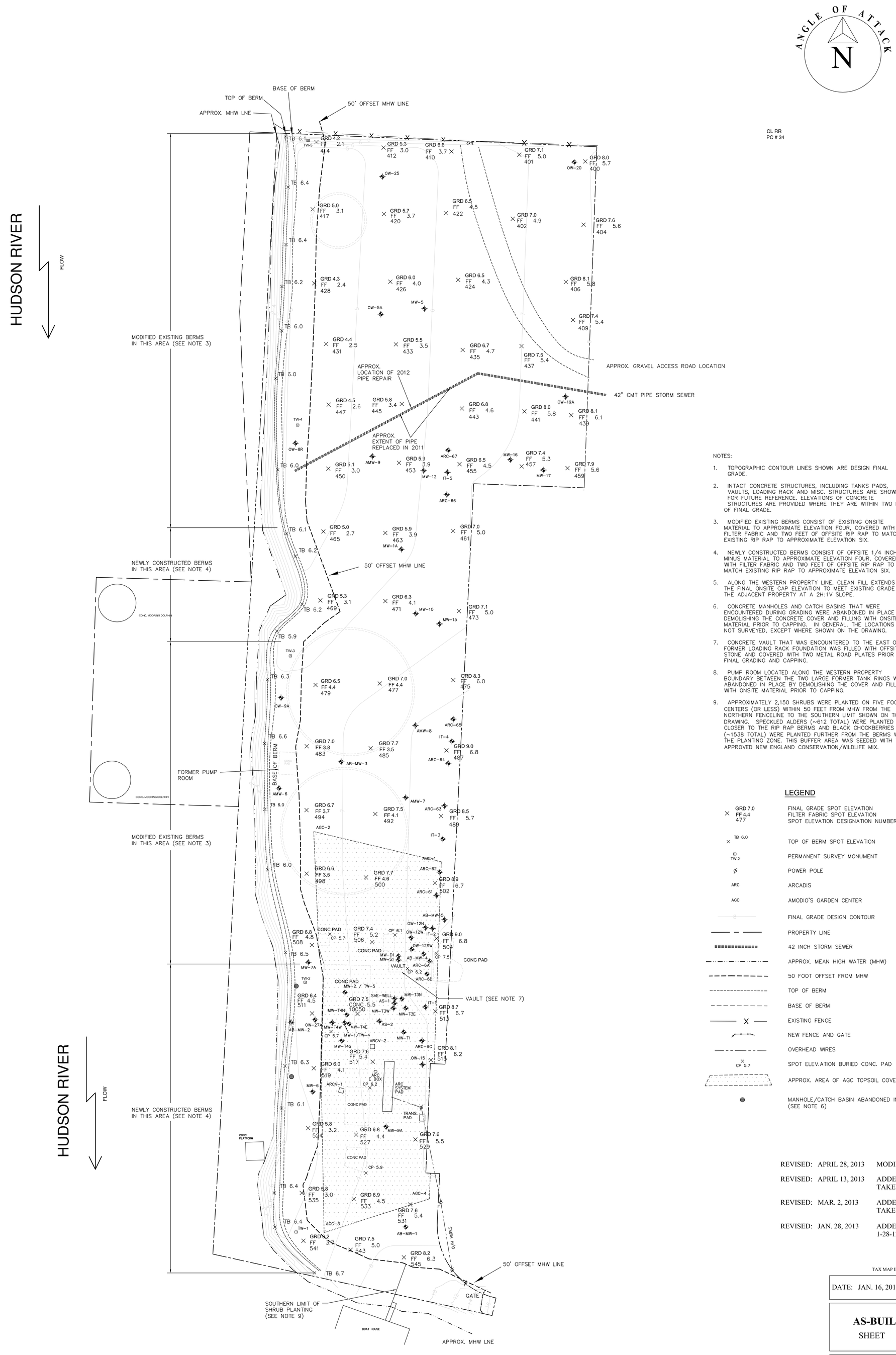
WESTWOOD ORGANIC RECYCLING

Billing & Main Office
1160 Mamaroneck Avenue • White Plains, NY 10605
938 Lincoln Avenue • Rye Brook, NY 10573
115 Beaver Dam Road • Bedford Hills NY 10507
Phone: 914-946-WOOD • Phone: 914-949-3244 • Fax: 914-517-2703
www.westwoodorganic.com

Bill To: Rod Benz Date: 12/13/12
Job Location: 1 River St Hastings on Hudson

QTY		CONTACT INFO:		
	Tri-Axle	CONTAINER	PRICE	AMOUNT
	Dump Trailer	DROP DATE		
	Trailer Move			
	Excavator	P/U DATE		
	Mini Excavator			
	W-Loader	DESCRIPTION		
	Screener/Grinder	30 yds		
	Hammer			
	Crusher	Container		
	Labor/Foreman			
	Containers			
	20 YD			
	30 YD	Brush Logs		
YARDS	Stumps			
	Chips			
	Brush			
	Logs			
	Leaves			
	Mix			
	Compost			
	Topsoil			
	Reg. Mulch			
	Prem. Dark			
	Prem. Light			
	West Blend™			
	Fill/Screened			
	Stone			
	Rec. Item 4			
			TAX	
Signature			TOTAL	

APPENDIX C: AS-BUILT SURVEY



NOTES:

1. TOPOGRAPHIC CONTOUR LINES SHOWN ARE DESIGN FINAL GRADE.
2. INTACT CONCRETE STRUCTURES, INCLUDING TANKS PADS, VAULTS, LOADING RACK AND MISC. STRUCTURES ARE SHOWN FOR FUTURE REFERENCE. ELEVATIONS OF CONCRETE STRUCTURES ARE PROVIDED WHERE THEY ARE WITHIN TWO FEET OF FINAL GRADE.
3. MODIFIED EXISTING BERMS CONSIST OF EXISTING ONSITE MATERIAL TO APPROXIMATE ELEVATION FOUR, COVERED WITH FILTER FABRIC AND TWO FEET OF OFFSITE RIP RAP TO MATCH EXISTING RIP RAP TO APPROXIMATE ELEVATION SIX.
4. NEWLY CONSTRUCTED BERMS CONSIST OF OFFSITE 1/4 INCH MINUS MATERIAL TO APPROXIMATE ELEVATION FOUR, COVERED WITH FILTER FABRIC AND TWO FEET OF OFFSITE RIP RAP TO MATCH EXISTING RIP RAP TO APPROXIMATE ELEVATION SIX.
5. ALONG THE WESTERN PROPERTY LINE, CLEAN FILL EXTENDS FROM THE FINAL ONSITE CAP ELEVATION TO MEET EXISTING GRADE ON THE ADJACENT PROPERTY AT A 2H:1V SLOPE.
6. CONCRETE MANHOLES AND CATCH BASINS THAT WERE ENCOUNTERED DURING GRADING WERE ABANDONED IN PLACE BY DEMOLISHING THE CONCRETE COVER AND FILLING WITH ONSITE MATERIAL PRIOR TO CAPPING. IN GENERAL, THE LOCATIONS WERE NOT SURVEYED, EXCEPT WHERE SHOWN ON THE DRAWING.
7. CONCRETE VAULT THAT WAS ENCOUNTERED TO THE EAST OF THE FORMER LOADING RACK FOUNDATION WAS FILLED WITH OFFSITE STONE AND COVERED WITH TWO METAL ROAD PLATES PRIOR TO FINAL GRADING AND CAPPING.
8. PUMP ROOM LOCATED ALONG THE WESTERN PROPERTY BOUNDARY BETWEEN THE TWO LARGE FORMER TANK RINGS WAS ABANDONED IN PLACE BY DEMOLISHING THE COVER AND FILLING WITH ONSITE MATERIAL PRIOR TO CAPPING.
9. APPROXIMATELY 2,150 SHRUBS WERE PLANTED ON FIVE FOOT CENTERS (OR LESS) WITHIN 50 FEET FROM MHW FROM THE NORTHERN FENCELINE TO THE SOUTHERN LIMIT SHOWN ON THE DRAWING. SPECKLED ALDERS (~612 TOTAL) WERE PLANTED CLOSER TO THE RIP RAP BERMS AND BLACK CHOCKBERRIES (~1538 TOTAL) WERE PLANTED FURTHER FROM THE BERMS WITHIN THE PLANTING ZONE. THIS BUFFER AREA WAS SEEDED WITH THE APPROVED NEW ENGLAND CONSERVATION/WILDLIFE MIX.

LEGEND

GRD 7.0 FF 4.4 477	FINAL GRADE SPOT ELEVATION FILTER FABRIC SPOT ELEVATION SPOT ELEVATION DESIGNATION NUMBER
TB 6.0	TOP OF BERM SPOT ELEVATION
TW-2	PERMANENT SURVEY MONUMENT
ϕ	POWER POLE
ARC	ARCADIS
AGC	AMODIO'S GARDEN CENTER
	FINAL GRADE DESIGN CONTOUR
	PROPERTY LINE
	42 INCH STORM SEWER
	APPROX. MEAN HIGH WATER (MHW)
	50 FOOT OFFSET FROM MHW
	TOP OF BERM
	BASE OF BERM
X	EXISTING FENCE
	NEW FENCE AND GATE
	OVERHEAD WIRES
CP 5.7	SPOT ELEV.ATION BURIED CONC. PAD
	APPROX. AREA OF AGC TOPSOIL COVERAGE
	MANHOLE/CATCH BASIN ABANDONED IN PLACE (SEE NOTE 6)

REVISED:	APRIL 28, 2013	MODIFIED FOR COMMENTS
REVISED:	APRIL 13, 2013	ADDED FINAL GRADE SHOTS TAKEN 3-22-13
REVISED:	MAR. 2, 2013	ADDED FINAL GRADE SHOTS TAKEN 2-21-13
REVISED:	JAN. 28, 2013	ADDED TOPO SHOTS TAKEN 1-28-13

TAX MAP ID # 4.100-93-18

DATE: JAN. 16, 2013 SCALE 1" = 40'

AS-BUILT SURVEY

SHEET 1 OF 1

MAP OF PROPERTY
#1 RAILROAD AVENUE
SITUATE AT
VILLAGE OF HASTINGS ON HUDSON
TOWN OF GREENBURGH
WESTCHESTER COUNTY, NEW YORK

ANGLE OF ATTACK
LAND SURVEYING, LLC
100 S. JERSEY AVE. UNIT 7
SETAUKET, NY 11733
631-751-1901

HORIZONTAL DATUM NAD 83 NEW YORK STATE PLANE NY EAST ZONE US FEET
VERTICAL DATUM NAVD 88 US FEET

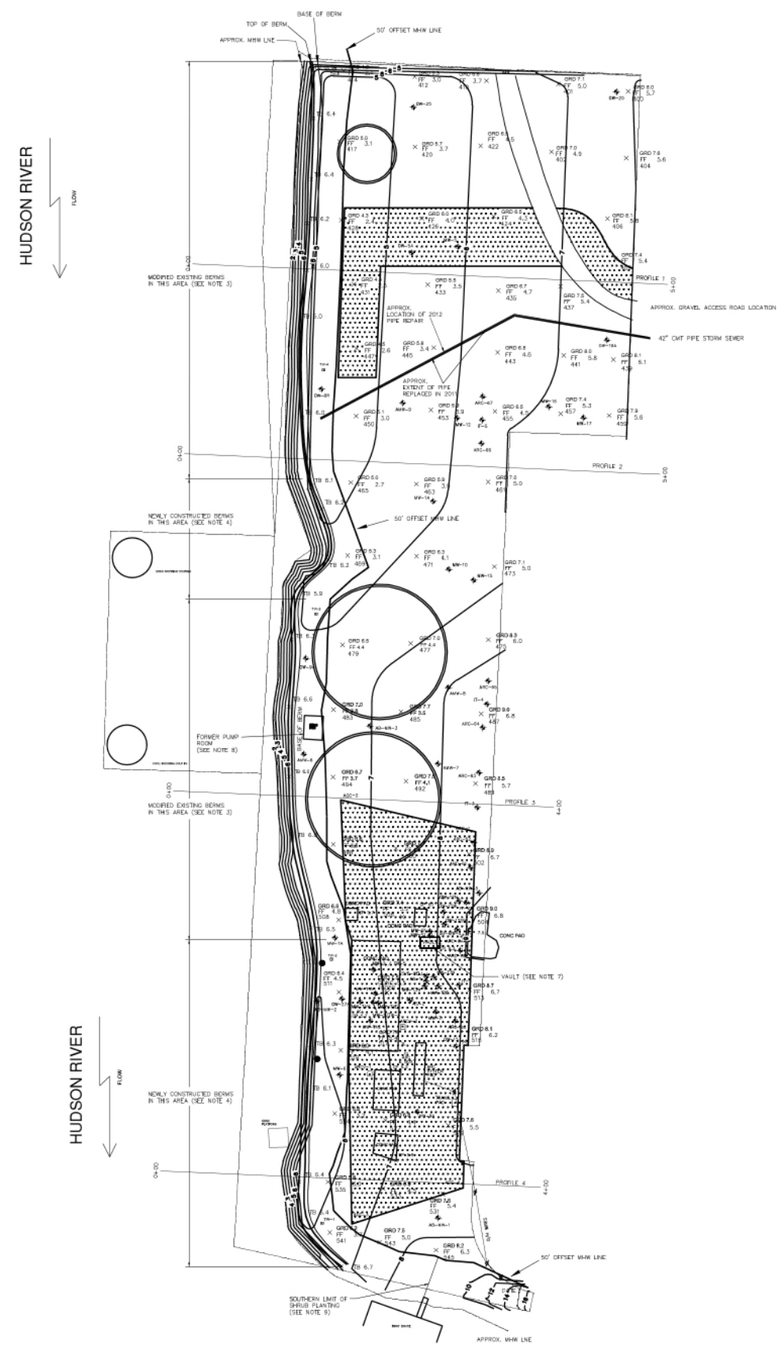
NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209, SUB-SECTION 2

NOTE: THIS SURVEY IS FOR THE PURPOSE OF SHOWING IMPROVEMENTS AS OF THE DATE OF THIS SURVEY AND IS NOT TO BE RELIED UPON FOR THE FUTURE ESTABLISHMENT OF FENCE, BUILDING OR OTHER IMPROVEMENT LINES. SUBSURFACE CONDITIONS MAY NOT BE SHOWN. EASEMENTS, RIGHTS OF WAY AND OTHER LINES OF RECORD MAY NOT BE SHOWN.

40 0 40 80 120 160 200
SCALE: 1" = 40'
CONTOUR INTERVAL 1'

WILLIAM D. MITCHELL
NYS PLS # 49834

24x36 SHEET
1:2.26



LEGEND

GRD 7.0 / FF 4.4 / 477	FINAL GRADE SPOT ELEVATION FILTER FABRIC SPOT ELEVATION SPOT ELEVATION DESIGNATION NUMBER
TB 6.0	TOP OF BERM SPOT ELEVATION
IB / TPB-2	PERMANENT SURVEY MONUMENT
	POWER POLE
ARC	ARCADIS
AGC	AMOCKO'S GARDEN CENTER
8	FINAL GRADE DESIGN CONTOUR
	PROPERTY LINE
	42 INCH STORM SEWER
	APPROX. MEAN HIGH WATER (MHW)
	50 FOOT OFFSET FROM MHW
	TOP OF BERM
	BASE OF BERM
	EXISTING FENCE
	NEW FENCE AND GATE
	OVERHEAD WIRES
CP 5.7	SPOT ELEVATION BURIED CONC. PAD
	APPROX. AREA OF AGC TOPSOIL COVERAGE MEETING RESTRICTED RESIDENTIAL USE, OTHERWISE CAP MEETS UNRESTRICTED USE
	MANHOLE/CATCH BASIN ABANDONED IN PLACE (SEE NOTE 6)

NOTES:

1. TOPOGRAPHIC CONTOUR LINES SHOWN ARE DESIGN FINAL GRADE.
2. INTACT CONCRETE STRUCTURES, INCLUDING TANKS PADS, VAULTS, LOADING RACK AND MISC. STRUCTURES ARE SHOWN FOR FUTURE REFERENCE. ELEVATIONS OF CONCRETE STONE STRUCTURES ARE PROVIDED WHERE THEY ARE WITHIN TWO FEET OF FINAL GRADE.
3. MODIFIED EXISTING BERMS CONSIST OF EXISTING ONSITE MATERIAL TO APPROXIMATE ELEVATION FOUR, COVERED WITH FILTER FABRIC AND TWO FEET OF OFFSITE RIP RAP TO MATCH EXISTING RIP RAP TO APPROXIMATE ELEVATION SIX.
4. NEWLY CONSTRUCTED BERMS CONSIST OF OFFSITE 1/4 INCH MINUS MATERIAL TO APPROXIMATE ELEVATION FOUR, COVERED WITH FILTER FABRIC AND TWO FEET OF OFFSITE RIP RAP TO MATCH EXISTING RIP RAP TO APPROXIMATE ELEVATION SIX.
5. ALONG THE WESTERN PROPERTY LINE, CLEAN FILL EXTENDS FROM THE FINAL ONSITE CAP ELEVATION TO MEET EXISTING GRADE ON THE ADJACENT PROPERTY AT A 2H:1V SLOPE.
6. CONCRETE MANHOLES AND CATCH BASINS THAT WERE ENCOUNTERED DURING GRADING WERE ABANDONED IN PLACE BY DEMOLISHING THE CONCRETE COVER AND FILLING WITH ONSITE MATERIAL PRIOR TO CAPPING. IN GENERAL, THE LOCATIONS WERE NOT SURVEYED, EXCEPT WHERE SHOWN ON THE DRAWING.
7. CONCRETE VAULT THAT WAS ENCOUNTERED TO THE EAST OF THE FORMER LOADING RACK FOUNDATION WAS FILLED WITH OFFSITE STONE AND COVERED WITH TWO METAL ROAD PLATES PRIOR TO FINAL GRADING AND CAPPING.
8. PUMP ROOM LOCATED ALONG THE WESTERN PROPERTY BOUNDARY BETWEEN THE TWO LARGE FORMER TANK RINGS WAS ABANDONED IN PLACE BY DEMOLISHING THE COVER AND FILLING WITH ONSITE MATERIAL PRIOR TO CAPPING.
9. APPROXIMATELY 2,150 SHRUBS WERE PLANTED ON FIVE FOOT CENTERS (OR LESS) WITHIN 50 FEET FROM MHW FROM THE NORTHERN FENCELINE TO THE SOUTHERN LIMIT SHOWN ON THE DRAWING. SPECKLED ALDERS (~612 TOTAL) WERE PLANTED CLOSER TO THE RIP RAP BERMS AND BLACK CHOCKBERRIES (~1538 TOTAL) WERE PLANTED FURTHER FROM THE BERMS WITHIN THE PLANTING ZONE. THIS BUFFER AREA WAS SEEDED WITH THE APPROVED NEW ENGLAND CONSERVATION/WILDLIFE MIX.

HORIZONTAL DATUM NAD 83 NEW YORK STATE PLANE NY EAST ZONE US FEET
VERTICAL DATUM NAVD 88 US FEET

NOTE: THIS SURVEY IS FOR THE PURPOSE OF SHOWING IMPROVEMENTS AS OF THE DATE OF THIS SURVEY AND IS NOT TO BE RELIED UPON FOR THE FUTURE ESTABLISHMENT OF FENCE, BUILDING OR OTHER IMPROVEMENT LINES. SUBSURFACE CONDITIONS MAY NOT BE SHOWN. EASEMENTS, RIGHTS OF WAY AND OTHER LINES OF RECORD MAY NOT BE SHOWN.

Woodard & Curran Engineering PA PC
709 Westchester Avenue, Suite L2
White Plains, New York 10604
800.807.4080 | www.woodardcurran.com

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REV	DESCRIPTION	DATE
1	ADD RESTRICTED USE AREA	1-8-15

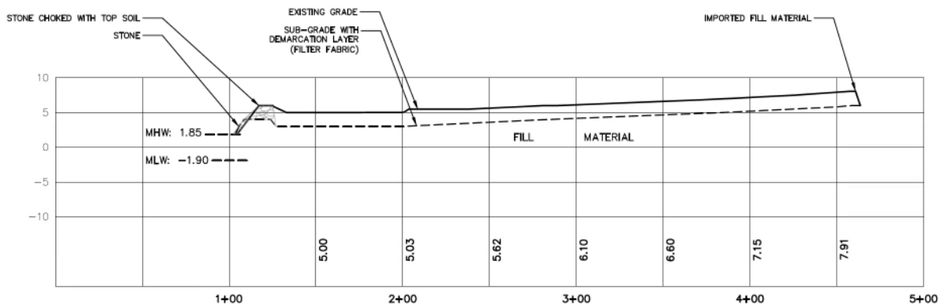
DESIGNED BY:
DRAWN BY:
CHECKED BY:
DRAWN TRAL AS BUILT_BASEMAP.DWG

SITE PLAN AND BOUNDARIES

FORMER MOBIL TAPPAN TERMINAL
PROPERTY HASTINGS-ON-HUDSON,
WESTCHESTER COUNTY
FORMER TAPPAN TERMINAL NYSDEC
SITE NO. 3-60-015

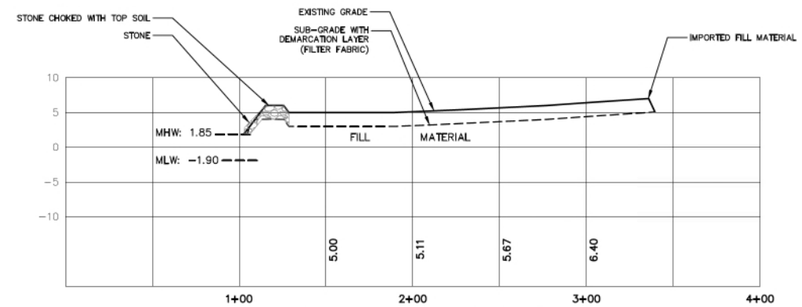
JOB NO.: 206925.06
DATE: AUGUST 2013
SCALE: 1" = 70'
SHEET: OF

\\CH2SHARE\Projects\206925 ExxonMobil Tappan Terminal\dg\Final Remedial Design\Add-Ballts\tappan final as built_basemap.dwg, Apr 08, 2015 - 9:42am



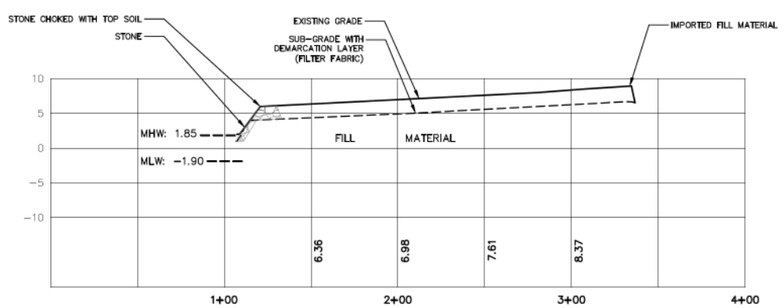
PROFILE 1 STA. 0+00 TO 5+00

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



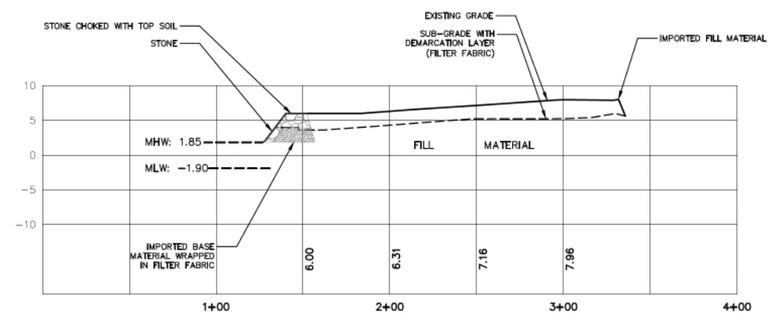
PROFILE 2 STA. 0+00 TO 5+00

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



PROFILE 3 STA. 0+00 TO 5+00

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



PROFILE 4 STA. 0+00 TO 5+00

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

NOTES:

1. MHW = MEAN HIGH WATER
2. MLW = MEAN LOW WATER
3. IMPORTED FILL MATERIAL = APPROXIMATELY 18" OF BASE MATERIAL (1/4" MINUS) AND 6" OF TOP SOIL.
4. DEPICTION OF SHORE LINE CONSTRUCTION IS APPROXIMATE AND PROVIDED FOR REFERENCE ONLY

Woodard & Curran Engineering PA PC
709 Westchester Avenue, Suite L2
White Plains, New York 10604
800.807.4080 | www.woodardcurran.com

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REV	DESCRIPTION	DATE
1	INDICATED FILL MATERIAL UNDER SOIL COVER SYSTEM	12/1/2015

DESIGNED BY:
DRAWN BY:
CHECKED BY:
TAPPAN FINAL AS BUILT_BASEMAP.DWG

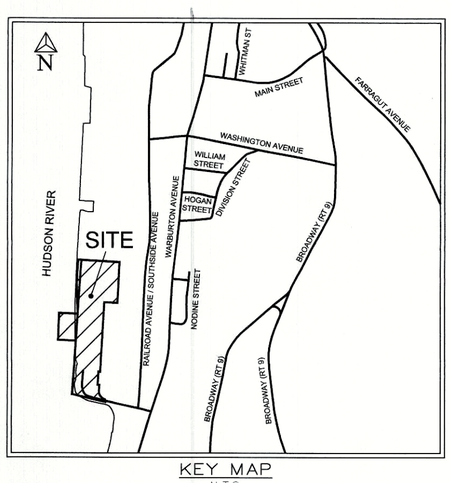
GEOLOGIC CROSS-SECTIONS

FORMER MOBIL TAPPAN TERMINAL
PROPERTY HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL NYSDEC SITE NO. 360015

JOB NO.: 206925.06
DATE: AUGUST 2013
SCALE: AS SHOWN
SHEET: OF

\\ws\shared\Projects\206925 ExxonMobil Tappan Terminal\wip\Final Remedial Design\As-Builts\tappan final as built_basemap.dwg Dec 01, 2015 - 1:58pm

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law. The engineering and institutional controls for this Easement are set forth in the Site Management Plan (SMP). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov .



KEY MAP
N.T.S.

SCHEDULE A DESCRIPTION

ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE VILLAGE OF HASTINGS-ON-HUDSON, TOWN OF GREENBURGH, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE DIVISION LINE BETWEEN LAND NOW OR FORMERLY BELONGING TO ANACONDA WIRE AND CABLE CO., FORMERLY NATIONAL CONDUIT AND CABLE CO. AND CHAS. T. CROMWELL, ON THE NORTH AND TAPPAN TANKER TERMINAL INC., ON THE SOUTH WHICH SAID POINT IS DISTANT, AS MEASURED ALONG SAID DIVISION LINE, NORTH 87° 24' 00" WEST 126.00 FEET, FROM A POINT ON THE WESTERLY RIGHT OF WAY LINE OF THE PENN CENTRAL RAILROAD, FORMERLY NEW YORK CENTRAL RAILROAD, WHICH SAID LAST MENTIONED POINT IS DISTANT SOUTH 65° 05' 30" WEST 36.48 FEET FROM THE STONE MONUMENT MARKING THE POINT OF CURVE OF CURVE NO. 34 OF THE ORIGINAL CENTER LINE OF SAID RAILROAD;

RUNNING THENCE FROM SAID POINT OF BEGINNING THROUGH LANDS OF THE TAPPAN TANKER TERMINAL INC. THE FOLLOWING COURSES AND DISTANCES:

SOUTH 2° 15' 46" WEST 379.40 FEET,
NORTH 87° 44' 14" WEST 123.01 FEET AND
SOUTH 2° 57' 36" WEST 646.16 FEET TO THE NORTHERLY SIDE OF A TWO STORY BRICK AND FRAME BUILDING;

THENCE ALONG THE NORTHERLY, WESTERLY AND SOUTHERLY FACE OF SAID TWO STORY BRICK AND FRAME BUILDING:

NORTH 87° 31' 13" WEST 16.41 FEET,
SOUTH 2° 28' 47" WEST 121.70 FEET AND
SOUTH 87° 31' 13" EAST 15.39 FEET;

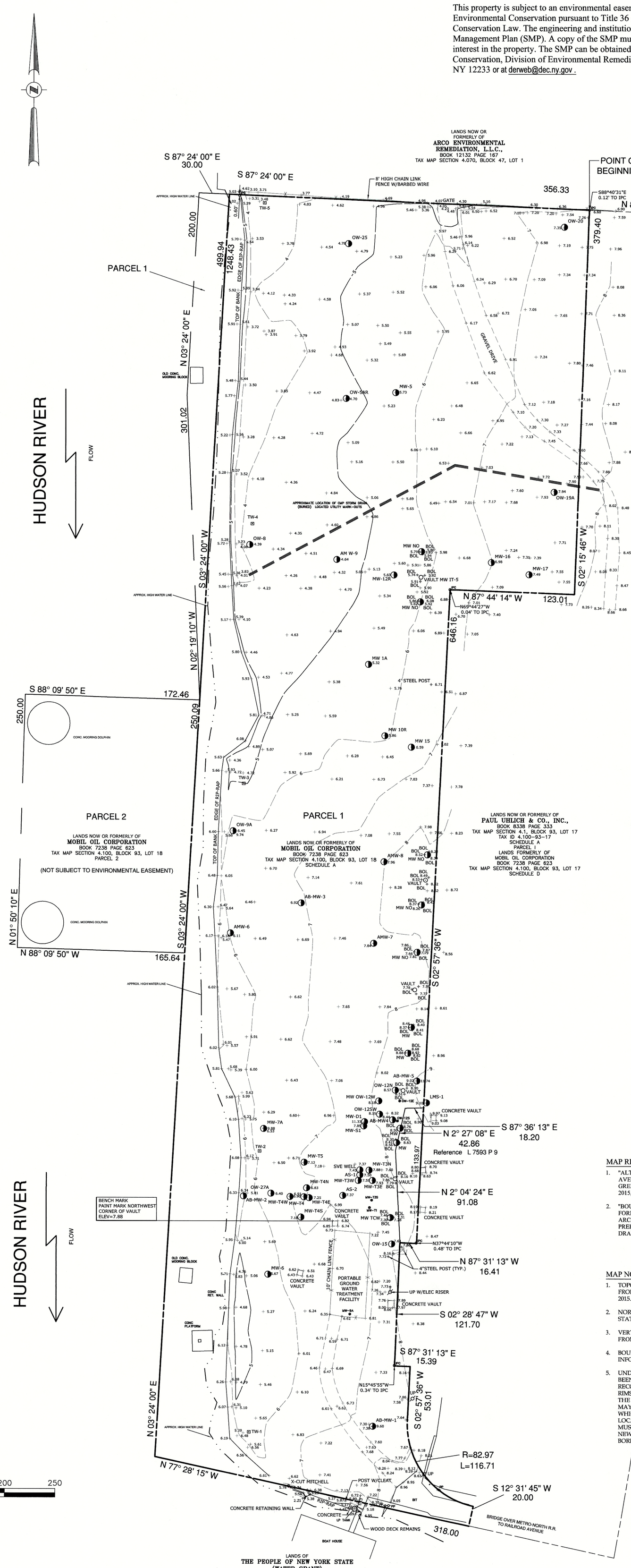
THENCE SOUTH 2° 57' 36" WEST 53.01 FEET TO A POINT OF CURVE;

THENCE ON A CURVE TO THE LEFT HAVING A RADIUS OF 82.97 FEET, A DISTANCE OF 116.71 FEET AND SOUTH 12° 31' 45" WEST 20.00 FEET TO A POINT IN THE SOUTHERLY BOUNDARY LINE OF LAND BELONGING TO TAPPAN TANKER TERMINAL INC., DISTANT AS MEASURED ALONG THE SAME NORTH 77° 28' 15" WEST 147.24 FEET FROM THE WESTERLY RIGHT OF WAY LINE OF SAID RAILROAD;

THENCE INTO THE WATERS OF THE HUDSON RIVER, NORTH 77° 28' 15" WEST 318.00 FEET AND NORTH 3° 24' 00" EAST 1248.43 FEET TO THE DIVISION LINE FIRST HEREINABOVE REFERRED TO;

THENCE ALONG THE SAID DIVISION LINE, SOUTH 87° 24' 00" EAST 356.33 FEET TO THE POINT AND PLACE OF BEGINNING.

SAID PROPERTY CONTAINING APPROXIMATELY 8.088 ACRES MORE OR LESS.



MAP REFERENCES:

1. "ALTA/ACSM LAND TITLE SURVEY MAP OF PROPERTY #0 SOUTHSIDE AVENUE SITUATE AT VILLAGE OF HASTINGS ON HUDSON, TOWN OF GREENBURGH, WESTCHESTER COUNTY, NEW YORK", DATED APRIL 2015, PREPARED BY ANGLE OF ATTACK LAND SURVEYORS, LLC.
2. "BOUNDARY AND TOPOGRAPHIC SURVEY LANDS NOW OR FORMERLY OF PAUL UHLICH & COMPANY, INC. PREPARED FOR ARCADIS", DATED JANUARY 10, 2011, LAST REVISED APRIL 11, 2013, PREPARED BY C.T. MALE ASSOCIATES, P.C., PROJECT NO. 10.1472, DRAWING NO. 11-106.

MAP NOTES:

1. TOPOGRAPHIC INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY CONDUCTED ON SEPTEMBER 24, 2015.
2. NORTH ORIENTATION IS GRID NORTH BASED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83.
3. VERTICAL DATUM SHOWN HEREON IS NAVD 88 AND WAS OBTAINED FROM GPS OBSERVATIONS.
4. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM INFORMATION AS SHOWN ON MAP REFERENCE NO. 1.
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.

10m 0 10m 20m
1:10 METERS

50 0 50 100 150 200 250
SCALE: 1" = 50'

LEGEND

CONC	CONCRETE
MW	MONITORING WELL
	UTILITY MANHOLE
PP UP	POWER POLE
	GUY WIRE
	CHAIN LINK FENCE
IPC	IRON PIN W/CAP
	DROP INLET
ASM1	BORING LOCATION
BOL	BOLLARD
FOUND.	FOUNDATION
RET. WALL	RETAINING WALL
R.R.	RAILROAD
TW-1	PERMANENT SURVEY MONUMENT

"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".

JAMES F. COOK
P.L.S. NO. 49260

STATE OF NEW YORK · JAMES F. COOK · 049260 · LICENSED LAND SURVEYOR

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
12/16/15	1	REVISIONS PER DEC COMMENTS	GLB	JFC	WJN
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

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

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C.T. MALE ASSOCIATES

APPROVED: WJN
DRAFTED : GLB
CHECKED : JFC
PROJ. NO : 15.5531
SCALE : 1" = 50'
DATE : OCT. 7, 2015

TOPOGRAPHIC SURVEY

Lands Now or Formerly of

EXXON MOBIL OIL CORPORATION

#1 RAILROAD AVENUE
VILLAGE OF HASTING ON HUDSON
TOWN OF GREENBURGH
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: 15-544

APPENDIX D: FILL MATERIAL DOCUMENTATION

Tappan Terminal Site 360015
Estimated Volume of Fill Material 23,000 to 25,000 cubic yards (yd^3)

Source of Fill Material	Sampling Frequency	Parameters
NY Stone & Sand; Dredged Sand from Ambrose Channel BUD 846-2-24 Topsoil (Final 6 inches of soil cover system) Source of topsoil needs to be identified	First Three Barge loads of ~2,000 yd^3: Sample each barge load (source) for VOCs: 4 discrete samples SVOCs: 2 composite samples Inorganics: 2 composite samples PCBs,/Pesticides: 2 composite samples Barge loads (4 and above) VOCs: 2 discrete samples SVOCs: 1 composite sample Inorganics: 1 composite sample PCBs,/Pesticides: 1 composite samples	6NYCRR Part 375/DER-10 identified VOCs , SVOCs, Inorganics, PCBs,/Pesticides, See DER-10 Appendix 5 for list of constituents
NY Stone & Sand; Stone from 2nd Avenue Subway Project	Check/sample rock for naturally occurring radioactivity No sampling required if the stone material contains less than 10% by weight material which would pass through a size 80 sieve; otherwise same as above	See above if needed

Imported material (sand, stone, and topsoil) must be free of odors and sheens. Any imported material with visually identified contamination and/or odors will be segregated and tested before being used as part of the soil cover.

Haverstraw

07/31/2012

To Whom It May Concern:

As it is supplied by our Haverstraw facility, ASTM #10 screenings are produced to meet New York State Department of Transportation Standard Specifications. Our West Nyack facility, NYSDOT source #8-10R supplies 100% virgin Traprock (Diabase) that is quarried and processed to finished sizes. To the best of our knowledge, the material is clean and free from contaminants prior to shipping.

The following gradation is presented as typical for ASTM Size #10:

0999-Screenings

Procedure	Sieve/Test	Average	Unit
	1/4" (6.3mm)	99.8	%
	#4 (4.75mm)	99.6	%
	#8 (2.36mm)	83.6	%
	#16 (1.18mm)	61.8	%
	#30 (0.6mm)	46.7	%
	#50 (0.3mm)	35.0	%
	#100 (0.15mm)	25.1	%
	#200 (75um)	17.34	%
	Pan	0.00	%

If you have any questions, or require additional information, please contact me at 845.422.0675.

Very truly yours,
Tilcon, NY Inc.

Mike Kalinowski
Supervisor, Quality Control

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST1		**TCN-ST2**		**TCN-ST3**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**10/19/2012**		**10/19/2012**		**11/2/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.007	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	NA		NA		N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	NA		NA		N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	NA		NA		N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	NA		NA		N.D.	0.076
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	NA		NA		N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	0.001 J	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	NA		NA		N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	NA		NA		N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST4		**TCN-ST5**		**TCN-ST6**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/2/2012**		**11/2/2012**		**11/2/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.008	N.D.	0.007	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.076	N.D.	0.074	N.D.	0.075
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST7		**TCN-ST8**		**TCN-ST9**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/2/2012**		**11/2/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.008	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.074	N.D.	0.076	N.D.	0.072
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST10		**TCN-ST11**		**TCN-ST12**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.007	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.071	N.D.	0.069	N.D.	0.073
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST13		**TCN-ST14**		**TCN-ST15**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.007	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.074	N.D.	0.072	N.D.	0.075
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST16		**TCN-ST17**		**TCN-ST18**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.008	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.072	N.D.	0.075	N.D.	0.072
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST19		**TCN-ST20**		**TCN-ST21**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.007	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.073	N.D.	0.074	N.D.	0.070
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Tilcon										
Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R										
					TCN-ST22		**TCN-ST23**		**TCN-ST24**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.007	N.D.	0.007	N.D.	0.007
	71-43-2	Benzene	PPM	0.06	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	78-93-3	2-Butanone (MEK)	PPM	0.12	N.D.	0.004	N.D.	0.004	N.D.	0.004
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.070	N.D.	0.068	N.D.	0.071
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0005	N.D.	0.0005	N.D.	0.0005
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Fill Sources

Source: Tilcon

Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R

					TCN-STC1		TCN-STC2		TCN-STC3		TCN-STC4	
	Cas No	Analyte	Units	Limits (1)	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit
Sample Date					10/19/2012		11/2/2012		11/2/2012		11/2/2012	
SVOC												
	83-32-9	Acenaphthene	PPB	20000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	208-96-8	Acenaphthylene	PPB	100000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	120-12-7	Anthracene	PPB	100000	N.D.	4	4 J	3	N.D.	3	N.D.	3
	56-55-3	Benzo(a)anthracene	PPB	1000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	50-32-8	Benzo(a)pyrene	PPB	1000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	205-99-2	Benzo(b)fluoranthene	PPB	1000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	207-08-9	Benzo(k)fluoranthene	PPB	800	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	218-01-9	Chrysene	PPB	1000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	53-70-3	Dibenz(a,h)anthracene	PPB	330	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	132-64-9	Dibenzofuran	PPB	7000	N.D.	18	N.D.	17	N.D.	17	N.D.	18
	206-44-0	Fluoranthene	PPB	100000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	86-73-7	Fluorene	PPB	30000	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	N.D.	4	N.D.	3	N.D.	3	N.D.	3
	95-48-7	2-Methylphenol	PPB	330	N.D.	18	N.D.	17	N.D.	17	N.D.	18
	108-39-4/106-44	3+4-Methylphenol	PPB	330	N.D.	18	N.D.	17	N.D.	17	N.D.	18
	91-20-3	Naphthalene	PPB	12000	N.D.	4	9 J	3	N.D.	3	N.D.	3
	87-86-5	Pentachlorophenol	PPB	800	N.D.	35	N.D.	35	N.D.	35	N.D.	35
	85-01-8	Phenanthrene	PPB	100000	4 J	4	6 J	3	N.D.	3	N.D.	3
	108-95-2	Phenol	PPB	330	N.D.	18	N.D.	17	N.D.	17	N.D.	18
	129-00-0	Pyrene	PPB	100000	6 J	4	N.D.	3	4 J	3	N.D.	3
HERBICIDES, PESTICIDES AND PCBs												
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.8	N.D.	0.78	N.D.	0.79	N.D.	0.80
	72-54-8	4,4´-DDD	PPB	3.3	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	72-55-9	4,4´-DDE	PPB	3.3	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	50-29-3	4,4´-DDT	PPB	3.3	N.D.	0.35	N.D.	0.37	N.D.	0.37	N.D.	0.37
	309-00-2	Aldrin	PPB	5	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
	319-84-6	alpha-BHC	PPB	20	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
	319-85-7	beta-BHC	PPB	36	N.D.	1	N.D.	1.0	N.D.	1.0	N.D.	1.0
	57-74-9	Chlordane	PPB	94	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
	319-86-8	delta-BHC	PPB	40	N.D.	0.48	N.D.	0.48	N.D.	0.48	N.D.	0.48
	60-57-1	Dieldrin	PPB	5	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	959-98-8	Endosulfan I	PPB	2400	N.D.	0.23	N.D.	0.23	N.D.	0.23	N.D.	0.23
	33213-65-9	Endosulfan II	PPB	2400	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	72-20-8	Endrin	PPB	14	N.D.	0.35	N.D.	0.35	N.D.	0.35	N.D.	0.35
	58-89-9	gamma-BHC	PPB	100	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
	76-44-8	Heptachlor	PPB	42	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	4	N.D.	0.22	N.D.	0.22	N.D.	0.22
		Total PCBs	PPB	100	N.D.		N.D.		N.D.		N.D.	
INORGANICS												
	7440-38-2	Arsenic	PPM	13	2.21		3.57		2.34		2.37	
	7440-39-3	Barium	PPM	350	20.1		12.9		15.7		13.0	
	7440-41-7	Beryllium	PPM	7.2	1.06		N.D.	0.0710	0.0943 J	0.0694	N.D.	0.0701
	7440-43-9	Cadmium	PPM	2.5	0.368 J	0.0348	N.D.	0.0350	N.D.	0.0342	N.D.	0.0345
	7440-47-3	Chromium	PPM		5.71		6.54		7.09		4.25	
	7440-50-8	Copper	PPM	50	138		129		121		133	
	7439-92-1	Lead	PPM	63	3.71		2.74		2.72		2.65	
	7439-96-5	Manganese	PPM	1600	225		194		176		170	
	7440-02-0	Nickel	PPM	30	14.9		16.0		15.3		13.6	
	7782-49-2	Selenium	PPM	3.9	N.D.	0.759	2.66		1.68 J		2.26	
	7440-22-4	Silver	PPM	2	0.25 J	0.148	0.378 J	0.148	0.211 J	0.145	0.332 J	0.146
	7440-66-6	Zinc	PPM	109	46.5		51.8		39.4		41.1	
	7439-97-6	Mercury	PPM	0.18	N.D.	0.0108	N.D.	0.0109	N.D.	0.0106	N.D.	0.0103
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	0.53	N.D.	0.53	N.D.	0.53	N.D.	0.53
	16065-83-1	Chromium, Trivalent	PPM	30	5.7		6.5		7.1		4.3	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.18	N.D.	0.18	N.D.	0.18	N.D.	0.18
		Percent Moisture	wt%				5.6		5.4		6.3	

NOTES:
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives
NA = Not Analyzed
N.D. = Non-detect
Value potentially exceeds criteria.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Fill Sources

Source: Tilcon

Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R

					TCN-STC5		TCN-STC6		TCN-STC7		TCN-STC8	
	Cas No	Analyte	Units	Limits (1)	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit
Sample Date					11/6/2012		11/6/2012		11/6/2012		11/6/2012	
SVOC												
	83-32-9	Acenaphthene	PPB	20000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	208-96-8	Acenaphthylene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	120-12-7	Anthracene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	56-55-3	Benzo(a)anthracene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	50-32-8	Benzo(a)pyrene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	205-99-2	Benzo(b)fluoranthene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	207-08-9	Benzo(k)fluoranthene	PPB	800	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	218-01-9	Chrysene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	53-70-3	Dibenz(a,h)anthracene	PPB	330	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	132-64-9	Dibenzofuran	PPB	7000	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	206-44-0	Fluoranthene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	86-73-7	Fluorene	PPB	30000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	95-48-7	2-Methylphenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	108-39-4/106-44	3+4-Methylphenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	91-20-3	Naphthalene	PPB	12000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	87-86-5	Pentachlorophenol	PPB	800	N.D.	34	N.D.	34	N.D.	34	N.D.	34
	85-01-8	Phenanthrene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	108-95-2	Phenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	129-00-0	Pyrene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
HERBICIDES, PESTICIDES AND PCBs												
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.77	N.D.	0.77	N.D.	0.78	N.D.	0.77
	72-54-8	4,4´-DDD	PPB	3.3	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	72-55-9	4,4´-DDE	PPB	3.3	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	50-29-3	4,4´-DDT	PPB	3.3	N.D.	0.36	N.D.	0.36	N.D.	0.36	N.D.	0.36
	309-00-2	Aldrin	PPB	5	N.D.	0.17	N.D.	0.17	N.D.	0.18	N.D.	0.18
	319-84-6	alpha-BHC	PPB	20	N.D.	0.17	N.D.	0.17	N.D.	0.18	N.D.	0.18
	319-85-7	beta-BHC	PPB	36	N.D.	0.99	N.D.	0.98	N.D.	1.0	N.D.	0.99
	57-74-9	Chlordane	PPB	94	N.D.	0.17	N.D.	0.17	N.D.	0.18	N.D.	0.18
	319-86-8	delta-BHC	PPB	40	N.D.	0.46	N.D.	0.46	N.D.	0.47	N.D.	0.46
	60-57-1	Dieldrin	PPB	5	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	959-98-8	Endosulfan I	PPB	2400	N.D.	0.23	N.D.	0.23	N.D.	0.23	N.D.	0.23
	33213-65-9	Endosulfan II	PPB	2400	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	72-20-8	Endrin	PPB	14	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	58-89-9	gamma-BHC	PPB	100	N.D.	0.17	N.D.	0.17	N.D.	0.18	N.D.	0.18
	76-44-8	Heptachlor	PPB	42	N.D.	0.17	N.D.	0.17	N.D.	0.24	N.D.	0.18
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	0.22	N.D.	0.22	N.D.	0.22	N.D.	0.22
		Total PCBs	PPB	100	N.D.		N.D.		N.D.		N.D.	
INORGANICS												
	7440-38-2	Arsenic	PPM	13	N.D.	0.336	N.D.	0.335	N.D.	0.331	1.27 J	0.334
	7440-39-3	Barium	PPM	350	16.4		18.0		16.5		16.5	
	7440-41-7	Beryllium	PPM	7.2	N.D.	0.0681	N.D.	0.0679	N.D.	0.0672	N.D.	0.0679
	7440-43-9	Cadmium	PPM	2.5	0.0559 J	0.0336	N.D.	0.0335	0.0954 J	0.0331	N.D.	0.0334
	7440-47-3	Chromium	PPM		4.47		5.33		4.28		4.92	
	7440-50-8	Copper	PPM	50	131		130		161		145	
	7439-92-1	Lead	PPM	63	2.62		1.42 J	0.477	3.07		2.90	
	7439-96-5	Manganese	PPM	1600	251		272		249		250	
	7440-02-0	Nickel	PPM	30	16.0		16.7		16.6		16.9	
	7782-49-2	Selenium	PPM	3.9	2.53		2.60		2.68		3.24	
	7440-22-4	Silver	PPM	2	0.275 J	0.142	0.384 J	0.142	0.398 J	0.141	0.342 J	0.142
	7440-66-6	Zinc	PPM	109	48.7		53.4		55.0		52.5	
	7439-97-6	Mercury	PPM	0.18	N.D.	0.0107	N.D.	0.0106	N.D.	0.0102	N.D.	0.0105
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	0.52	N.D.	0.52	N.D.	0.52	N.D.	0.52
	16065-83-1	Chromium, Trivalent	PPM	30	4.5		5.3		4.3		4.9	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.19	N.D.	0.19	N.D.	0.18	N.D.	0.19
		Percent Moisture	wt%		3.6		3.3		4.2		3.2	

NOTES:
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives
NA = Not Analyzed
N.D. = Non-detect
Value potentially exceeds criteria.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Fill Sources

Source: Tilcon

Material: Stone Fill, Haverstraw Facility, West Nyack, NYSDOT #8-10R

					TCN-STC9		TCN-STC10		TCN-STC11		TCN-STC12	
	Cas No	Analyte	Units	Limits (1)	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit
Sample Date					11/6/2012		11/6/2012		11/6/2012		11/6/2012	
SVOC												
	83-32-9	Acenaphthene	PPB	20000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	208-96-8	Acenaphthylene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	120-12-7	Anthracene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	56-55-3	Benzo(a)anthracene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	50-32-8	Benzo(a)pyrene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	205-99-2	Benzo(b)fluoranthene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	207-08-9	Benzo(k)fluoranthene	PPB	800	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	218-01-9	Chrysene	PPB	1000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	53-70-3	Dibenz(a,h)anthracene	PPB	330	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	132-64-9	Dibenzofuran	PPB	7000	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	206-44-0	Fluoranthene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	86-73-7	Fluorene	PPB	30000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	95-48-7	2-Methylphenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	108-39-4/106-44	3+4-Methylphenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	91-20-3	Naphthalene	PPB	12000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	87-86-5	Pentachlorophenol	PPB	800	N.D.	34	N.D.	34	N.D.	34	N.D.	35
	85-01-8	Phenanthrene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
	108-95-2	Phenol	PPB	330	N.D.	17	N.D.	17	N.D.	17	N.D.	17
	129-00-0	Pyrene	PPB	100000	N.D.	3	N.D.	3	N.D.	3	N.D.	3
HERBICIDES, PESTICIDES AND PCBs												
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.78	N.D.	0.78	N.D.	0.77	N.D.	0.80
	72-54-8	4,4´-DDD	PPB	3.3	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	72-55-9	4,4´-DDE	PPB	3.3	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	50-29-3	4,4´-DDT	PPB	3.3	N.D.	0.36	N.D.	0.36	N.D.	0.36	N.D.	0.37
	309-00-2	Aldrin	PPB	5	N.D.	0.17	N.D.	0.17	N.D.	0.17	N.D.	0.18
	319-84-6	alpha-BHC	PPB	20	N.D.	0.17	N.D.	0.17	N.D.	0.17	N.D.	0.18
	319-85-7	beta-BHC	PPB	36	N.D.	0.98	N.D.	0.98	N.D.	0.98	N.D.	1.0
	57-74-9	Chlordane	PPB	94	N.D.	0.17	N.D.	0.17	N.D.	0.17	N.D.	0.18
	319-86-8	delta-BHC	PPB	40	N.D.	0.46	N.D.	0.46	N.D.	0.46	N.D.	0.47
	60-57-1	Dieldrin	PPB	5	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	959-98-8	Endosulfan I	PPB	2400	N.D.	0.22	N.D.	0.23	N.D.	0.22	N.D.	0.23
	33213-65-9	Endosulfan II	PPB	2400	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	72-20-8	Endrin	PPB	14	N.D.	0.34	N.D.	0.34	N.D.	0.34	N.D.	0.34
	58-89-9	gamma-BHC	PPB	100	N.D.	0.17	N.D.	0.17	N.D.	0.17	N.D.	0.18
	76-44-8	Heptachlor	PPB	42	N.D.	0.17	N.D.	0.17	N.D.	0.17	N.D.	0.18
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	0.21	N.D.	0.22	N.D.	0.21	N.D.	0.22
		Total PCBs	PPB	100	N.D.		N.D.		N.D.		N.D.	
INORGANICS												
	7440-38-2	Arsenic	PPM	13	N.D.	0.338	N.D.	0.333	N.D.	0.331	N.D.	0.350
	7440-39-3	Barium	PPM	350	17.2		16.9		17.4		13.7	
	7440-41-7	Beryllium	PPM	7.2	N.D.	0.0686	N.D.	0.0676	N.D.	0.0672	N.D.	0.0711
	7440-43-9	Cadmium	PPM	2.5	N.D.	0.0338	0.0888 J	0.0333	0.114 J	0.0331	0.0892 J	0.0350
	7440-47-3	Chromium	PPM		4.24		4.09		3.83		3.33	
	7440-50-8	Copper	PPM	50	141		136		138		132	
	7439-92-1	Lead	PPM	63	2.49		2.13		2.19		3.00	
	7439-96-5	Manganese	PPM	1600	250		261		256		227	
	7440-02-0	Nickel	PPM	30	16.2		16.1		16.5		14.7	
	7782-49-2	Selenium	PPM	3.9	2.94		2.67		3.03		2.37	
	7440-22-4	Silver	PPM	2	0.340 J	0.143	0.477 J	0.141	0.435 J	0.140	0.314 J	0.149
	7440-66-6	Zinc	PPM	109	52.5		56.4		52.2		56.5	
	7439-97-6	Mercury	PPM	0.18	N.D.	0.0104	N.D.	0.0106	N.D.	0.0106	N.D.	0.0108
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	0.52	N.D.	0.52	N.D.	0.52	N.D.	0.53
	16065-83-1	Chromium, Trivalent	PPM	30	4.2		4.1		3.8		3.3	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.18	N.D.	0.18	N.D.	0.17	N.D.	0.18
		Percent Moisture	wt%		3.3		3.8		3.2		5.8	

NOTES:
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives
NA = Not Analyzed
N.D. = Non-detect
Value potentially exceeds criteria.

Anne Proctor

From: Anne Proctor
Sent: Wednesday, November 14, 2012 12:37 PM
To: 'William Ports'
Cc: steve.p.trifiletti@exxonmobil.com; Amen Omorogbe; David Herman; DSharma@hastingsgov.org; nclarke@rouxinc.com; Tracy Bispham
Subject: RE: Former Tappan Terminal, Soil Cap for AOC1
Attachments: data.hw360015.2012-11-14.AOC1 Fill Sources - Stone.pdf

Bill,

We just received the pesticide data which has been incorporated into the attached version of the spreadsheet. All results for pesticides were below the detection limits. Please let me know if anything else is needed for approval of these samples.

Thank you for your help,
Anne

Notes:
- The crane barge is actually now scheduled to mobilize tomorrow (Thursday). We anticipate commencing material delivery on Friday 11/16.
- Results for additional samples will be forwarded as that analytical data is received.

-----Original Message-----
From: William Ports [mailto:wfports@gw.dec.state.ny.us]
Sent: Tuesday, November 13, 2012 11:33 AM
To: Anne Proctor
Cc: steve.p.trifiletti@exxonmobil.com; Amen Omorogbe; David Herman; DSharma@hastingsgov.org; nclarke@rouxinc.com; Tracy Bispham
Subject: RE: Former Tappan Terminal, Soil Cap for AOC1

Anne,

The stone fill material from Tilcon is conditionally approved based on the data provided. Please submit the pesticide data. It is my understanding the stone fill is from a quarry and the copper concentrations found are likely to be naturally occurring from the rock formation.

Bill

William T. Ports, P.E.
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014
Phone: 518-402-9672
Fax: 518-402-9020

October 29, 2012

Mr. John Clemente
American Environmental
188 Long Island Ave.
Wyandanch, NY 11798

Dear Mr. Clemente:

We look forward to providing your company with topsoil product for the Exxon/Mobil Project Hastings on the Hudson.

We P&M Brick LLC (Port of Coeymans) will be supplying topsoil from, Ravena, NY in conjunction with the required project specifications. Our production company, Carver Sand & Gravel, operates the topsoil operation on our adjacent property a six day per week production schedule. We currently are stripping topsoil from farm fields on this property and are importing farm topsoil from one of our development sites Canterbury Crossing located in Latham NY off Rte 9. We take both topsoil's and blend them, after completion of blending we then screen topsoil through a screener and stock pile the finish product.

We would like to extend an invitation to you and the project engineers to visit the topsoil site and marine terminal in Ravena.

Please advise if we can be of any further assistance.

Respectfully Submitted,

Steven Kelly
VP Sales & Operations

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Ravena & Latham, NY										
					POC-TS1		**POC-TS2**		**POC-TS3**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**10/22/2012**		**10/22/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.009	N.D.	0.009	N.D.	0.009
	71-43-2	Benzene	PPM	0.06	0.0008 J	0.0007	0.0009 J	0.0006	N.D.	0.0007
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	NA		NA		N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	NA		NA		N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	NA		NA		N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	NA		NA		N.D.	0.091
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0007	N.D.	0.0006	N.D.	0.0007
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.003	N.D.	0.002	N.D.	0.003
	103-65-1	n-Propylbenzene	PPM	3.9	NA		NA		N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	0.004 J	0.001	0.004 J	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	NA		NA		N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	NA		NA		N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Ravena & Latham, NY										
					POC-TS4		**POC-TS5**		**POC-TS6**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.009	N.D.	0.008	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0006	N.D.	0.0006
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.088	N.D.	0.083	N.D.	0.081
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0006	N.D.	0.0006
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.003	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Ravena & Latham, NY										
					POC-TS7		**POC-TS8**		**POC-TS9**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.009	N.D.	0.01	N.D.	0.009
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0007	N.D.	0.0006
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.090	N.D.	0.096	N.D.	0.089
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0007	N.D.	0.0006
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.003	N.D.	0.003	N.D.	0.003
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Ravena & Latham, NY										
					POC-TS10		**POC-TS11**		**POC-TS12**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**11/6/2012**		**11/6/2012**		**11/6/2012**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.008	N.D.	0.009	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0007	N.D.	0.0006
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.083	N.D.	0.091	N.D.	0.082
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0007	N.D.	0.0006
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.003	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001	0.001 J	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Fill Sources

Source: Port of Coeymans
Material: Topsoil, Ravena & Latham, NY

					POC-TSC1		POC-TSC2		POC-TSC3	
	Cas No	Analyte	Units	Limits (1)	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit
Sample Date					10/22/2012		11/6/2012		11/6/2012	
SVOC										
	83-32-9	Acenaphthene	PPB	20000	N.D.	4	N.D.	4	7 J	4
	208-96-8	Acenaphthylene	PPB	100000	7 J	4	5 J	4	9 J	4
	120-12-7	Anthracene	PPB	100000	11 J	4	11 J	4	24	
	56-55-3	Benzo(a)anthracene	PPB	1000	31		40		70	
	50-32-8	Benzo(a)pyrene	PPB	1000	39		48		71	
	205-99-2	Benzo(b)fluoranthene	PPB	1000	56		63		100	
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	29		35		53	
	207-08-9	Benzo(k)fluoranthene	PPB	800	24		30		38	
	218-01-9	Chrysene	PPB	1000	45		48		72	
	53-70-3	Dibenz(a,h)anthracene	PPB	330	N.D.	4	12 J	4	15 J	4
	132-64-9	Dibenzofuran	PPB	7000	N.D.	21	N.D.	21	N.D.	21
	206-44-0	Fluoranthene	PPB	100000	52		80		140	
	86-73-7	Fluorene	PPB	30000	N.D.	4	4 J	4	9 J	4
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	27		30		43	
	95-48-7	2-Methylphenol	PPB	330	N.D.	21	N.D.	21	N.D.	21
	108-39-4/106-44	3+4-Methylphenol	PPB	330	N.D.	21	41 J	21	25 J	21
	91-20-3	Naphthalene	PPB	12000	24		9 J	4	14 J	4
	87-86-5	Pentachlorophenol	PPB	800	N.D.	43	N.D.	42	N.D.	43
	85-01-8	Phenanthrene	PPB	100000	36		48		100	
	108-95-2	Phenol	PPB	330	48		N.D.	21	N.D.	21
	129-00-0	Pyrene	PPB	100000	59		81		130	
HERBICIDES, PESTICIDES AND PCBs										
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.95	N.D.	0.96	N.D.	0.97
	72-54-8	4,4´-DDD	PPB	3.3	1.1 J		N.D.	0.98	N.D.	1.2
	72-55-9	4,4´-DDE	PPB	3.3	3.9		2.5		2.8	
	50-29-3	4,4´-DDT	PPB	3.3	2.9		2.4 J		2.4	
	309-00-2	Aldrin	PPB	5	N.D.	0.22	0.42 J	0.22	N.D.	0.22
	319-84-6	alpha-BHC	PPB	20	N.D.	0.22	0.81 J	0.22	N.D.	0.27
	319-85-7	beta-BHC	PPB	36	N.D.	1.2	N.D.	1.2	N.D.	1.2
	57-74-9	Chlordane	PPB	94	N.D.	2.3	N.D.	1.4	N.D.	0.89
	319-86-8	delta-BHC	PPB	40	N.D.	0.58	N.D.	0.58	N.D.	0.58
	60-57-1	Dieldrin	PPB	5	N.D.	2.8	1.9 J	0.42	1.2 J	0.43
	959-98-8	Endosulfan I	PPB	2400	N.D.	0.31	N.D.	0.31	N.D.	0.28
	33213-65-9	Endosulfan II	PPB	2400	N.D.	0.42	N.D.	0.42	0.49 J	0.43
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	0.42	N.D.	0.42	N.D.	0.43
	72-20-8	Endrin	PPB	14	N.D.	0.42	N.D.	0.89	N.D.	1.4
	58-89-9	gamma-BHC	PPB	100	N.D.	0.22	N.D.	0.70	N.D.	0.22
	76-44-8	Heptachlor	PPB	42	N.D.	0.22	N.D.	0.39	N.D.	0.36
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	4	1.5 J		0.80 J	0.27
		Total PCBs	PPB	100	N.D.		55 J		N.D.	
INORGANICS										
	7440-38-2	Arsenic	PPM	13	7.87		4.59	0.419	5.16	0.416
	7440-39-3	Barium	PPM	350	119		153	0.0419	143	
	7440-41-7	Beryllium	PPM	7.2	1.34		1.08		1.12	
	7440-43-9	Cadmium	PPM	2.5	0.585 J	0.042	0.175 J	0.0419	0.287 J	0.0416
	7440-47-3	Chromium	PPM		24.8		26.5		27.4	
	7440-50-8	Copper	PPM	50	17.9		25.4		20.4	
	7439-92-1	Lead	PPM	63	27		30.0		33.6	
	7439-96-5	Manganese	PPM	1600	959		825		1,070	
	7440-02-0	Nickel	PPM	30	17.6		22.4		28.5	
	7782-49-2	Selenium	PPM	3.9	N.D.	0.916	2.93		3.42	
	7440-22-4	Silver	PPM	2	N.D.	0.178	0.424 J	0.178	0.448 J	0.176
	7440-66-6	Zinc	PPM	109	80.8		91.0		108	
	7439-97-6	Mercury	PPM	0.18	0.0617 J	0.013	0.0614 J	0.0130	0.0686 J	0.0131
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	3.2*	N.D.	3.2*	N.D.	3.2*
	16065-83-1	Chromium, Trivalent	PPM	30	24.8		26.5		27.4	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.23	N.D.	0.23	N.D.	0.23
		Percent Moisture	wt%				22.8		22.9	

NOTES:
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives
NA = Not Analyzed
N.D. = Non-detect
* Reporting limit raised due to interference from sample matrix.
Value potentially exceeds criteria.
Value flagged as estimated after validation.

Final Remedial Design/Remedial Action Work Plan
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)
Village of Hastings on Hudson, Westchester County, New York
Site No. 3-60-015
Fill Sources

Source: Port of Coeymans
Material: Topsoil, Ravena & Latham, NY

					POC-TSC4		POC-TSC5		POC-TSC6	
	Cas No	Analyte	Units	Limits (1)	Results	Det. Limit	Results	Det. Limit	Results	Det. Limit
Sample Date					11/6/2012		11/6/2012		11/6/2012	
SVOC										
	83-32-9	Acenaphthene	PPB	20000	7 J	4	5 J	4	7 J	4
	208-96-8	Acenaphthylene	PPB	100000	7 J	4	7 J	4	8 J	4
	120-12-7	Anthracene	PPB	100000	20 J	4	14 J	4	23	
	56-55-3	Benzo(a)anthracene	PPB	1000	66		50		65	
	50-32-8	Benzo(a)pyrene	PPB	1000	74		57		74	
	205-99-2	Benzo(b)fluoranthene	PPB	1000	100		78		100	
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	54		43		68	
	207-08-9	Benzo(k)fluoranthene	PPB	800	42		33		44	
	218-01-9	Chrysene	PPB	1000	70		54		74	
	53-70-3	Dibenz(a,h)anthracene	PPB	330	17 J	4	12 J	4	23	
	132-64-9	Dibenzofuran	PPB	7000	N.D.	21	N.D.	21	N.D.	21
	206-44-0	Fluoranthene	PPB	100000	130		94		140	
	86-73-7	Fluorene	PPB	30000	8 J	4	5 J	4	8 J	4
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	45		36		51	
	95-48-7	2-Methylphenol	PPB	330	N.D.	21	N.D.	21	N.D.	21
	108-39-4/106-44	3+4-Methylphenol	PPB	330	35 J	21	N.D.	21	N.D.	21
	91-20-3	Naphthalene	PPB	12000	15 J	4	11 J	4	15 J	4
	87-86-5	Pentachlorophenol	PPB	800	N.D.	42	N.D.	42	N.D.	41
	85-01-8	Phenanthrene	PPB	100000	81		57		98	
	108-95-2	Phenol	PPB	330	N.D.	21	N.D.	21	N.D.	21
	129-00-0	Pyrene	PPB	100000	130		92		130	
HERBICIDES, PESTICIDES AND PCBs										
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.96	N.D.	0.96	N.D.	0.93
	72-54-8	4,4´-DDD	PPB	3.3	N.D.	2.1	N.D.	2.3	N.D.	1.8
	72-55-9	4,4´-DDE	PPB	3.3	2.2		**3.7**		**3.7**	
	50-29-3	4,4´-DDT	PPB	3.3	**3.5**		2.9		2.0 J	0.44
	309-00-2	Aldrin	PPB	5	0.30 J	0.22	N.D.	0.27	N.D.	0.21
	319-84-6	alpha-BHC	PPB	20	N.D.	0.22	0.92 J	0.22	N.D.	0.56
	319-85-7	beta-BHC	PPB	36	N.D.	1.2	N.D.	1.2	N.D.	1.2
	57-74-9	Chlordane	PPB	94	N.D.	2.2	N.D.	0.22	N.D.	0.21
	319-86-8	delta-BHC	PPB	40	N.D.	0.58	N.D.	0.57	0.63 J	0.56
	60-57-1	Dieldrin	PPB	5	N.D.	3.1	2.1 J	0.42	1.4 J	0.41
	959-98-8	Endosulfan I	PPB	2400	N.D.	0.28	0.64 J	0.28	N.D.	0.27
	33213-65-9	Endosulfan II	PPB	2400	0.83 J	0.42	0.60 J	0.42	0.62 J	0.41
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	0.42	N.D.	0.42	N.D.	0.41
	72-20-8	Endrin	PPB	14	N.D.	1.1	N.D.	1.0	N.D.	1.0
	58-89-9	gamma-BHC	PPB	100	N.D.	0.22	N.D.	0.97	4.4	
	76-44-8	Heptachlor	PPB	42	N.D.	0.75	N.D.	0.22	N.D.	0.21
	118-74-1	Hexachlorobenzene	PPB	330	1.5		3.1		4.5	
		Total PCBs	PPB	100	14.5 J		15.3 J		20.4 J	
INORGANICS										
	7440-38-2	Arsenic	PPM	13	7.43	0.416	6.55		5.94	
	7440-39-3	Barium	PPM	350	142		164		124	
	7440-41-7	Beryllium	PPM	7.2	1.05		1.29		1.07	
	7440-43-9	Cadmium	PPM	2.5	0.194 J	0.0416	0.160 J	0.0414	0.460 J	0.0409
	7440-47-3	Chromium	PPM		26.9		29.2		29.7	
	7440-50-8	Copper	PPM	50	17.4		23.2		23.5	
	7439-92-1	Lead	PPM	63	30.5		24.2		34.6	
	7439-96-5	Manganese	PPM	1600	567		649		**1,860**	
	7440-02-0	Nickel	PPM	30	23.2		24.3		25.4	
	7782-49-2	Selenium	PPM	3.9	3.03		3.46		**4.12**	
	7440-22-4	Silver	PPM	2	0.327 J	0.177	0.514 J	0.176	0.633	
	7440-66-6	Zinc	PPM	109	91.6		92.6		105	
	7439-97-6	Mercury	PPM	0.18	0.0689 J	0.0130	0.0550 J	0.0125	0.117 J	
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	3.2*	N.D.	3.2*	N.D.	3.1*
	16065-83-1	Chromium, Trivalent	PPM	30	26.9		29.2		29.7	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.22	0.25 J	0.23	N.D.	0.22
		Percent Moisture	wt%		22.3		22.7		20.2	

NOTES:
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives
NA = Not Analyzed
N.D. = Non-detect
* Reporting limit raised due to interference from sample matrix.
Value potentially exceeds criteria.

Anne Proctor

From: William Ports <wfports@gw.dec.state.ny.us>
Sent: Thursday, November 29, 2012 4:37 PM
To: steve.p.trifiletti@exxonmobil.com; nclarke@rouxinc.com; Anne Proctor
Cc: jclemente@american-environmental.net; Amen Omorogbe; Tracy Bispham
Subject: Re: Former Tappan Terminal, Soil Cap for AOC1

Steve and Anne,

I have reviewed the analytical data for the topsoil and it is acceptable to use at the site. As mentioned, I will be visually inspecting the topsoil before it is loaded into the barges.

If you have any questions, please contact this office.

Bill

William T. Ports, P.E.
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014
Phone: 518-402-9672
Fax: 518-402-9020
email: wfports@gw.dec.state.ny.us

January 21, 2013

Mr. John Clemente
American Environmental
188 Long Island Ave.
Wyandanch, NY 11798

Dear Mr. Clemente:

We look forward to providing your company with topsoil product for the Exxon/Mobil Project Hastings on the Hudson.

We P&M Brick LLC (Port of Coeymans) will be supplying topsoil from, Duanesburg, NY in conjunction with the required project specifications. Our production company, Carver Sand & Gravel, operates the topsoil operation at our Duanesburg Plant. The topsoil that is being proposed has been processed from imported farm topsoil from two of our development sites Canterbury Crossing located in Latham NY off Rte 9,Lydius St. Schenectady and Becker farm from Schoharie NY. We take all topsoil's and blend them, after completion of blending we then screen topsoil through a screener and stock pile the finish product.

We would like to extend an invitation to you and the project engineers to visit the topsoil site and marine terminal in Ravena.

Please advise if we can be of any further assistance.

Respectfully Submitted,

Steven Kelly
VP Sales & Operations

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Latham & Schoharie, NY										
					POC2-TS1		**POC2-TS2**		**POC2-TSC1**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**1/17/2013**		**1/17/2013**		**1/17/2013**	
VOC										
	67-64-1	Acetone	PPM	0.05	N.D.	0.008	N.D.	0.008		
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0006		
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005		
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001		
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001		
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001		
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001		
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001		
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001		
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001		
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001		
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001		
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001		
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001		
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001		
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001		
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001		
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.082	N.D.	0.083		
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001		
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0006		
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002		
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001		
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001		
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	0.002 J	0.001		
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001		
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001		
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001		
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001		
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001		
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	0.002 J	0.001		
SVOC										
	83-32-9	Acenaphthene	PPB	20000					4 J	4
	208-96-8	Acenaphthylene	PPB	100000					N.D.	4
	120-12-7	Anthracene	PPB	100000					15 J	4
	56-55-3	Benzo(a)anthracene	PPB	1000					99	
	50-32-8	Benzo(a)pyrene	PPB	1000					110	
	205-99-2	Benzo(b)fluoranthene	PPB	1000					160	
	191-24-2	Benzo(g,h,i)perylene	PPB	100000					90	
	207-08-9	Benzo(k)fluoranthene	PPB	800					68	
	218-01-9	Chrysene	PPB	1000					140	
	53-70-3	Dibenz(a,h)anthracene	PPB	330					19 J	4
	132-64-9	Dibenzofuran	PPB	7000					N.D.	20
	206-44-0	Fluoranthene	PPB	100000					200	
	86-73-7	Fluorene	PPB	30000					5 J	4
	118-74-1	Hexachlorobenzene	PPB	330					2.7	
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500					83	
	95-48-7	2-Methylphenol	PPB	330					N.D.	20
	108-39-4/106-44	3+4-Methylphenol	PPB	330					59	
	91-20-3	Naphthalene	PPB	12000					5 J	4
	87-86-5	Pentachlorophenol	PPB	800					N.D.	40
	85-01-8	Phenanthrene	PPB	100000					83	
	108-95-2	Phenol	PPB	330					N.D.	20
	129-00-0	Pyrene	PPB	100000					200	

Final Remedial Design/Remedial Action Work Plan										
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)										
Village of Hastings on Hudson, Westchester County, New York										
Site No. 3-60-015										
Fill Sources										
Source: Port of Coeymans										
Material: Topsoil, Latham & Schoharie, NY										
					POC2-TS1		**POC2-TS2**		**POC2-TSC1**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
HERBICIDES, PESTICIDES AND PCBs										
	93-72-1	2,4,5-TP	PPB	3800					N.D.	0.89
	72-54-8	4,4´-DDD	PPB	3.3					N.D.	0.55
	72-55-9	4,4´-DDE	PPB	3.3					0.74 J	0.39
	50-29-3	4,4´-DDT	PPB	3.3					N.D.	0.42
	309-00-2	Aldrin	PPB	5					0.33 J	0.20
	319-84-6	alpha-BHC	PPB	20					N.D.	0.20
	319-85-7	beta-BHC	PPB	36					N.D.	1.1
	57-74-9	Chlordane (Alpha)	PPB	94					N.D.	0.20
	319-86-8	delta-BHC	PPB	40					N.D.	0.54
	60-57-1	Dieldrin	PPB	5					0.62 J	0.39
	959-98-8	Endosulfan I	PPB	2400					0.31 J	0.26
	33213-65-9	Endosulfan II	PPB	2400					N.D.	0.39
	1031-07-8	Endosulfan sulfate	PPB	2400					N.D.	0.39
	72-20-8	Endrin	PPB	14					N.D.	0.39
	58-89-9	gamma-BHC	PPB	100					N.D.	0.20
	76-44-8	Heptachlor	PPB	42					1.1	
	118-74-1	Hexachlorobenzene	PPB	330					2.7	
		Total PCBs	PPB	100					N.D.	
INORGANICS										
	7440-38-2	Arsenic	PPM	13					4.28	
	7440-39-3	Barium	PPM	350					50.3	
	7440-41-7	Beryllium	PPM	7.2					0.705	
	7440-43-9	Cadmium	PPM	2.5					N.D.	0.0389
	7440-47-3	Chromium	PPM						11.9	
	7440-50-8	Copper	PPM	50					17.7	
	7439-92-1	Lead	PPM	63					13.9	
	7439-96-5	Manganese	PPM	1600					336	
	7440-02-0	Nickel	PPM	30					14.1	
	7782-49-2	Selenium	PPM	3.9					1.51 J	0.850
	7440-22-4	Silver	PPM	2					N.D.	0.165
	7440-66-6	Zinc	PPM	109					48.3	
	7439-97-6	Mercury	PPM	0.18					0.0180 J	0.0121
	18540-29-9	Chromium, Hexavalent	PPM	1					N.D.	0.60
	16065-83-1	Chromium, Trivalent	PPM	30					11.9	
	57-12-5	Cyanide Total & Amenable	PPM	27					N.D.	0.21
		Percent Moisture	wt%						16.1	
NOTES:										
(1) NYSDEC Subpart 375-6.3 Unrestricted Use Soil Cleanup Objectives										
NA = Not Analyzed										
N.D. = Non-detect										
* Reporting limit raised due to interference from sample matrix.										
Value potentially exceeds criteria.										

Final Remedial Design/Remedial Action Work Plan								
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)								
Village of Hastings on Hudson, Westchester County, New York								
Site No. 3-60-015								
Fill Sources								
Source: Amodio's Garden Center, Nursery & Flower Shop								
Material from: 1160 Mamaroneck Ave White Plains, NY 10605								
					AGC-TS1		**AGC-TS2**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**1/10/2013**		**1/10/2013**	
VOC								
	67-64-1	Acetone	PPM	0.05	N.D.	0.008	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0006
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.004	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.077	N.D.	0.082
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0006
	75-09-2	Methylene Chloride	PPM	0.05	0.002 J	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	0.001 J	0.001	0.001 J	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan								
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)								
Village of Hastings on Hudson, Westchester County, New York								
Site No. 3-60-015								
Fill Sources								
Source: Amodio's Garden Center, Nursery & Flower Shop								
Material from: 1160 Mamaroneck Ave White Plains, NY 10605								
					AGC-TS3		**AGC-TS4**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**1/14/2013**		**1/14/2013**	
VOC								
	67-64-1	Acetone	PPM	0.05	N.D.	0.008	N.D.	0.008
	71-43-2	Benzene	PPM	0.06	N.D.	0.0006	N.D.	0.0006
	78-93-3	2-Butanone	PPM	0.12	N.D.	0.005	N.D.	0.005
	104-51-8	n-Butylbenzene	PPM	12	N.D.	0.001	N.D.	0.001
	135-98-8	sec-Butylbenzene	PPM	11	N.D.	0.001	N.D.	0.001
	98-06-6	tert-Butylbenzene	PPM	5.9	N.D.	0.001	N.D.	0.001
	56-23-5	Carbon Tetrachloride	PPM	0.76	N.D.	0.001	N.D.	0.001
	108-90-7	Chlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001
	67-66-3	Chloroform	PPM	0.37	N.D.	0.001	N.D.	0.001
	95-50-1	1,2-Dichlorobenzene	PPM	1.1	N.D.	0.001	N.D.	0.001
	541-73-1	1,3-Dichlorobenzene	PPM	2.4	N.D.	0.001	N.D.	0.001
	106-46-7	1,4-Dichlorobenzene	PPM	1.8	N.D.	0.001	N.D.	0.001
	75-34-3	1,1-Dichloroethane	PPM	0.27	N.D.	0.001	N.D.	0.001
	107-06-2	1,2-Dichloroethane	PPM	0.02	N.D.	0.001	N.D.	0.001
	75-35-4	1,1-Dichloroethene	PPM	0.33	N.D.	0.001	N.D.	0.001
	156-59-2	cis-1,2-Dichloroethene	PPM	0.25	N.D.	0.001	N.D.	0.001
	156-60-5	trans-1,2-Dichloroethene	PPM	0.19	N.D.	0.001	N.D.	0.001
	123-91-1	1,4-Dioxane	PPM	0.1	N.D.	0.080	N.D.	0.083
	100-41-4	Ethylbenzene	PPM	1	N.D.	0.001	N.D.	0.001
	1634-04-4	Methyl Tert Butyl Ether	PPM	0.93	N.D.	0.0006	N.D.	0.0006
	75-09-2	Methylene Chloride	PPM	0.05	N.D.	0.002	N.D.	0.002
	103-65-1	n-Propylbenzene	PPM	3.9	N.D.	0.001	N.D.	0.001
	127-18-4	Tetrachloroethene	PPM	1.3	N.D.	0.001	N.D.	0.001
	108-88-3	Toluene	PPM	0.7	N.D.	0.001	N.D.	0.001
	71-55-6	1,1,1-Trichloroethane	PPM	0.68	N.D.	0.001	N.D.	0.001
	79-01-6	Trichloroethene	PPM	0.47	N.D.	0.001	N.D.	0.001
	95-63-6	1,2,4-Trimethylbenzene	PPM	3.6	N.D.	0.001	N.D.	0.001
	108-67-8	1,3,5-Trimethylbenzene	PPM	8.4	N.D.	0.001	N.D.	0.001
	75-01-4	Vinyl Chloride	PPM	0.02	N.D.	0.001	N.D.	0.001
	1330-20-7	Xylene (Total)	PPM	0.26	N.D.	0.001	N.D.	0.001

Final Remedial Design/Remedial Action Work Plan								
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)								
Village of Hastings on Hudson, Westchester County, New York								
Site No. 3-60-015								
Fill Sources								
Source: Amodio's Garden Center, Nursery & Flower Shop								
Material from: 1160 Mamaroneck Ave White Plains, NY 10605								
					AGC-TSC1		**AGC-TSC2**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**1/10/2013**		**1/14/2013**	
SVOC								
	83-32-9	Acenaphthene	PPB	20000	14 J	4	6 J	4
	208-96-8	Acenaphthylene	PPB	100000	14 J	4	16 J	4
	120-12-7	Anthracene	PPB	100000	69		21	
	56-55-3	Benzo(a)anthracene	PPB	1000	280		65	
	50-32-8	Benzo(a)pyrene	PPB	1000	190		63	
	205-99-2	Benzo(b)fluoranthene	PPB	1000	270		89	
	191-24-2	Benzo(g,h,i)perylene	PPB	100000	97		53	
	207-08-9	Benzo(k)fluoranthene	PPB	800	140		39	
	218-01-9	Chrysene	PPB	1000	290		76	
	53-70-3	Dibenz(a,h)anthracene	PPB	330	26		10 J	4
	132-64-9	Dibenzofuran	PPB	7000	N.D.	20	N.D.	20
	206-44-0	Fluoranthene	PPB	100000	500		120	
	86-73-7	Fluorene	PPB	30000	17 J	4	7 J	4
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	1.2	N.D.	1.2
	193-39-5	Indeno(1,2,3-cd)pyrene	PPB	500	95		42	
	95-48-7	2-Methylphenol	PPB	330	N.D.	20	N.D.	20
	108-39-4/106-44	3+4-Methylphenol	PPB	330	N.D.	20	N.D.	20
	91-20-3	Naphthalene	PPB	12000	8 J	4	7 J	4
	87-86-5	Pentachlorophenol	PPB	800	N.D.	39	N.D.	39
	85-01-8	Phenanthrene	PPB	100000	210		64	
	108-95-2	Phenol	PPB	330	N.D.	20	N.D.	20
	129-00-0	Pyrene	PPB	100000	430		110	
HERBICIDES, PESTICIDES AND PCBs								
	93-72-1	2,4,5-TP	PPB	3800	N.D.	0.88	N.D.	0.88
	72-54-8	4,4´-DDD	PPB	3.3 (13,000)	**N.D.**	7.7	**7.8 J**	1.9
	72-55-9	4,4´-DDE	PPB	3.3 (8,900)	**47**		**44**	
	50-29-3	4,4´-DDT	PPB	3.3 (7,900)	**63**		**49**	
	309-00-2	Aldrin	PPB	5	N.D.	1.0	N.D.	0.98
	319-84-6	alpha-BHC	PPB	20	N.D.	1.0	N.D.	0.98
	319-85-7	beta-BHC	PPB	36	N.D.	5.7	N.D.	5.5
	57-74-9	Chlordane (Alpha)	PPB	94	20		21	
	319-86-8	delta-BHC	PPB	40	N.D.	2.7	N.D.	2.6
	60-57-1	Dieldrin	PPB	5	N.D.	2.8	N.D.	1.9
	959-98-8	Endosulfan I	PPB	2400	N.D.	1.3	N.D.	1.3
	33213-65-9	Endosulfan II	PPB	2400	N.D.	2.0	N.D.	1.9
	1031-07-8	Endosulfan sulfate	PPB	2400	N.D.	2.0	N.D.	1.9
	72-20-8	Endrin	PPB	14	N.D.	2.0	N.D.	1.9
	58-89-9	gamma-BHC	PPB	100	N.D.	1.0	N.D.	0.98
	76-44-8	Heptachlor	PPB	42	N.D.	4.0	N.D.	2.3
	118-74-1	Hexachlorobenzene	PPB	330	N.D.	1.2	N.D.	1.2
		Total PCBs	PPB	100	N.D.		N.D.	

Final Remedial Design/Remedial Action Work Plan								
Former Mobil Tappan Terminal, Soil Cap for AOC 1 (Western Parcel)								
Village of Hastings on Hudson, Westchester County, New York								
Site No. 3-60-015								
Fill Sources								
Source: Amodio's Garden Center, Nursery & Flower Shop								
Material from: 1160 Mamaroneck Ave White Plains, NY 10605								
					AGC-TSC1		**AGC-TSC2**	
	Cas No	**Analyte**	**Units**	**Limits (1)**	**Results**	**Det. Limit**	**Results**	**Det. Limit**
Sample Date					**1/10/2013**		**1/14/2013**	
INORGANICS								
	7440-38-2	Arsenic	PPM	13	3.46		2.99	
	7440-39-3	Barium	PPM	350	103		107	
	7440-41-7	Beryllium	PPM	7.2	0.392 J	0.0777	0.452 J	0.0779
	7440-43-9	Cadmium	PPM	2.5	N.D.	0.191	N.D.	0.0383
	7440-47-3	Chromium	PPM		24.1		27.7	
	7440-50-8	Copper	PPM	50	23.7		29.6	
	7439-92-1	Lead	PPM	63	13.7		15.7	
	7439-96-5	Manganese	PPM	1600	471		473	
	7440-02-0	Nickel	PPM	30	15.3		16.0	
	7782-49-2	Selenium	PPM	3.9	N.D.	0.835	1.01 J	0.837
	7440-22-4	Silver	PPM	2	0.195 J	0.162	N.D.	0.163
	7440-66-6	Zinc	PPM	109	49.1		54.2	
	7439-97-6	Mercury	PPM	0.18	0.0224 J	0.0115	0.0298 J	0.0119
	18540-29-9	Chromium, Hexavalent	PPM	1	N.D.	0.59	N.D.	0.59
	16065-83-1	Chromium, Trivalent	PPM	30	24.1		27.7	
	57-12-5	Cyanide Total & Amenable	PPM	27	N.D.	0.21	N.D.	0.21
		Percent Moisture	wt%		15.5		14.8	
NOTES:								
(1) NYSDEC Subpart 375-6.3 Soil Cleanup Objectives for Unrestricted Use (Restricted Residential Use, if indicated)								
NA = Not Analyzed								
N.D. = Non-detect								
* Reporting limit raised due to interference from sample matrix.								
Value potentially exceeds criteria for Unrestricted Use, but meets criteria for Restricted Residential Use.								

Anne Proctor

From: William Ports <wfports@gw.dec.state.ny.us>
Sent: Friday, January 25, 2013 9:58 AM
To: steve.p.trifiletti@exxonmobil.com; Anne Proctor
Cc: Amen Omorogbe; DSharma@hastingsgov.org; nclarke@rouxinc.com; Tracy Bispham
Subject: RE: Former Tappan Terminal, Soil Cap for AOC1, Site 360015

Anne and Steve,

The use of up to 1,000 cubic yards of topsoil is approved for use in areas within 50 feet from the shore at the Tappan Terminal Site.

If you have any questions, please contact this office.

Bill

William T. Ports, P.E.
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014
Phone: 518-402-9672
Fax: 518-402-9020
email: wfports@gw.dec.state.ny.us >>> "Anne Proctor" <aproctor@woodardcurran.com> 1/24/2013 4:15 PM >>>
Bill,

Thank you for your reply below and as indicated, attached are analytical data and source information for additional topsoil from Latham and Schoharie, NY by Port of Coeymans. This data was compliant with Unrestricted Use criteria and we ask for approval of up to 1,000 cubic yards of this material to be used in areas within 50 feet from shore. Please let me know if anything else is needed for approval to use this topsoil source by Port of Coeymans as proposed.

Thank you again for all of your help, Anne

Anne E. Proctor, PE
Principal Project Manager
Woodard & Curran
1520 Highland Avenue
Cheshire, CT 06410
P: (203) 271-0379
F: (203) 271-7952
aproctor@woodardcurran.com Anne

-----Original Message-----
From: William Ports [mailto:wfports@gw.dec.state.ny.us]
Sent: Wednesday, January 23, 2013 9:39 AM
To: steve.p.trifiletti@exxonmobil.com; Anne Proctor
Cc: Amen Omorogbe; DSharma@hastingsgov.org; nclarke@rouxinc.com; Tracy Bispham
Subject: RE: Former Tappan Terminal, Soil Cap for AOC1

Anne and Steve,

The use of up to 2,000 cubic yards of topsoil is approved for use in areas greater than 50 feet from the shore at the Tappan Terminal Site.

If you have any questions, please contact this office.

Bill

William T. Ports, P.E.
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014
Phone: 518-402-9672
Fax: 518-402-9020
email: wfports@gw.dec.state.ny.us >>> "Anne Proctor" <aproctor@woodardcurran.com> 1/23/2013 9:21 AM >>> Bill,

As attached, additional samples of top soil have been collected and analyzed for Amodio's Garden Center, Nursery & Flower Shop from their facility addressed 1160 Mamaroneck Avenue in White Plains, New York. Again, results are consistent with Restricted Residential Use criteria and we ask for approval of up to 2,000 cubic yards of this material to be used in areas greater than 50 feet from shore.

Please note that additional samples are in process for top soil to be used within 50 feet of shore and will be provided to you when available.

Please let me know if anything else is needed for approval to use top soil from Amodio's Garden Center, Nursery & Flower Shop as proposed.

Thank you for all of your help, Anne

Anne E. Proctor, PE
Principal Project Manager
Woodard & Curran
1520 Highland Avenue
Cheshire, CT 06410
P: (203) 271-0379
F: (203) 271-7952
aproctor@woodardcurran.com

-----Original Message-----
From: Amen Omorogbe [mailto:amomorog@gw.dec.state.ny.us]
Sent: Wednesday, January 16, 2013 3:34 PM
To: William Ports; Anne Proctor
Cc: steve.p.trifiletti@exxonmobil.com; DSharma@hastingsgov.org; nclarke@rouxinc.com; Tracy Bispham
Subject: Re: Former Tappan Terminal, Soil Cap for AOC1

Anne:

The top soil is acceptable for use based on the sampling results.

Thanks,

Amen.

>>> On 1/16/13 at 11:49 AM, in message
<C1082F3B0B691F4BA41C102EF5F18A963458A302@mail2003.woodardcurran.net>,
"Anne Proctor" <aproctor@woodardcurran.com> wrote:

Bill,

As relayed, some additional top soil is required at the site and attached is a summary of results for top soil to be provided by Amodio's Garden Center, Nursery & Flower Shop from their facility addressed 1160 Mamaroneck Avenue in White Plains, New York. Available results are consistent with Restricted Residential Use criteria and up to 1,000 cubic yards of this material is to be used in areas greater than 50 feet from shore.

The previous company that provided top soil, Port of Coeymans, does not have the volume required from the same source; however, we are in contact with them regarding what volume may be available.

Please let me know if anything else is needed for approval to use top soil from Amodio's Garden Center, Nursery & Flower Shop as proposed.

Thank you, Anne

Anne E. Proctor, PE
Principal Project Manager
Woodard & Curran
1520 Highland Avenue
Cheshire, CT 06410
P: (203) 271-0379
F: (203) 271-7952
aproctor@woodardcurran.com

APPENDIX E: FIELD NOTES AND PHOTOGRAPHIC LOG

(Documents located on enclosed CD)

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s sunny
Date: Thursday, October 11, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Seth Plitt- American	Jordanna Kendrot- Roux
John Clemente- American	Tracy Bispham- Roux

Equipment On Site

American	**Weeks**	**Roux**
Backhoe	Not on site	None

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Thursday, October 11, 2012

Description of Work Performed:

- Clean area of debris in preparation for trailer delivery
- Accept deliveries (trailer, generator, backhoe and miscellaneous hand tools/equipment) and mobilize to staging area.

Equipment Delivered To Site:

- Site trailer delivered
- Generator delivered
- Backhoe and general tools

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No materials delivered

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

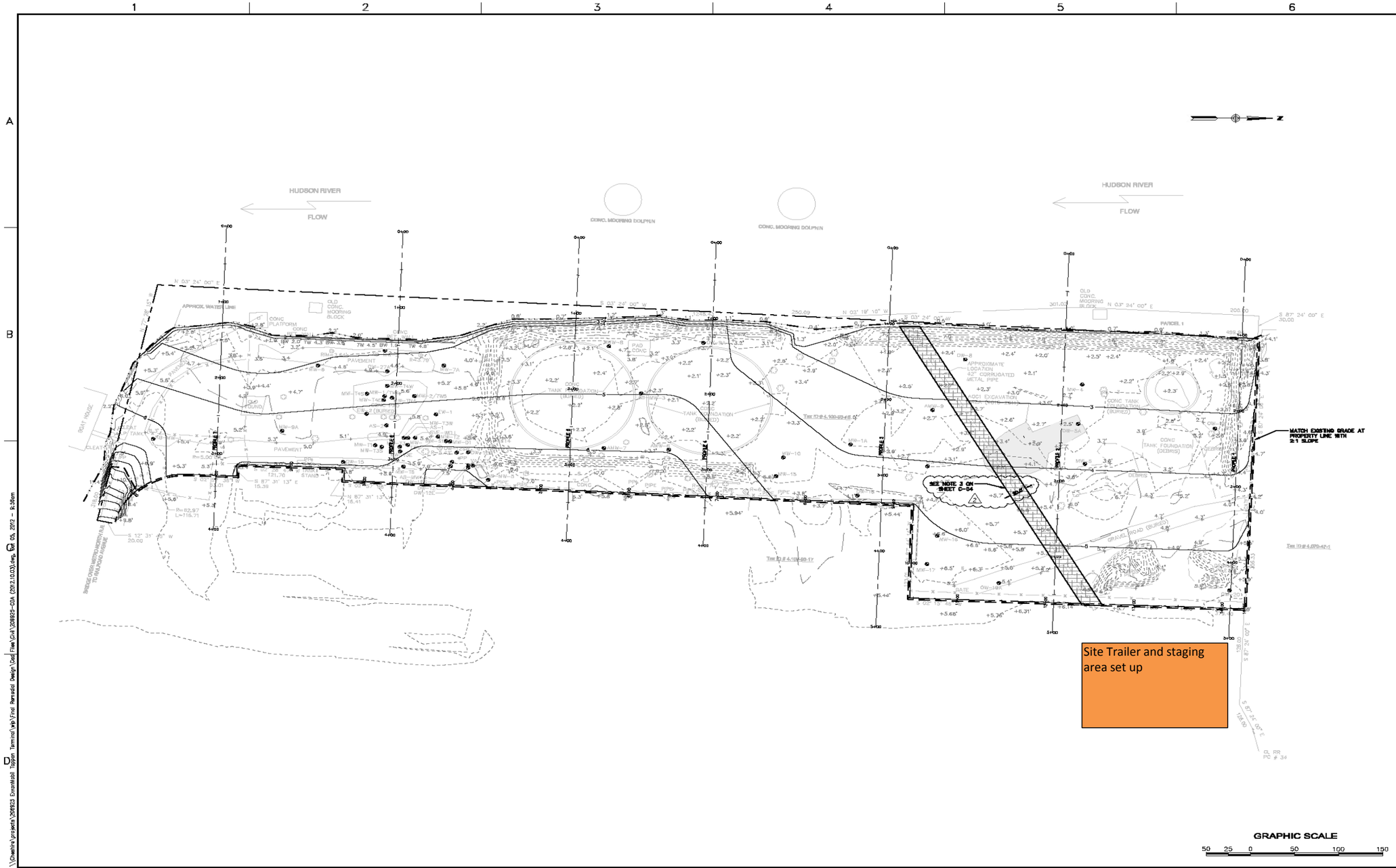
- CAMP not performed

Description of Upcoming Work Activities:

- Continue mobilization and site trailer set-up
- Connect generator to trailer

Reviewed by (initials): TB

24x36 SHEET



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	INVISEC COMMENTS	7/13/12

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DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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Photographs of Work Performed:

Date: Thursday, October 11, 2012

Photo 1: Trailer being prepared for hook up to generator

Photo 2: Looking North

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s sunny
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Friday, October 12, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Seth Plitt- American	Jordanna Kendrot- Roux
Rob- American	
(1) Electrician-American	

Equipment On Site

American	**Weeks**	**Roux**
Backhoe	Not on site	None
Storage Unit		
Generator		
Site Trailer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Thursday, October 12, 2102

Description of Work Performed:

- Hook up generator to site trailer and build containment area around unit
- Offload and set up tables and chairs inside of site trailer

Equipment Delivered To Site:

- American storage unit

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No materials delivered

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

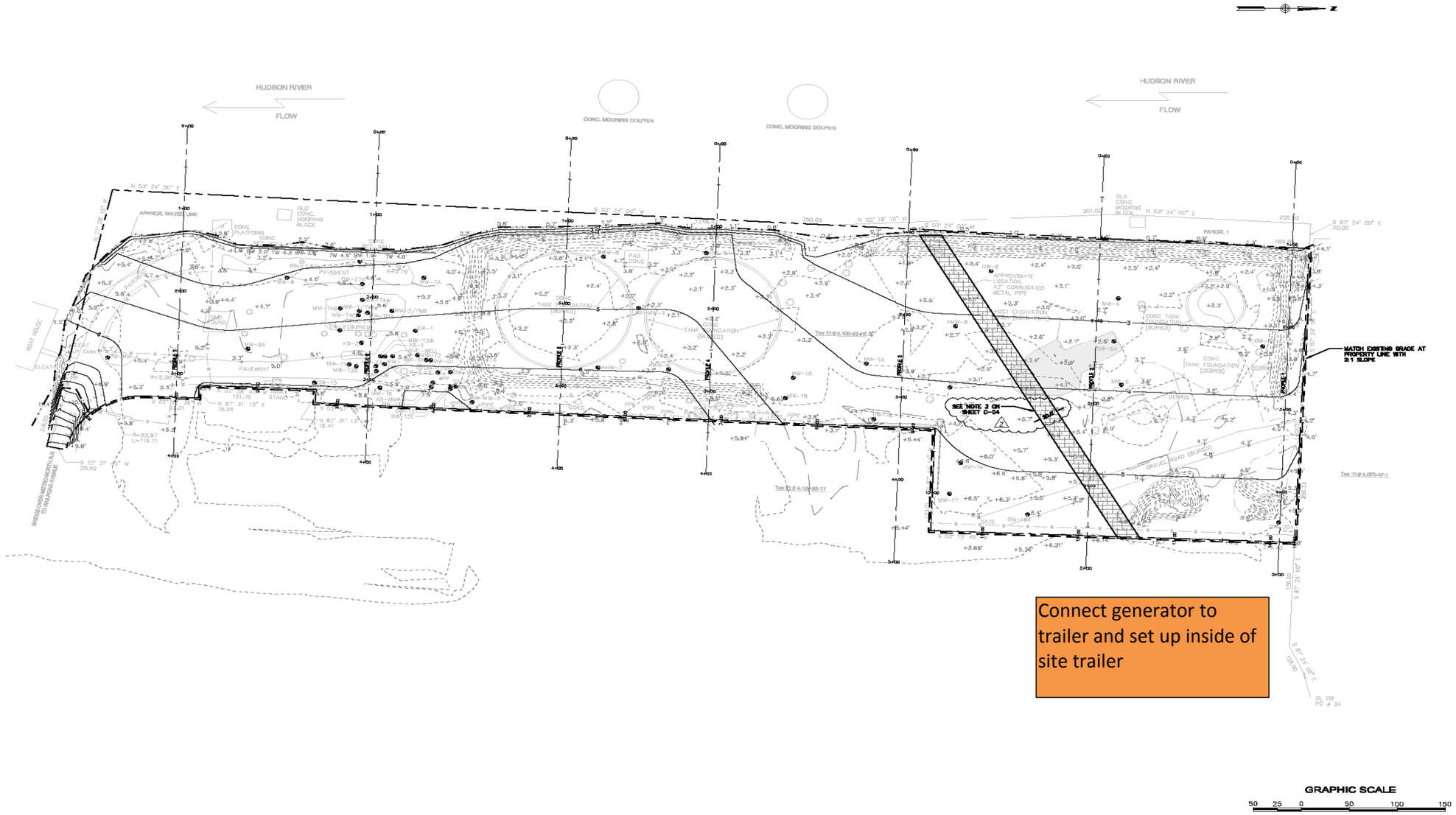
- CAMP not performed. Equipment not onsite.

Description of Upcoming Work Activities:

- Continue mobilization and site trailer set-up
- Begin debris clearing in preparation for grubbing activities

Reviewed by (initials): TB

24x36 SHEET



Connect generator to trailer and set up inside of site trailer

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CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
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NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

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DATE: DECEMBER 2011
SCALE: AS SHOWN
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Photographs of Work Performed:

Date: Friday, October 12, 2012

Photo 1: American storage unit

Photo 2: Generator and containment around unit

Photographs of Work Performed:

Date: Friday, October 12, 2012

Photo 3: Sign stands

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s, Cloudy chance of rain
Date: Monday, October 15, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	Jordanna Kendrot- Roux
Seth Plitt- American	
John Clemente- American	
(2) Personnel- X-Ray	
(2) Personnel (in water only)-Weeks Marine	

Equipment On Site

American	**Weeks**	**Roux**
Backhoe	Side Scan Boat	5-gas Meter
Porta-Potty (2)		
Generator		
Storage unit		
Site trailer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, October 15, 2012

Description of Work Performed:

- Conduct side scan survey of Hudson River
- Mark-out 42" sewer piping
- Remove property fence to open work zone
- Hydraulic leak on Backhoe. Work stopped
- Set up weather station

Equipment Delivered To Site:

- Porta-Potty delivered (2)

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

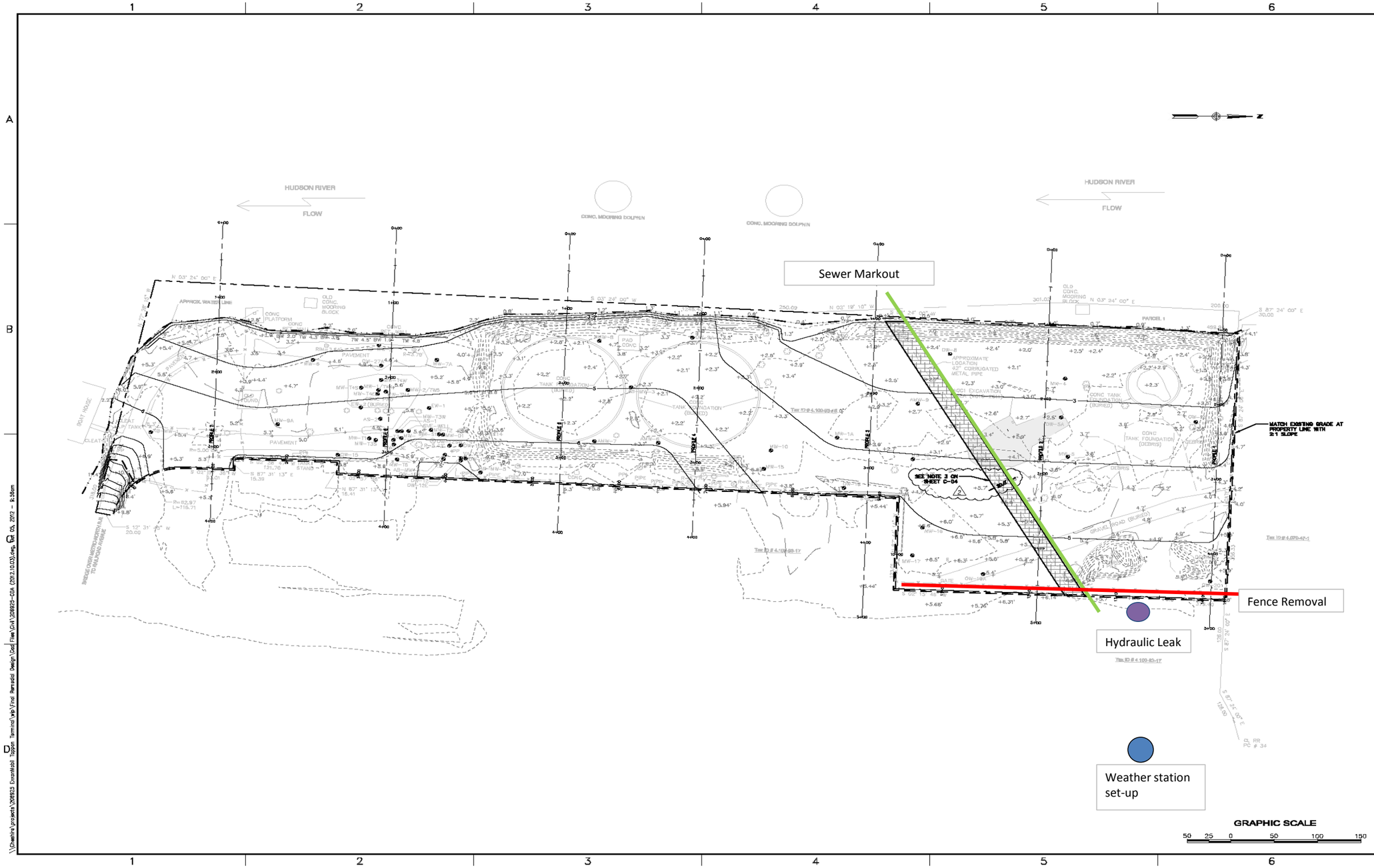
- CAMP not performed. No grubbing/clearing performed

Description of Upcoming Work Activities:

- Continue/Finish Mobilization
- Demarcate monitoring wells
- Herbicide and Pesticide applications

Reviewed by (initials): TB

24x36 SHEET



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DRAWN BY: HP
CHECKED BY: JJG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Monday, October 15, 2012

Photo 1: Mark-out of 42'' piping

Photo 2: Hydraulic line leak on Backhoe

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s, Sunny
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Tuesday, October 16, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	
Seth Plitt- American	
John Clemente- American	

Equipment On Site

American	Weeks	Roux
Backhoe	Not onsite	5-gas Meter
Tree Grubber		
Generator		
Storage unit		
Site trailer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, October 16, 2012

Description of Work Performed:

- Repair failed hydraulic connection on Backhoe
- Hertz to do full maintenance inspection on Backhoe prior to reuse
- Accept and stage deliveries (see below)
- Demarcate monitoring wells with fence posts and caution tape
- Mobilize Tree grubber from Bobcat

Equipment Delivered To Site:

- Tree Grubber

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Silt fence and stakes
- Well extending material
- Poland water for site
- Hay bales
- Filter fabric rolls

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

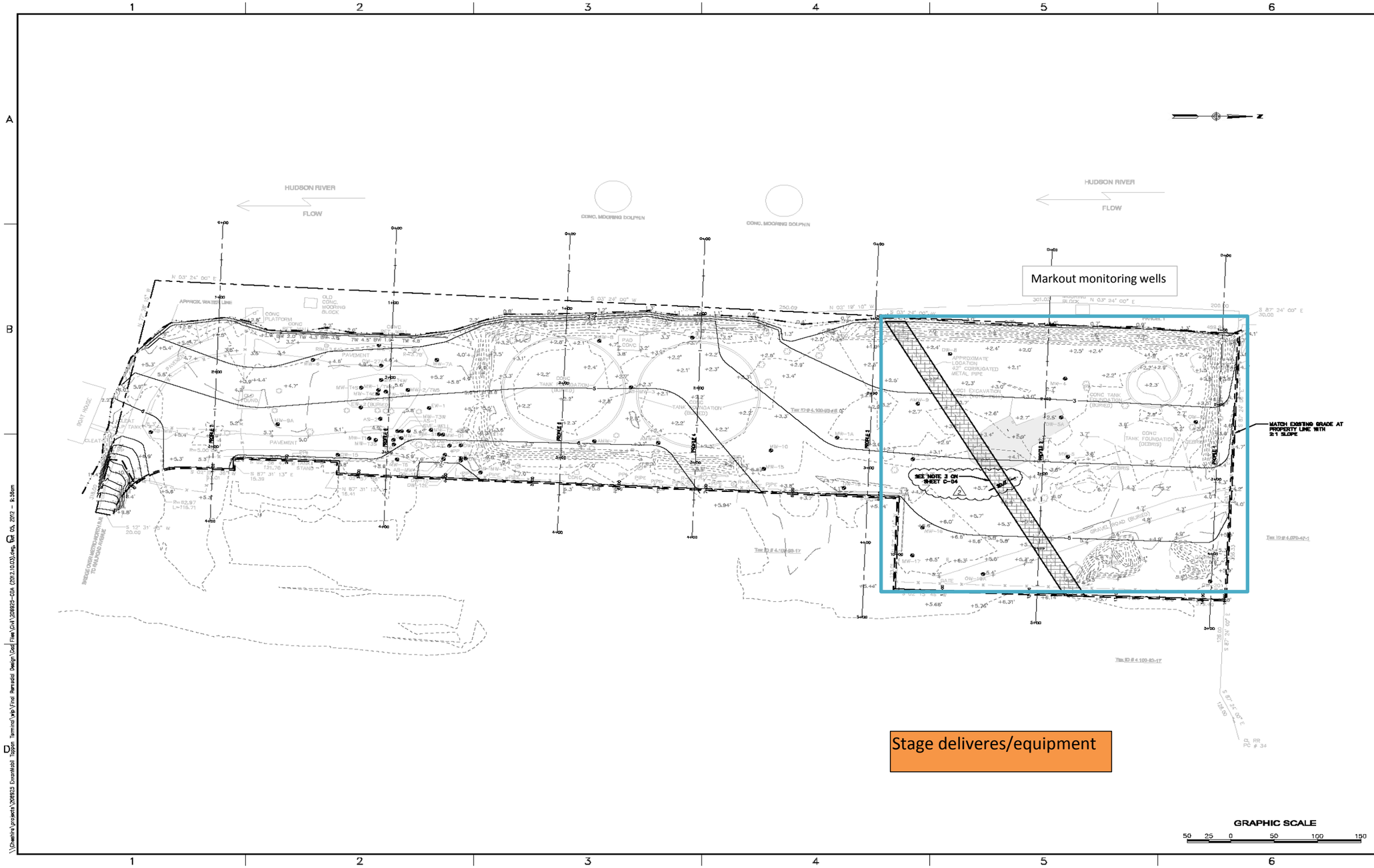
- CAMP not performed

Description of Upcoming Work Activities:

- Continue Mobilization
- Begin grubbing of trees and brush from Northern portion
- Herbicide and Pesticide applications

Reviewed by (initials) TB

24x36 SHEET



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CHECKED BY: JMC

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Tuesday, October 16, 2012

Photo 1: Broken hydraulic fitting for backhoe that was replaced

Photo 2: Demarcation of monitoring wells

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s, Sunny
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Wednesday, October 17, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	
Seth Plitt- American	
Kas-Regal Pest Management	
Jeff and Mike- Allied Biological	
Doug Mitchell- Angle of Attack	

Equipment On Site

American	**Weeks**	**Roux**
Backhoe	Not onsite	5-gas Meter
Tree Grubber		
Site Trailer		
Storage Unit		
Generator		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, October 17, 2012

Description of Work Performed:

- Spray site and well casings with pesticide to eliminate bees in possible work areas
- Survey of 42" sewer piping
- Herbicide application to phragmites
- Erect signage across the site

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Delivery of stone bags and biodegradable stakes

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

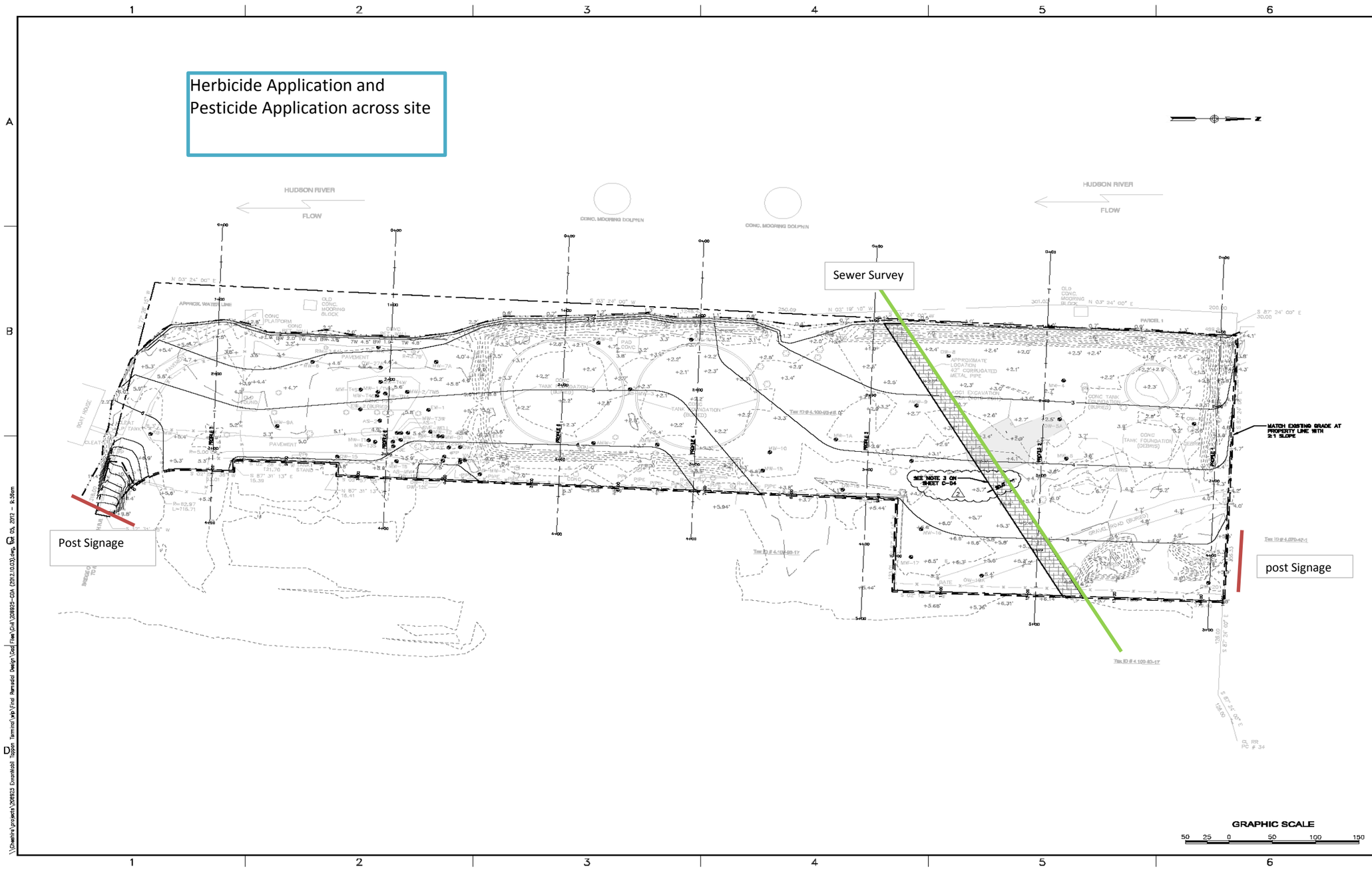
- CAMP not performed

Description of Upcoming Work Activities:

- Finish Mobilization
- Begin removal of property line fencing
- Begin grubbing of trees and brush from Northern portion

Reviewed by (initial): TB

Herbicide Application and
Pesticide Application across site



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CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Wednesday, October 17, 2012

Photo 1: Survey line and phragmites control

Photo 2: Site Trailer

Photographs of Work Performed:

Date: Wednesday, October 17, 2012

Photo 3: Signage by walk-bridge

Photo 4: Signage at front gate

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s, Sunny
Date: Thursday, October 18, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	Jordanna Kendrot- Roux
John Clemente- American	Tracy Bispham- Roux
Seth Plitt- American	Noelle Clarke- Roux
	Ann Proctor-Woodard and Curran
	Bill Ports- NYSDEC

Equipment On Site

American	Weeks	Roux
Backhoe	Not onsite	5-gas Meter
Tree Grubber		CAMP air monitors
Excavator		
Site Trailer		
Generator		
Storage Unit		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Thursday, October 18, 2012

Description of Work Performed:

- Accept delivery of debris roll off
- Roll-off filled with fence and steel debris
- Poland Springs onsite to fix water station
- Remove utility wires and excess debris in prep for tree grubber
- Site walk with NYSDEC. 42" breach in piping encountered

Equipment Delivered To Site:

-Excavator

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- (1) Roll off box delivered for steel and debris

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

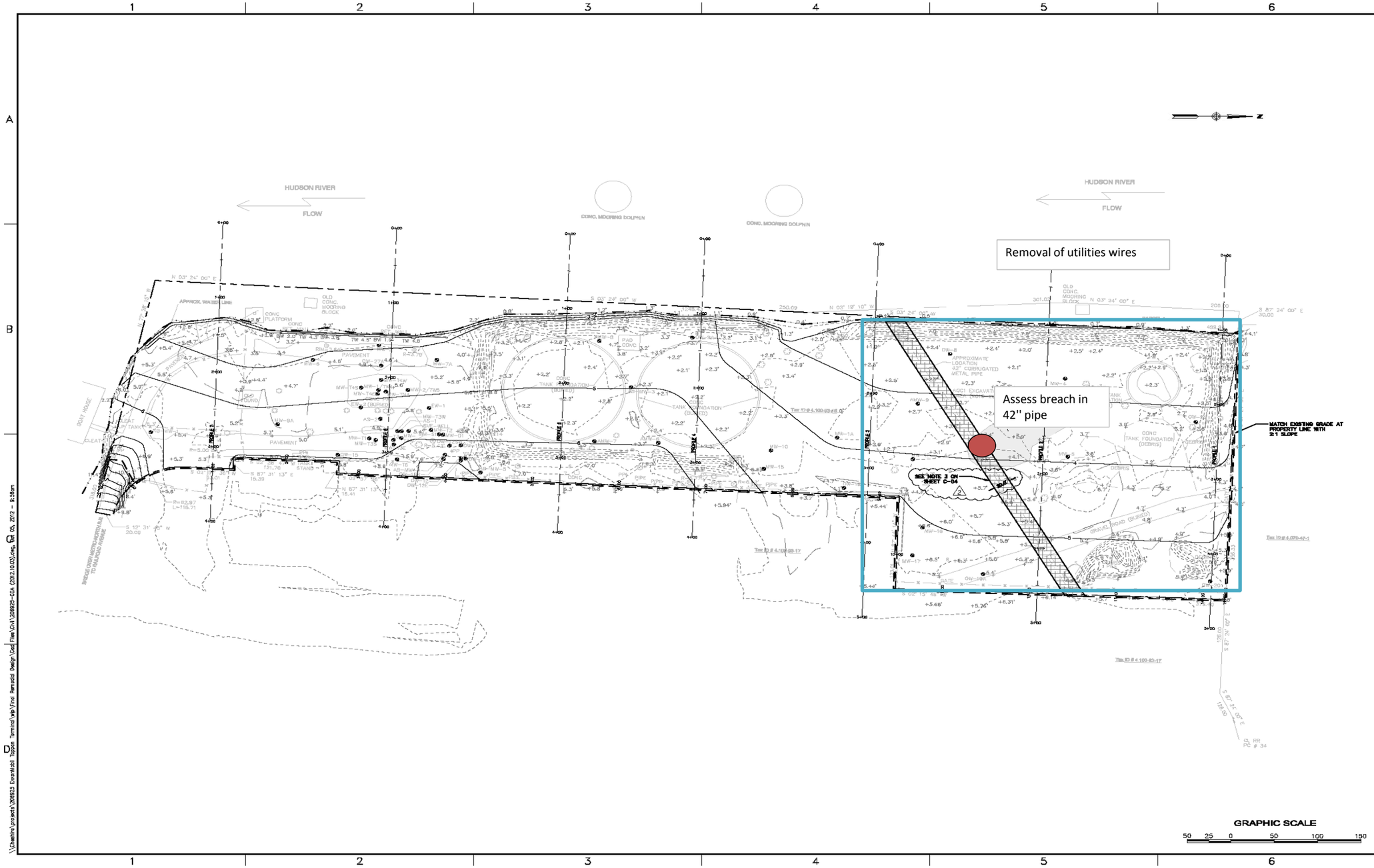
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Begin grubbing of trees and brush from Northern portion
- Discuss path forward regarding 42" pipe

Reviewed by (initials): TB

24x36 SHEET



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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
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SCALE: AS SHOWN
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ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Photographs of Work Performed:

Date: Thursday, October 18, 2012

Photo 1: 42'' piping breach

Photo 2: Utility wires wrapped in tree debris

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s Heavy rain
Date: Friday, October 19, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	5-gas Meter
Backhoe		
Tree Grubber		
Site trailer		
Generator		
Storage unit		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Friday, October 19, 2012

Description of Work Performed:

- Continuation of grubbing the Northern portion of the Mobil parcel
- Hertz onsite to investigate "thumb" malfunction. Checked and fixed

Equipment Delivered To Site:

-No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

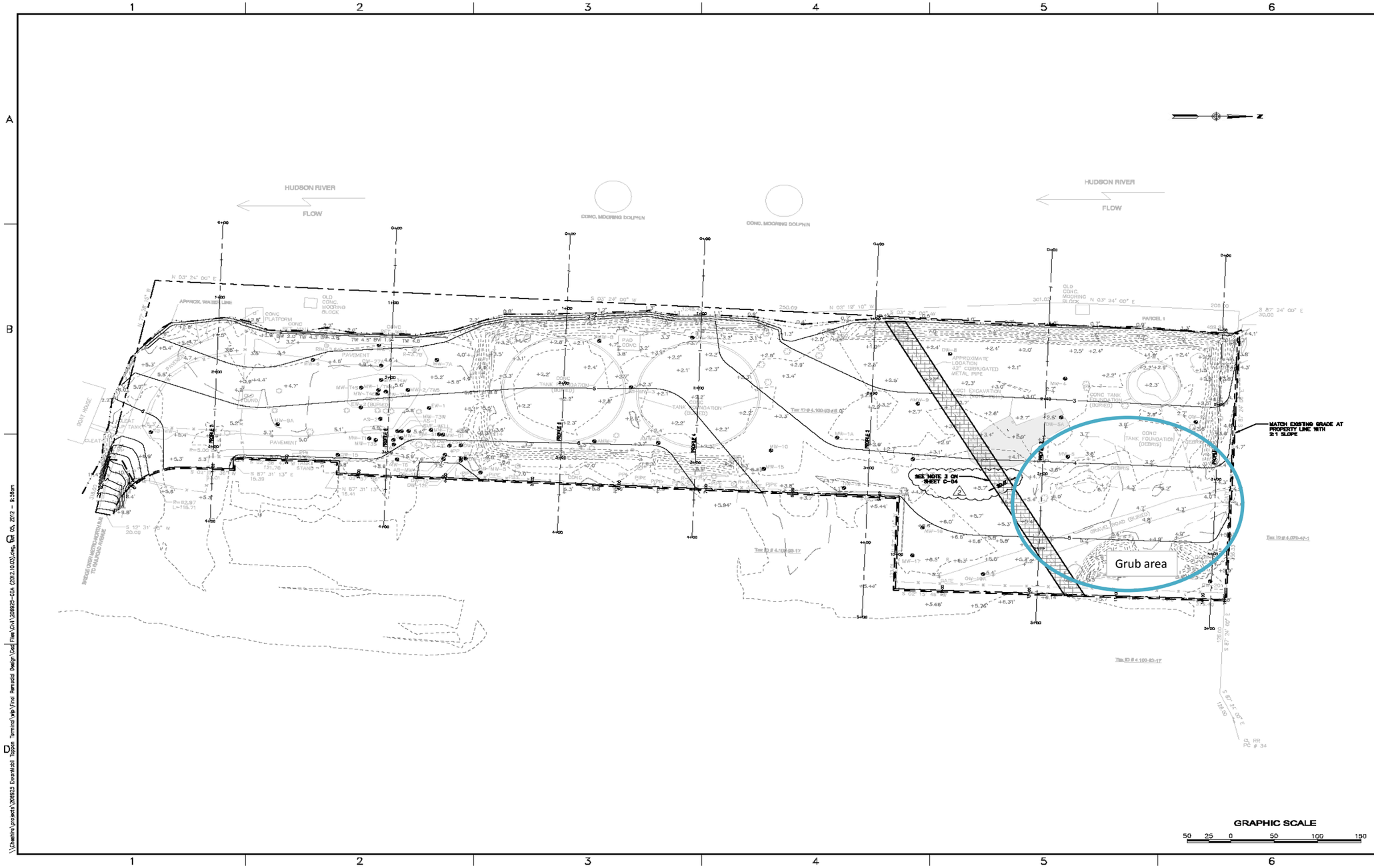
- CAMP not performed due to high volumes of rain

Description of Upcoming Work Activities:

- Continue grubbing of trees and brush from Northern portion
- Address breach in 42" pipe
- Temporarily extend monitoring wells

Reviewed by (initials): TB

24x36 SHEET



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CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
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Photographs of Work Performed:

Date: Friday, October 19, 2012

Photo 1: Northwestern portion grubbed and fence removed

Photo 2:

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s Sun
Date: Monday, October 22, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	Jordanna Kendrot-Roux
Seth Plitt-American	
Raphael- American	
John Clemente- American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP Air Monitoring
Backhoe		5-gas Meter
Tree Grubber		
Generator		
Site trailer		
Storage unit		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, October 22, 2012

Description of Work Performed:

- Hand dig end of 42" piping where signal was lost. Encountered pipe.
- Continuation of tree grubbing from the Northern portion of the Mobil parcel
- Repair electrical line for tree grubber

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Decontamination truck pads

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue tree grubbing and clearing of trees
- Address breach and ending in 42" pipe

Reviewed by (initials): TB

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SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Photographs of Work Performed:

Date: Monday, October 22, 2012

Photo 1: 42'' pipe where signal was lost

Photo 2: Exposed portion of 42'' piping at berm around 2.5' below ground surface

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Amy Hoffmann
Weather: 60s Sun, possible rain in afternoon
Date: Tuesday, October 23, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernendez-American	Jordanna Kendrot-Roux
Seth Plitt-American	David Herman-NYSDEC

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP Air Monitoring
Backhoe		5-gas Meter
Tree Grubber		
Site trailer		
Storage unit		
Generator		

Reviewed by (initials) TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, October 23, 2012

Description of Work Performed:

- Attach shield onto excavator for large tree removal
- Continue of tree grubbing and clearing in the Northern portion of the Mobil parcel
- Temporary extension of monitoring wells on Northern portion of Mobil parcel
  -OW-8, OW-5A, OW-25, MW-17, MW-16, MW-12, OW-20

Equipment Delivered To Site:

- Water Truck
- Frac Tank

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered

Material Removed From Site:

- No material removed

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

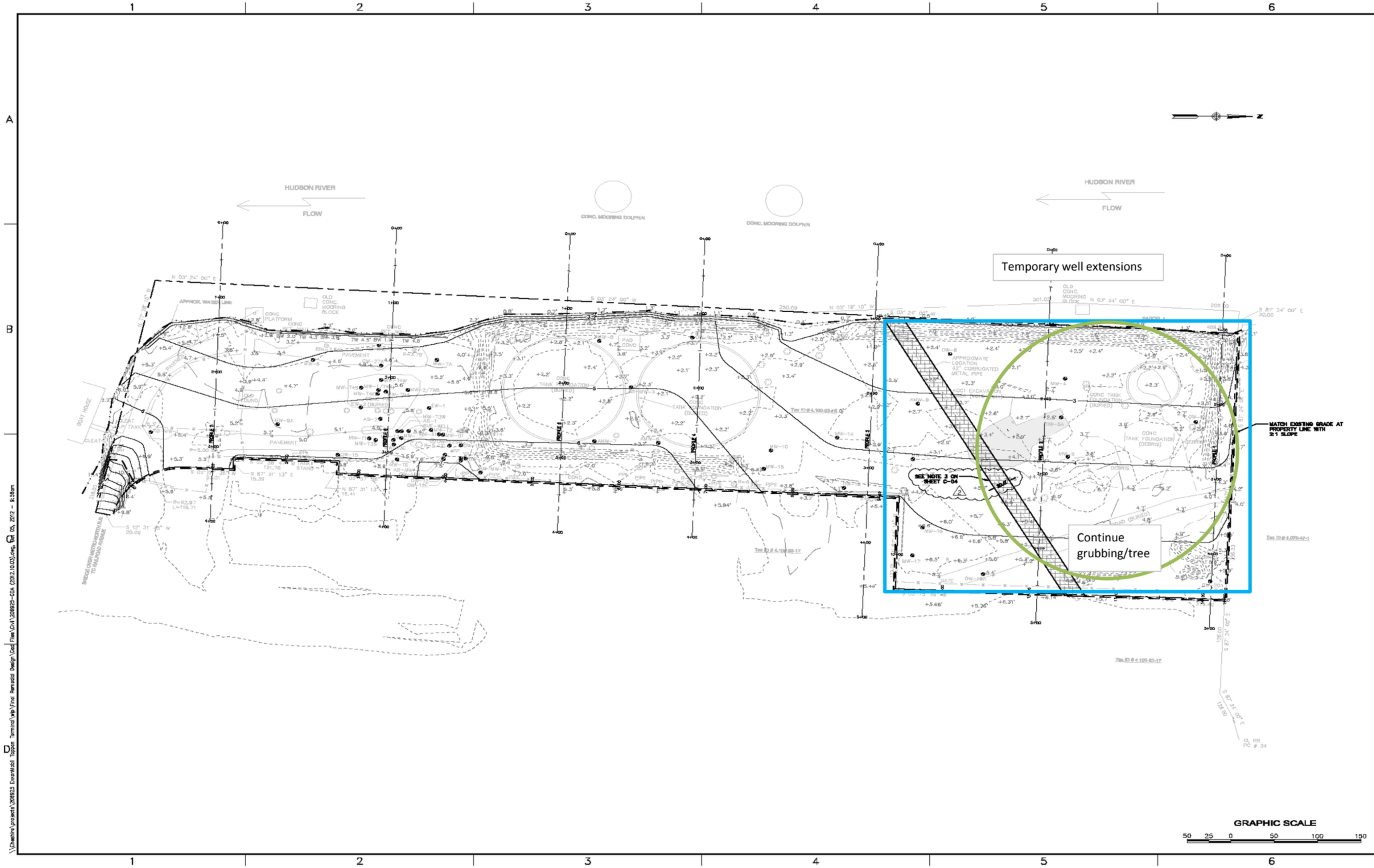
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue clearing trees and brush
- Address breach in 42" pipe
- Begin tree loadout

Reviewed by (initials): TB

24x36 SHEET



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REV	DESCRIPTION	DATE
	INVISEC COMMENTS	7/13/12

DESIGNED BY: JMC
DRAWN BY: HP
CHECKED BY: JMC

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Photographs of Work Performed:

Date: Tuesday, October 23, 2012

Photo 1: Shield for excavator

Photo 2: Frac tank and water truck

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s Cloudy with misty rain
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Wednesday, October 24, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Ken Brown-American	Amy Hoffmann-Roux
Omar Hernandez-American	Jordanna Kendrot-Roux
Seth Plitt-American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP Air Monitoring
Backhoe		5-gas Meter
Site trailer		
Storage unit		
Generator		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, October 24, 2012

Description of Work Performed:

- Continued tree clearing and material load out from the Northern portion of the Mobil parcel

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- Tree Grubber

Material Delivered To Site:

- No material delivered

Material Removed From Site:

- One roll off of steel/debris removed from site
-One roll off of trees/brush removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

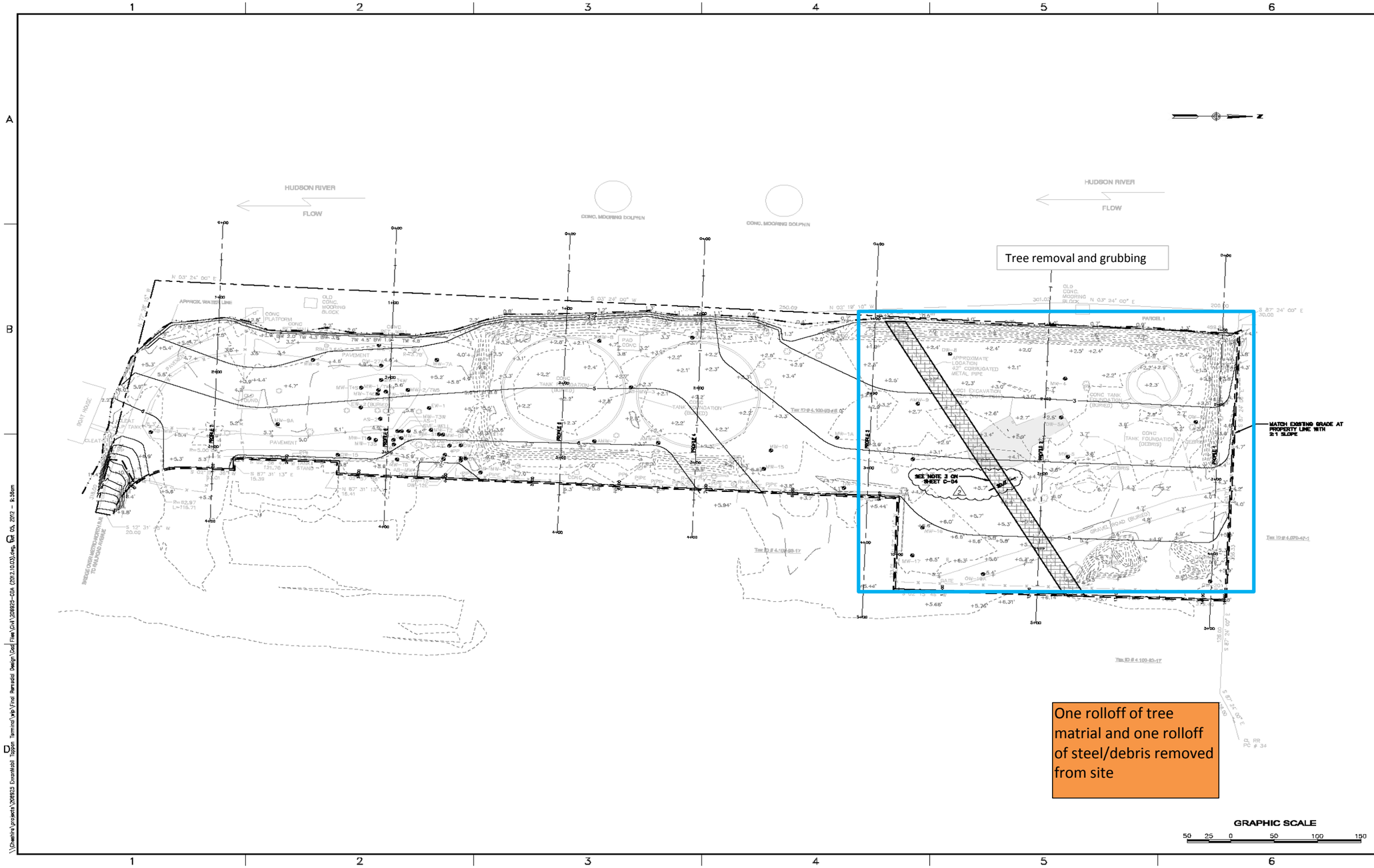
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue clearing of trees and load out
- Address breach in 42" pipe

Reviewed by (initials): TB

24x36 SHEET



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REV	DESCRIPTION	DATE
	INVISEC COMMENTS	7/13/12

DESIGNED BY: JMG
DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Wednesday, October 24, 2012

Photo 1: Site grubbed

Photo 2: Site grubbed. Few large trees left to be removed with excavator

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s Cloudy
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Thursday, October 25, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Amy Hoffmann-Roux
Ken Brown-American	Jordanna Kendrot-Roux
Omar Hernandez-American	Tracy Bispham-Roux
Seth Plitt-American	Noelle Clarke-Roux
	Ann Proctor- Woodard and Curran

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP Air Monitoring
Backhoe		5-gas Meter
Front End Loader		
Generator		
Site trailer		
Storage unit		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Thursday, October 25, 2012

Description of Work Performed:

- Continue tree clearing and material load out from the Northern portion of the Mobil parcel
- Weekly project meeting. Investigate options for repairing 42" diameter pipe
- Fuel onsite to top off all machinery

Equipment Delivered To Site:

-Frontend Loader

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Fuel onsite to fuel machinery

Material Removed From Site:

- Four roll offs of tree debris removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

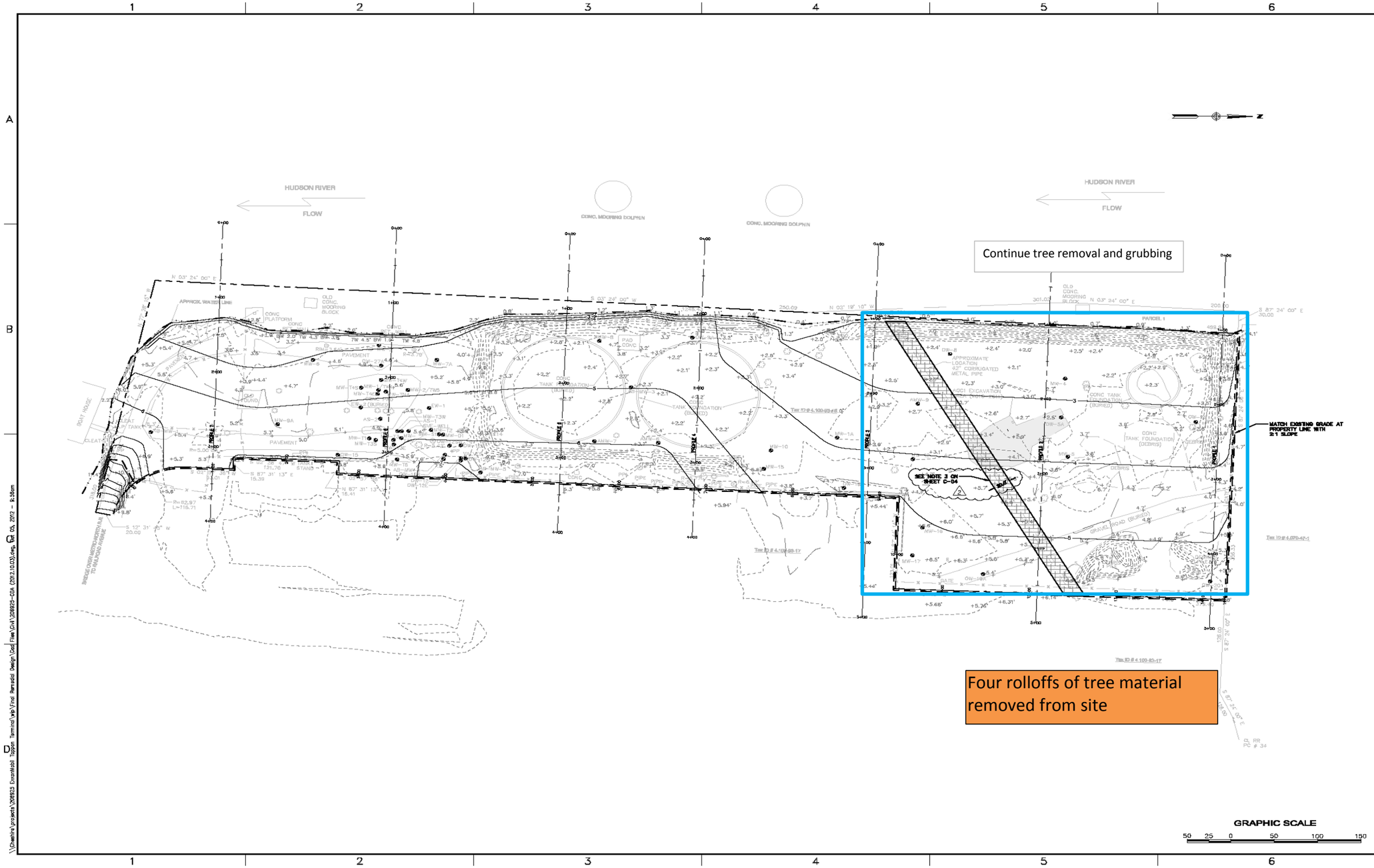
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue clearing of trees and load out
- Discuss patch on 42" pipe
- Prep for hurricane Sandy

Reviewed by (initials): TB

24x36 SHEET



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	INVISIBLE COMMUNITY	7/13/12

DESIGNED BY: JMG
DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Thursday, October 25, 2012

Photo 1: Tree material

Photo 2: Cleared area

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Amy Hoffmann
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	60s Cloudy
Project Number:	017.0151Y012		
Job:	Soil Cap for AOC1	Date:	Friday, October 26, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Amy Hoffmann-Roux
Ken Brown-American	Jordanna Kendrot-Roux
Omar Hernandez-American	
Raphael-American	
Doug Mitchell-Angle of Attack	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP Air Monitoring
Backhoe		5-gas Meter
Front End Loader		
Site trailer		
Storage unit		
Generator		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Friday, October 26, 2012

Description of Work Performed:

- Continued tree clearing and material load out from the Northern portion of the Mobil parcel
- Survey of Mobil property line
- Shift/tighten collar and concrete breach in 42" piping. Cover with blue stone
- Secure site for pending hurricane

Equipment Delivered To Site:

-No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- 450 Hay bales delivered

Material Removed From Site:

- One roll off of tree debris removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

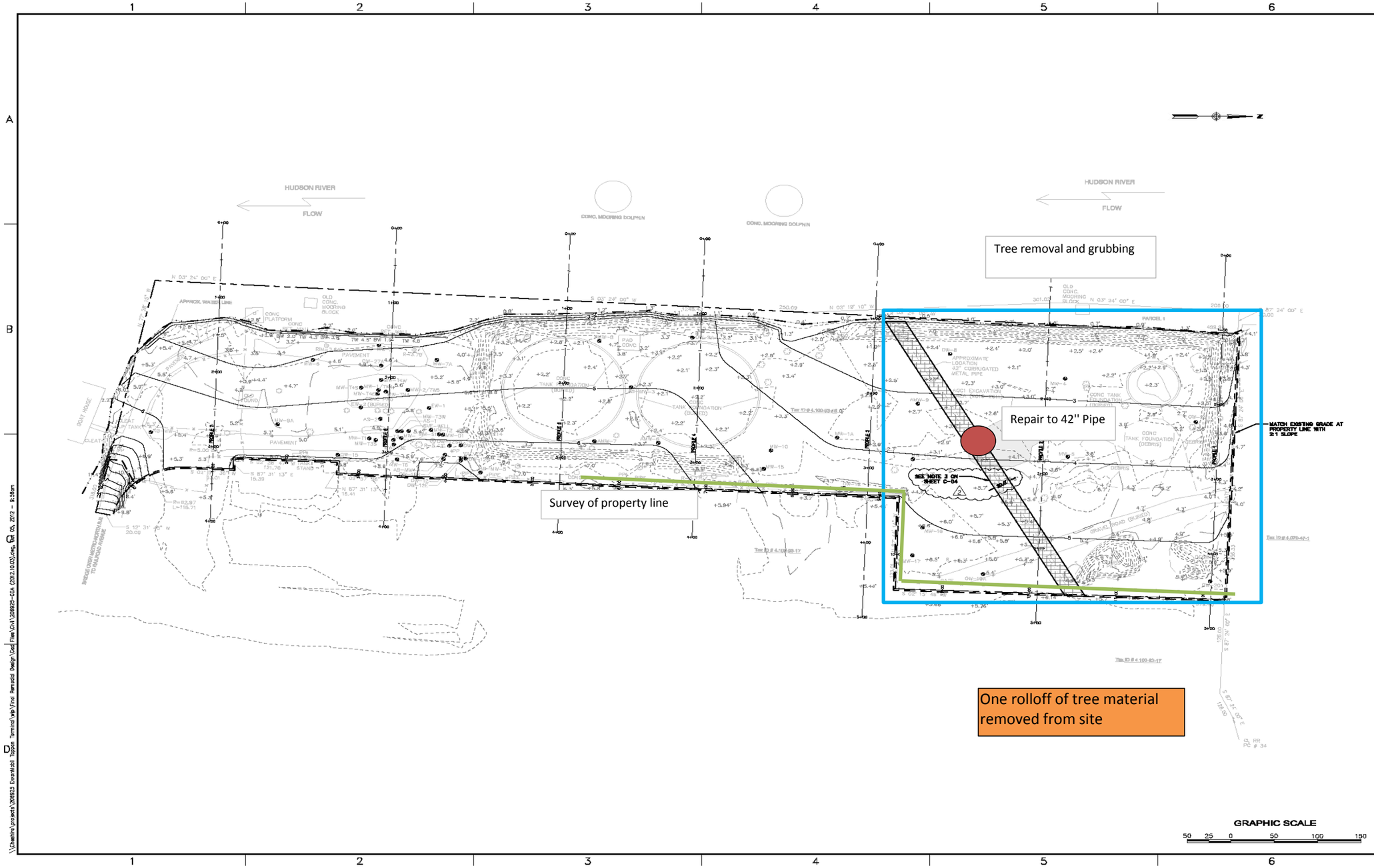
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Site activities cancelled on Monday 10.29.12 and Tuesday 10.29.12 due to the approaching Hurricane
- Work to resume on Wednesday 10.31.12 pending impact

Reviewed by (initials): TB

24x36 SHEET



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	INVISEC COMMENTS	7/13/12

DESIGNED BY: JMG
DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Friday, October 26, 2012

Photo 1: Collar shifted and tightened

Photo 2: Collar and breach cemented

Photographs of Work Performed:

Date: Friday, October 26, 2012

Photo 3: Repair covered with blue stone

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Jessica Collins
Weather: 40's Partly cloudy
63%, 30.15"rising
Wind: North 2 mph
Date: Monday, November 5, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Omar Hernandez-American	
Seth Plitt- American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, November 5, 2012

Description of Work Performed:

Continue with site grading and tree removal up to the five acre mark to the South.

Bull dozer delivered to site; equipment checklist completed

Begin rough grading site in preparation of cap

Equipment Delivered To Site:

Bull dozer delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered

Material Removed From Site:

Two roll off's removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

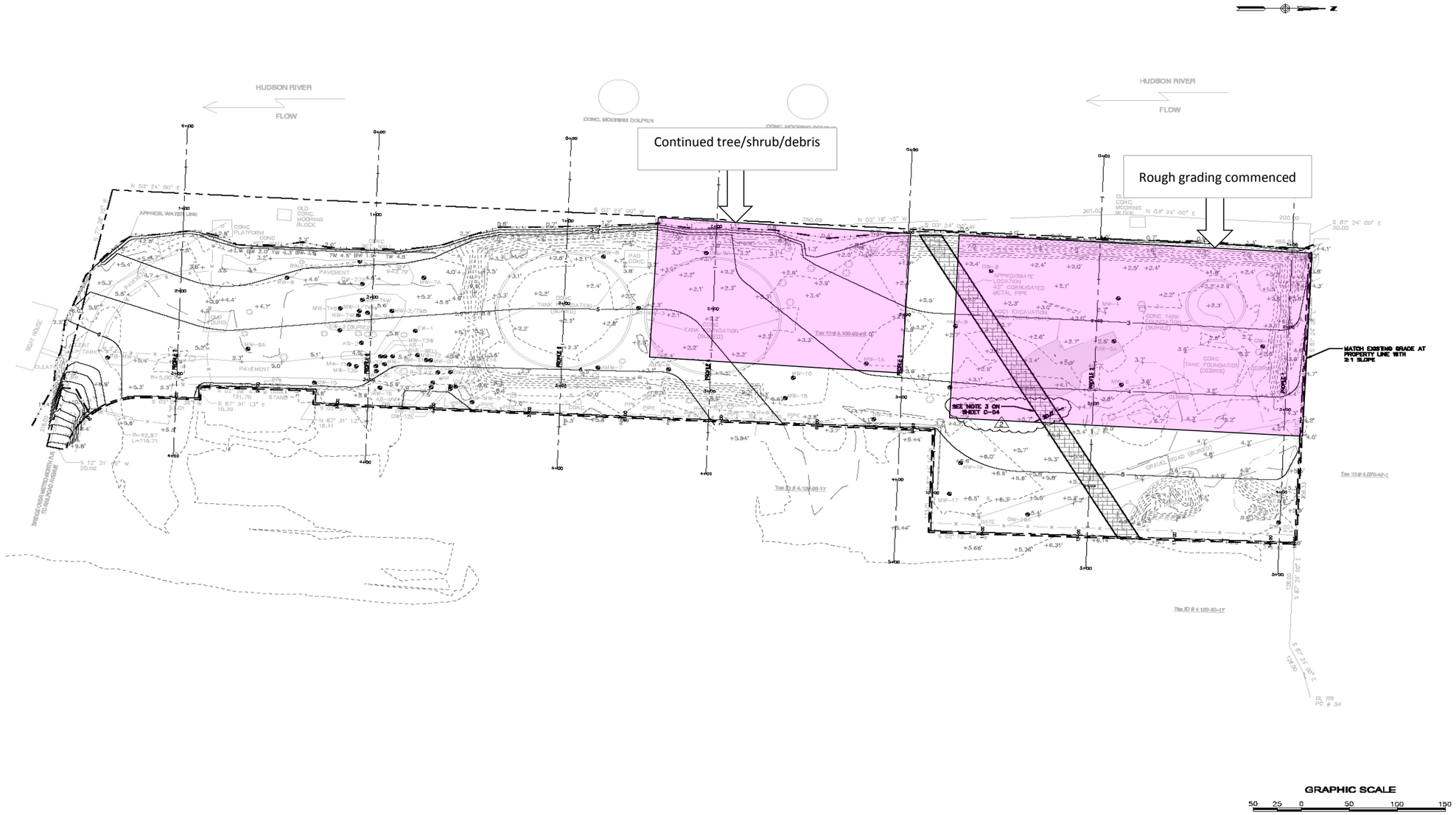
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Survey of mean high water
- Grading of the berm and installation of sediment controlls

Reviewed by (initial): TB

24x36 SHEET



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	INVISEC COMMENTS	7/13/12

DESIGNED BY: JMG CHECKED BY: JMG
DRAWN BY: HP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Monday, November 05, 2012

Photo 1: Looking south, the excavator is loading debris and brush into a roll-off

Photo 2: Looking northwest, the bulldozer begins rough grading the site

Photographs of Work Performed:

Date: Friday, November 02, 2012

Photo 3: Looking west

Photo 4: Looking west, showing recent rough graded surface

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	29 F, Mostly clear
Project Number:	017.0151Y012		71%, 30.36" rising
Job:	Soil Cap for AOC1	Wind:	Calm
		Date:	Tuesday, November 6, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Omar Hernandez-American	
Seth Plitt- American	
Raphael - American	Doug Mitchell - Angle of Attack
Rob - American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, November 6, 2012

Description of Work Performed:

Continue with tree removal up to the five acre mark to the South.

Continue rough grading site in preparation of cap

Surveying mean high water

Prep for nor'easter

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered

Material Removed From Site:

- No material removed from site

Sampling Performed:

- Completed sampling requirements for 9 barges from Tilcon and 3 barges from Port of Coeymans

CAMP Performed (Note any exceedances or issues with the equipment):

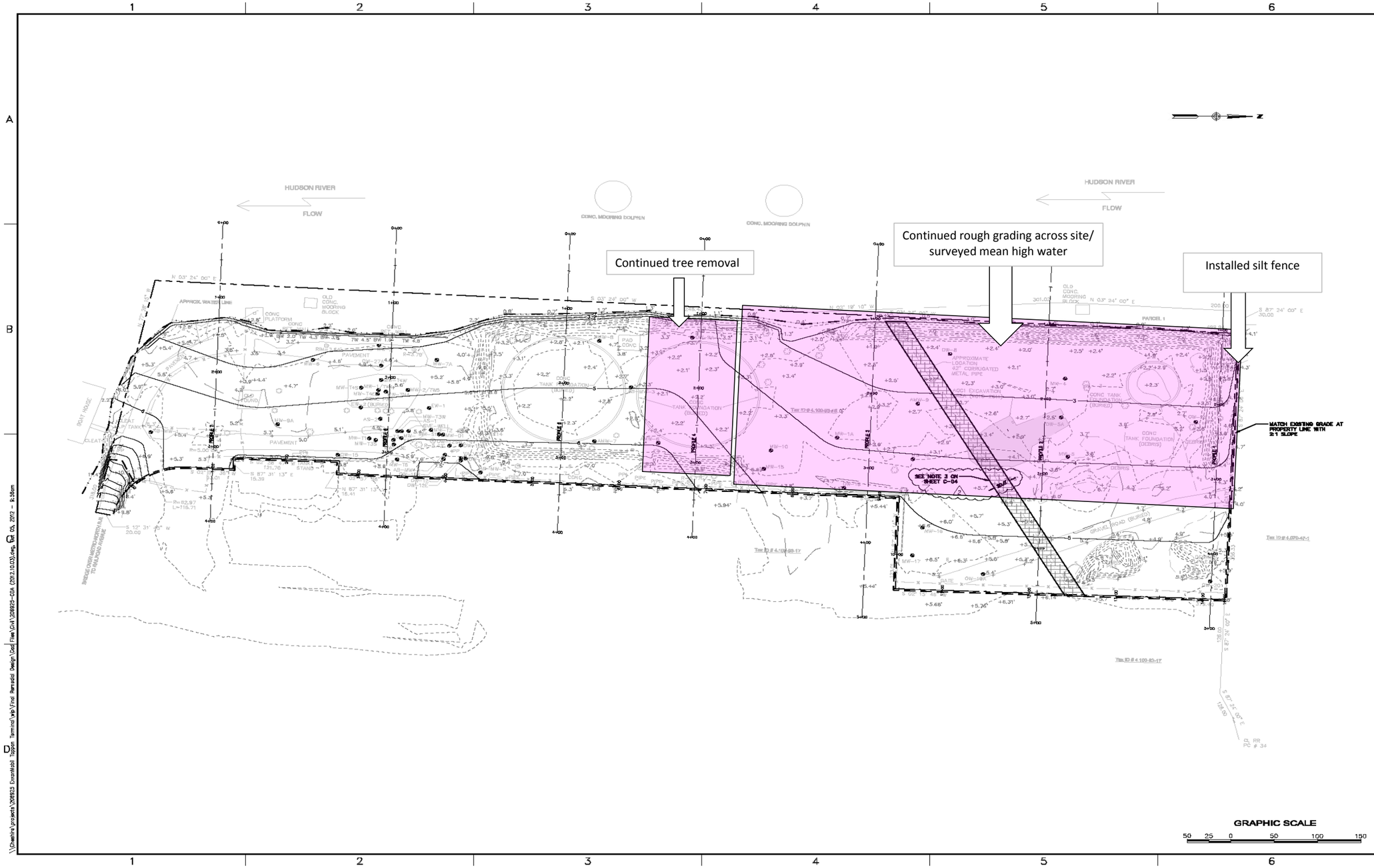
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Survey of mean high water
- Grading of the berm and installation of sediment controlls

Reviewed by (initials): TB

24x36 SHEET



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DESIGNED BY: JMG
DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 209925.06
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Photographs of Work Performed:

Date: Tuesday, November 06, 2012

Photo 1: Panorama of site conditions

Photo 2: Looking northwest, showing recently graded surface

Photographs of Work Performed:

Date: Tuesday, November 06, 2012

Photo 3: Looking southeast, showing recently graded and grubbed surface

Photo 4: At the northern border of site, showing silt fence installed to protect the swale, prior to nor'easter

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	35 F, Sunny
Project Number:	017.0151Y012		56%, 29.99" rising
Job:	Soil Cap for AOC1	Wind:	Winds NW 5 mph
		Date:	Friday, November 9, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Omar Hernandez-American	Tracy Bispham - Roux
Seth Plitt- American	
Raphael - American	Anne Proctor - Woodard & Curran
Rob - American	
	Steve Trifiletti - Exxon Mobil

Equipment On Site

American	**Weeks**	**Roux**
Excavator	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Friday, November 9, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Begin construction of de-con pad

General housekeeping of site

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- 2 loads of clean stone delivered to site

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Survey of mean high water
- Grading of the berm and installation of sediment controlls

Reviewed by (initials): TB

24x36 SHEET

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REV	DESCRIPTION	DATE
	NYSDEC COMMENTS	7/13/12

DESIGNED BY: MJG
DRAWN BY: MP
CHECKED BY: MJG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
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SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Friday, November 09, 2012

Photo 1: Commencement of construction of decon pad

Photo 2: Looking north, observe silt fence along trench, continued construction of decon pad

Photographs of Work Performed:

Date: Friday, November 09, 2012

Photo 3: Looking north, along river's edge, during XOM sitewalk

Photo 4: Looking NW, showing debris/shrubs to be removed

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client: ExxonMobil Oil Corporation
Location: 1 Railroad Avenue, Hastings-on-Hudson, NY
Project Number: 017.0151Y012
Job: Soil Cap for AOC1

Field Representative: Jessica Collins
Weather: 55 F, Foggy
90%, 30.49"falling
Wind: Winds NNW 3 mph
Date: Monday, November 12, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Omar Hernandez-American	
Seth Plitt- American	
Raphael Canales - American	
Ron Snider - American	
Doug Mitchell - Angle of Attack	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, November 12, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Continue construction of de-con pad

Commence assembly of erosion and sediment controls (i.e. silt fence and hay bales, along the river)

Survey of mean high water

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- 1 load of stone delivered for de-con pad

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

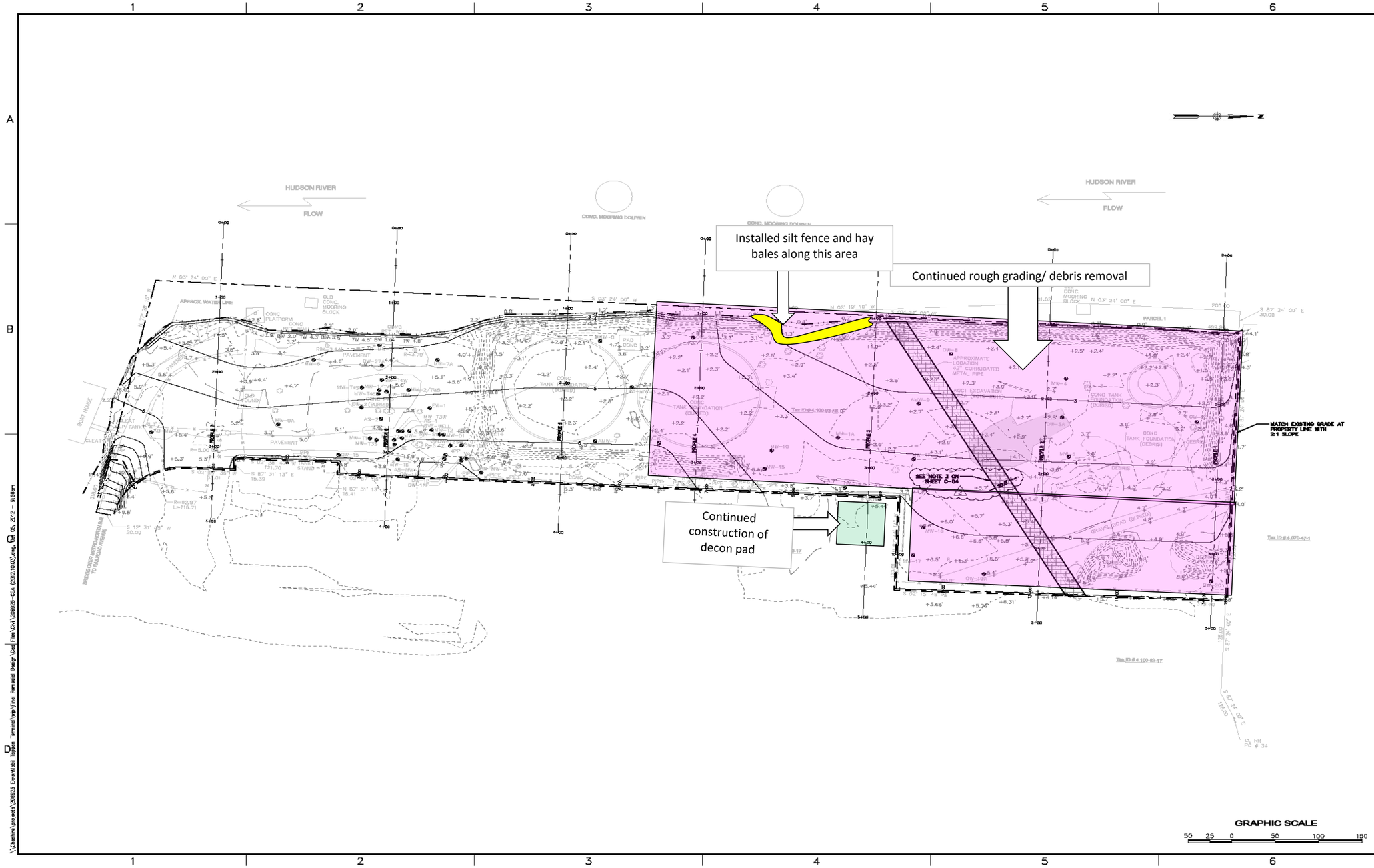
- CAMP performed. Elevated readings noted on the dust meters due to dense fog conditions.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Grading of the berm and installation of sediment controlls

Reviewed by (initials): TB

24x36 SHEET



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REV	DESCRIPTION	DATE
NYSDEC COMMENTS		7/13/12

DESIGNED BY: MJG
CHECKED BY: MJG
DRAWN BY: MP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Orlantha\projects\208925 Exxonmobil Tappan Terminal\Web\Final Remedial Design\Cad Files\CAP\208925-C03 (2012.10.03).dwg, Oct 05, 2012 - 8:36am

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Photographs of Work Performed:

Date: Monday, November 12, 2012

Photo 1: Panoramic view of site; from left to right is south to north

Photo 2: Looking north, observe construction of silt fence and hay bales along river's edge

Photographs of Work Performed:

Date: Monday, November 12, 2012

Photo 3: Looking north, along river's edge

Photo 4: Looking SW, showing the construction of the de-con pad

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	48 F, Overcast/Rain
Project Number:	017.0151Y012		90%, 30.38" falling
Job:	Soil Cap for AOC1	Wind:	Winds N 4mph
		Date:	Tuesday, November 13, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	
Seth Plitt- American	
Raphael Canales - American	
Ron Snider - American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, November 13, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Completed construction of de-con pad

Repair assembly of erosion and sediment controls (i.e. silt fence and hay bales, along the river)

Chop concrete using hammer attachment to excavator

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered to site

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

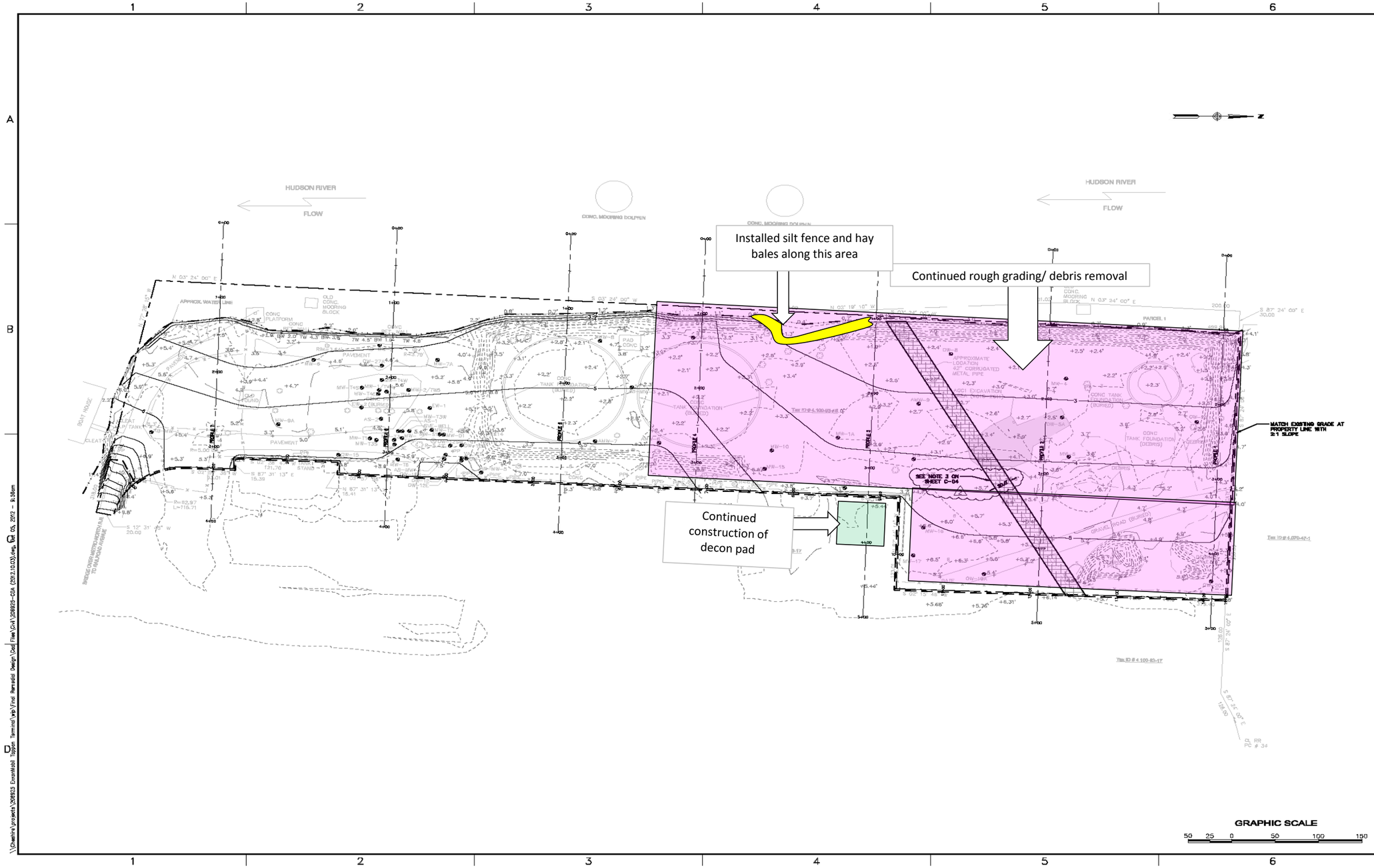
- No CAMP performed due to inclement weather (rain falling)

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Grading of the berm and installation of sediment controlls

Reviewed by (initials): TB

24x36 SHEET



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DRAWN BY: MP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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Photographs of Work Performed:

Date: Tuesday, November 13, 2012

Photo 1: Looking NNW, observing breach of sediment control measures, due to extreme high tide

Photo 2: Looking WSW, observe silt fence after tide goes out

Photographs of Work Performed:

Date: Tuesday, November 13, 2012

Photo 3: Looking east, observe rough grading activities

Photo 4: Looking SW, showing the repair of the berm along the cove area

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	37 F, Mostly clear
Project Number:	017.0151Y012		70%, 30.64" falling
Job:	Soil Cap for AOC1	Wind:	Winds N 2mph
		Date:	Wednesday, November 14, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	
Omar Hernandez - American	Dave Herman - NYSDEC
Raphael Canales - American	
Ron Snider - American	
Dan Hirschberger - American	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Not onsite	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initial): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, November 14, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Chop concrete using hammer attachment to excavator

Repair berm and assembly of erosion and sediment controls (i.e. silt fence and hay bales, along the river)

General housekeeping of site

Equipment Delivered To Site:

- No equipment delivered

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- 4 loads of stone delivered to site for use in repaired berm

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

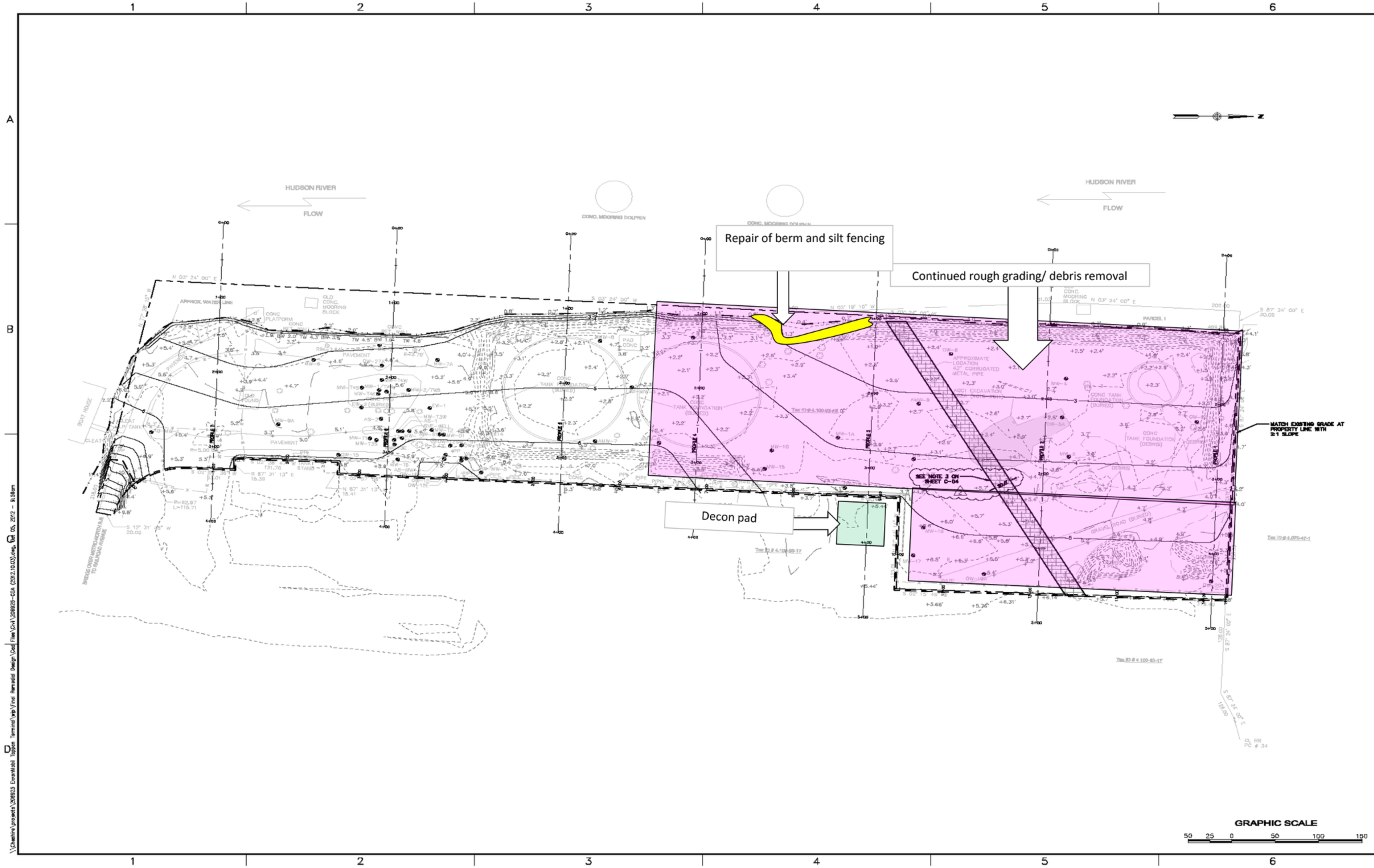
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Grading of the berm and installation of sediment controlls

Reviewed by (initials): TB

24x36 SHEET



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DESIGNED BY: MJG CHECKED BY: MJG
DRAWN BY: MP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR ACC 1

JOB NO.: 208925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

Photographs of Work Performed:

Date: Wednesday, November 14, 2012

Photo 1: Looking west, rough grading continues

Photo 2: Looking NNW, observe repair of berm

Photographs of Work Performed:

Date: Wednesday, November 14, 2012

Photo 3: Looking north, repair of berm continues

Photo 4: Looking NW, temporarily stabilized berm

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	35 F, Mostly clear
Project Number:	017.0151Y012		86%, 30.62" falling
Job:	Soil Cap for AOC1	Wind:	Winds calm
		Date:	Monday, November 19, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	
Omar Hernandez - American	Anne Proctor - Woodard & Curran
Seth Plitt - American	
Ron Snider - American	Doug Mitchell - Angle of Attack
Raphael Canales - American	
	Dave Herman - NYSDEC
	Bill Ports - NYSDEC
Chuck Giamundo - Weeks	
Gary Harris - Weeks	Steve Trifiletti - XOM
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, November 19, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and begin spreading fill material

General housekeeping of site

Surveying rough grade and fill grade

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- 2 dumpsters delivered (one for trees, one for garbage)
- 2 loads of rip rap from Tilcon

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

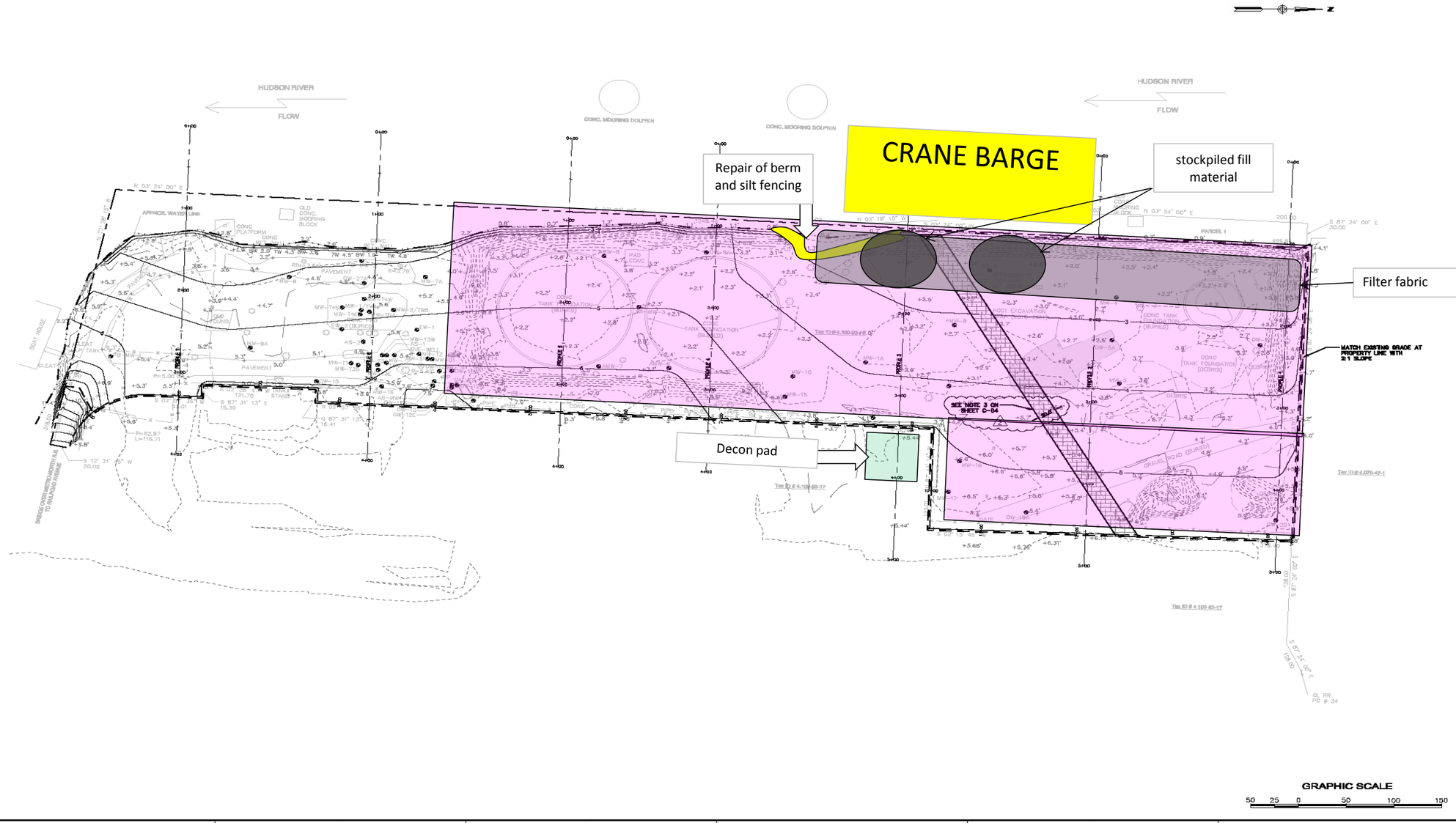
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Grading of the berm and installation of sediment controlls
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

24x36 SHEET



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REV	DESCRIPTION	DATE
	INYSDEC COMMENTS	7/13/12

DESIGNED BY: JMG
DRAWN BY: HP
CHECKED BY: JMG

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

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Photographs of Work Performed:

Date: Monday, November 19, 2012

Photo 1: Looking WSW, the crane begins offloading material

Photo 2: Looking west, offloading continues

Photographs of Work Performed:

Date: Monday, November 19, 2012

Photo 3: Looking west, the southern stockpile sits on filter fabric

Photo 4: Looking south, observing newly graded surfaces

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	40 F, Partly cloudy
Project Number:	017.0151Y012		65%, 30.26" falling
Job:	Soil Cap for AOC1	Wind:	Winds N 2 mph
		Date:	Tuesday, November 20, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	Drew Baris - Roux
Omar Hernandez - American	
Seth Plitt - American	
Ron Snider - American	
Raphael Canales - American	
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, November 20, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Surveying rough grade and fill grade

Repairing, restructuring berm

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered to site

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Grading of the berm and installation of sediment controls
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

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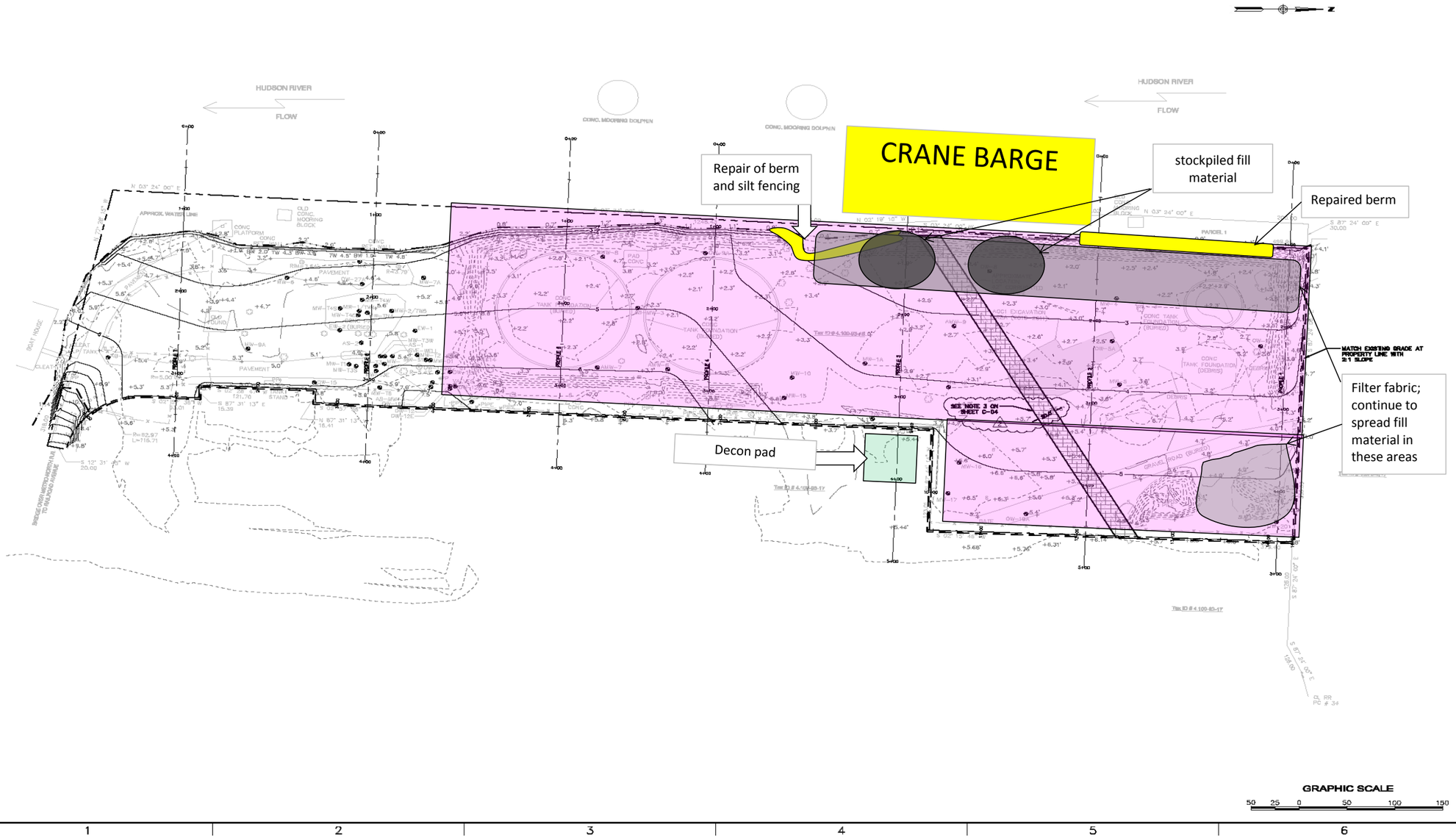

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DESIGNED BY: AHS
DRAWN BY: HP
CHECKED BY: AHS

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

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Photographs of Work Performed:

Date: Tuesday, November 20, 2012

Photo 1: Looking south, rough grading continues

Photo 2: Looking northwest, observing the placement of filter fabric

Photographs of Work Performed:

Date: Tuesday, November 20, 2012

Photo 3: Looking west, observing the newly spread out material atop filter fabric, with berm repair

Photo 4: Looking south, observing newly covered surfaces

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	35 F, Partly cloudy
Project Number:	017.0151Y012		81%, 30.33" steady
Job:	Soil Cap for AOC1	Wind:	Winds calm
		Date:	Wednesday, November 21, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	
Omar Hernandez - American	
Seth Plitt - American	
Ron Snider - American	
Raphael Canales - American	
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, November 21, 2012

Description of Work Performed:

Continue rough grading site in preparation of cap

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Surveying rough grade and fill grade

Repairing, restructuring berm

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Received second and third barges of 1/4 minus material from Tilcon
- Received 4 loads of stone for berm

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

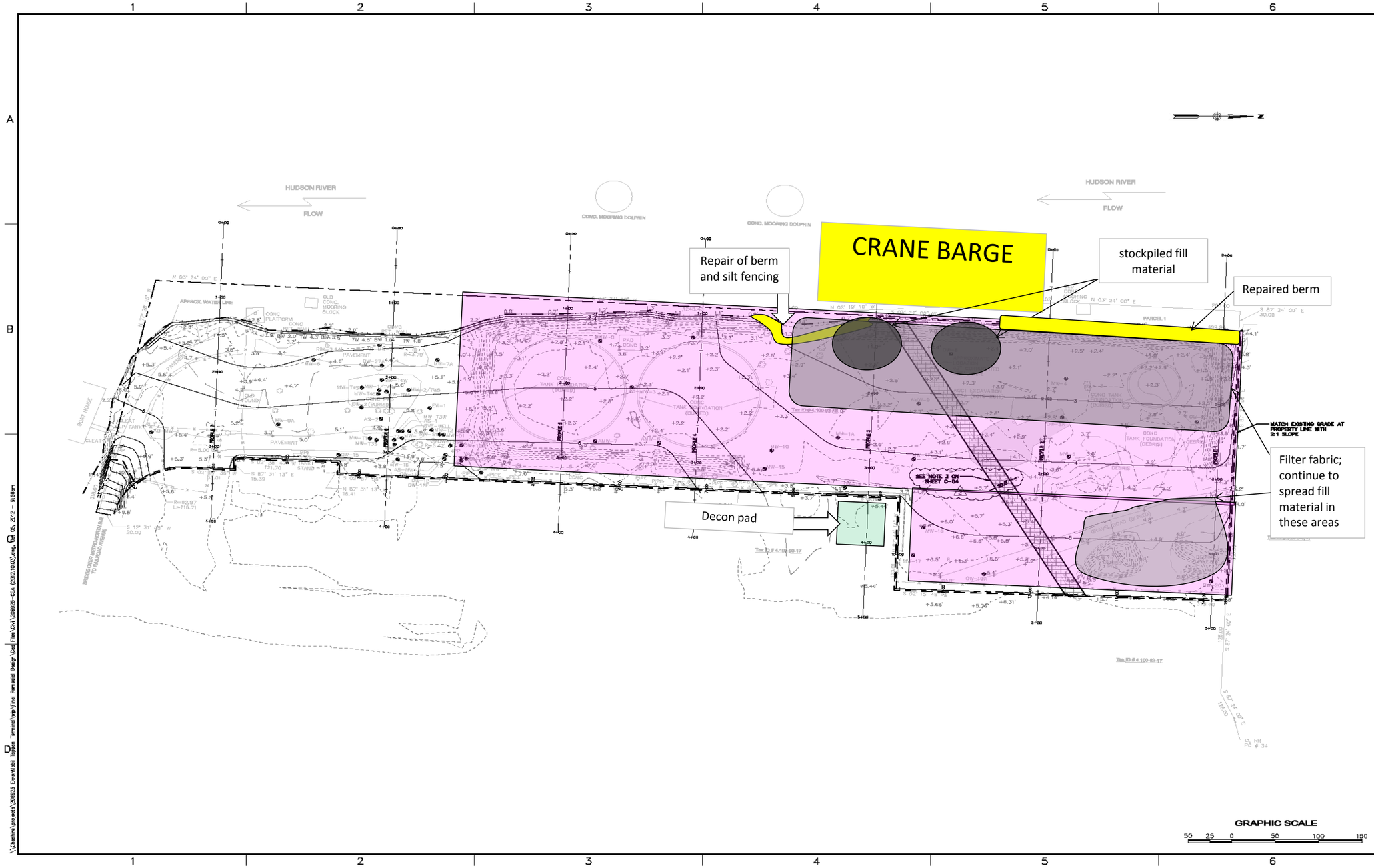
CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB



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DRAWN BY: HP
CHECKED BY: AHS

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
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C-03

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Photographs of Work Performed:

Date: Wednesday, November 21, 2012

Photo 1: Looking northwest, observing newly layed material and repaired berm in background

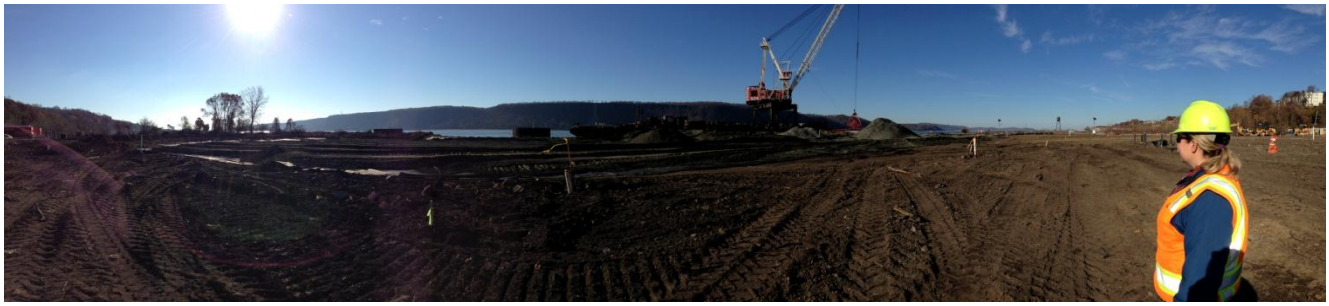

Photo 2: Panoramic; facing west, from south (on the left) to north (on the right)

Photographs of Work Performed:

Date: Wednesday, November 21, 2012

Photo 3: Looking southeast, newly layed material

Photo 4: Looking south, observing filter fabric and fill material

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	40 F, Mostly sunny
Project Number:	017.0151Y012		36%, 30.21" steady
Job:	Soil Cap for AOC1	Wind:	Winds N 5 mph
		Date:	Monday, November 26, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	
Omar Hernandez - American	
Seth Plitt - American	
Ron Snider - American	
Raphael Canales - American	
Bob Braban - American	
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	**Weeks**	**Roux**
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, November 26, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Permanently attach MW extenstions

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Received 4 loads of stone for berm

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

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DESIGNED BY: MJG
CHECKED BY: MJG
DRAWN BY: MP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

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SCALE: AS SHOWN
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Photographs of Work Performed:

Date: Monday, November 26, 2012

Photo 1: Panorama facing east, from left (north) to right (south)

Photo 2: Looking north, observing newly layed fill material and MW extensions.

Photographs of Work Performed:

Date: Monday, November 26, 2012

Photo 3: Looking north west, observing a MW extention

Photo 4: Looking south, observing fill material

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	35F, Mostly clear
Project Number:	017.0151Y012		80%, 30.36" Steady
Job:	Soil Cap for AOC1	Wind:	Winds N 2 mph
		Date:	Wednesday, November 28, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	Tracy Bispham - Roux
Omar Hernandez - American	Noelle Clarke - Roux
Seth Plitt - American	
Ron Snider - American	Steve Trifiletti - XOM
Raphael Canales - American	Cliff Pearson - XOM
Bob Braban - American	Joel L - XOM
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, November 28, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Permanently attach MW extenstions

Grubbing of south end of site

Installed silt fence and hay bales at rivers edge in south end of site

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered to site

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

24x36 SHEET

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REV	DESCRIPTION	DATE

Photographs of Work Performed:

Date: Wednesday, November 28, 2012

Photo 1: Facing west, observing crane barge offloading material

Photo 2: Looking west, observe grading and spread of new material over filter fabric

Photographs of Work Performed:

Date: Wednesday, November 28, 2012

Photo 3: Looking north west, observing silt fence and hay bales along river's edge

Photo 4: Looking northwest, observing crane barge and new section of berm

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	34F, Partly cloudy
Project Number:	017.0151Y012		66%, 30.44"Steady
Job:	Soil Cap for AOC1	Wind:	Winds S 2 mph
		Date:	Thursday, November 29, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	Tracy Bispham - Roux
Omar Hernandez - American	Noelle Clarke - Roux
Seth Plitt - American	
Ron Snider - American	Anne Proctor - Woodard & Curran
Raphael Canales - American	
Bob Braban - American	
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Thursday, November 29, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site (removed east gate)

Permanently attach MW extenstions

Grubbing of south end of site

Installed silt fence and hay bales at rivers edge in south end of site

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Barge of 1/4 minus material arrived

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

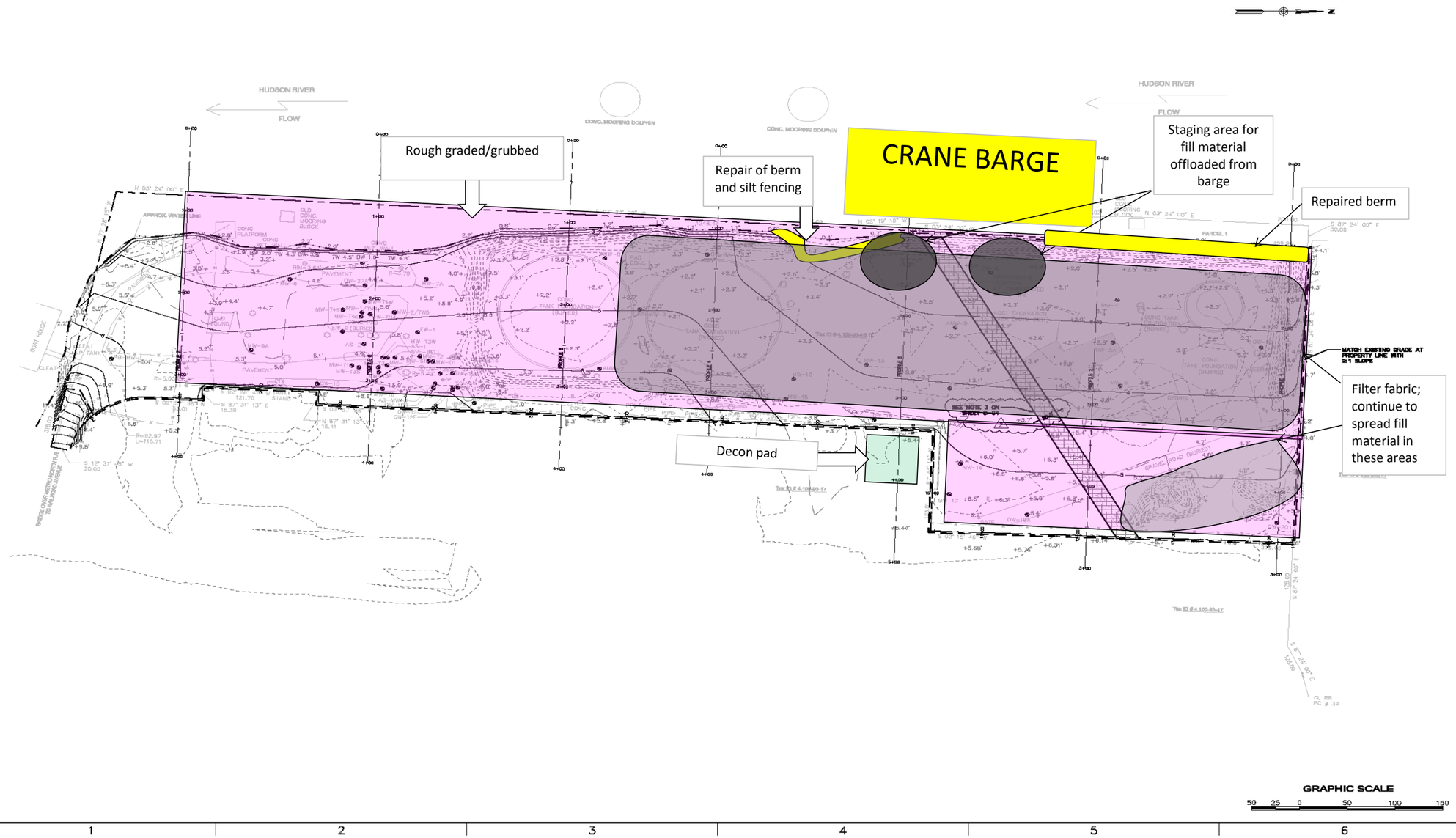
CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB



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REV	DESCRIPTION	DATE
NYSDEC COMMENTS		7/13/12
DESIGNED BY: AKG	CHECKED BY: AKG	
DRAWN BY: GP		

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Cheshire\projects\209925 Exxonmobil Tappan Terminal\wip\Final Remedial Design\Dwg\Final\Civil\209925-C04 (2012.10.03).dwg, Oct 05, 2012 - 9:36am

Photographs of Work Performed:

Date: Thursday, November 29, 2012

Photo 1: Facing west, panorama observing crane barge offloading material

Photo 2: Looking west, observe grading and spread of new material over filter fabric

Photographs of Work Performed:

Date: Thursday, November 29, 2012

Photo 3: Looking south west, observing clean fill material

Photo 4: Looking north, observing the laying of new fabric

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	32F, Overcast
Project Number:	017.0151Y012		78%, 30.48" falling
Job:	Soil Cap for AOC1	Wind:	Winds SSE 1 mph
		Date:	Friday, November 30, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Kearns - American	Tracy Bispham - Roux
Omar Hernandez - American	Noelle Clarke - Roux
Seth Plitt - American	
Ron Snider - American	Bill Ports - NYSDEC
Raphael Canales - American	
Bob Braban - American	
Chuck Giamundo - Weeks	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe		5-gas Meter
Front End Loader		
Bulldozer		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Friday, November 30, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site (removed east gate)

Permanently attach MW extenstions

Grubbing of south end of site

Install temporary fence at footbridge

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- No material delivered to site

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

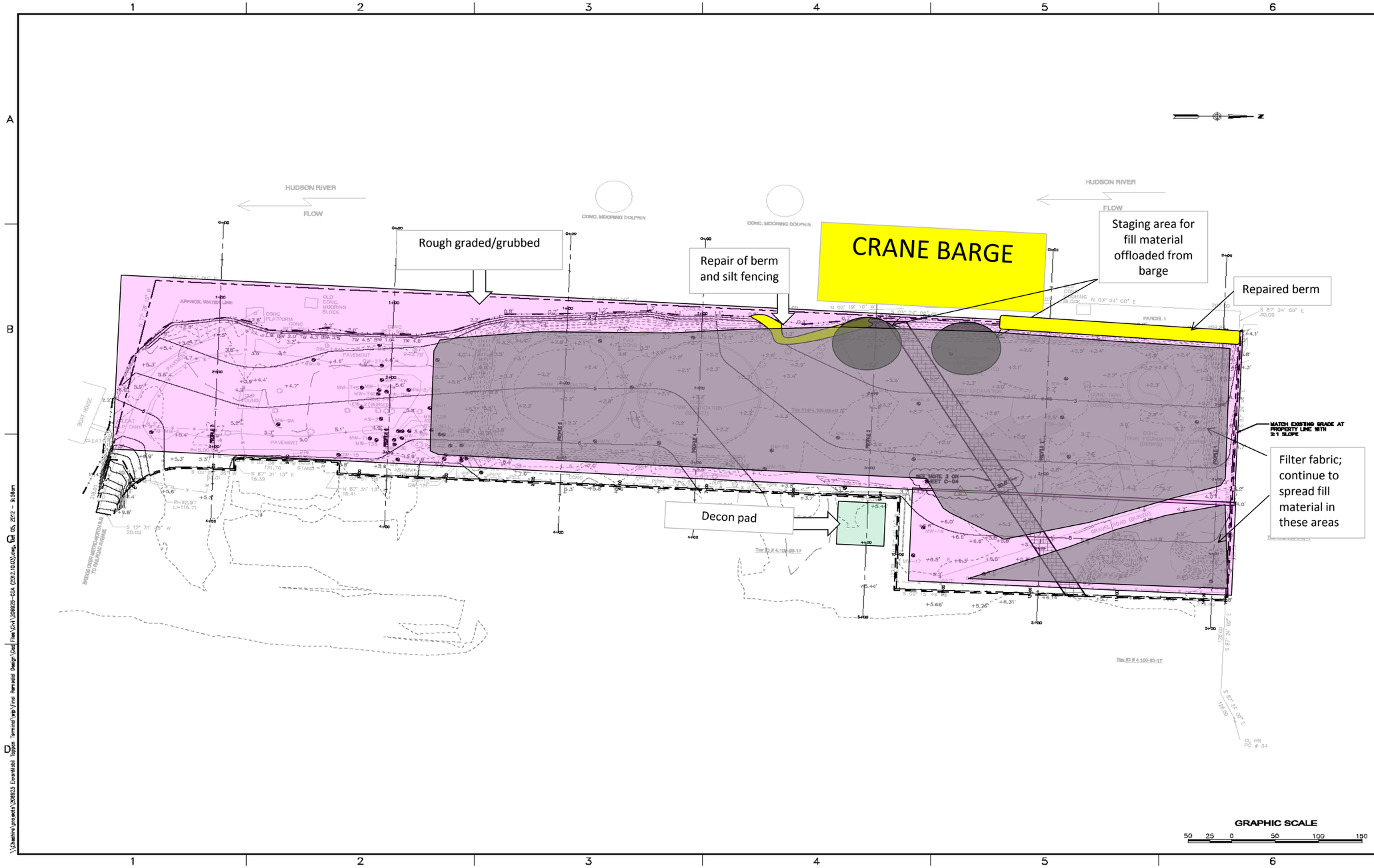
CAMP Performed (Note any exceedances or issues with the equipment):

- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB



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REV	DESCRIPTION	DATE
	NYSDEC COMMENTS	7/13/12

DESIGNED BY: MJG
CHECKED BY: MJG
DRAWN BY: MP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
FORMER TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209925.06
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Greenline\projects\209925 Exxonmobil Tappan Terminal\cad\Final Remedial Design\Dwg Files\Civil\209925-C04 (2012.10.03).dwg, Oct 05, 2012 - 9:36am

Photographs of Work Performed:

Date: Friday, November 30, 2012

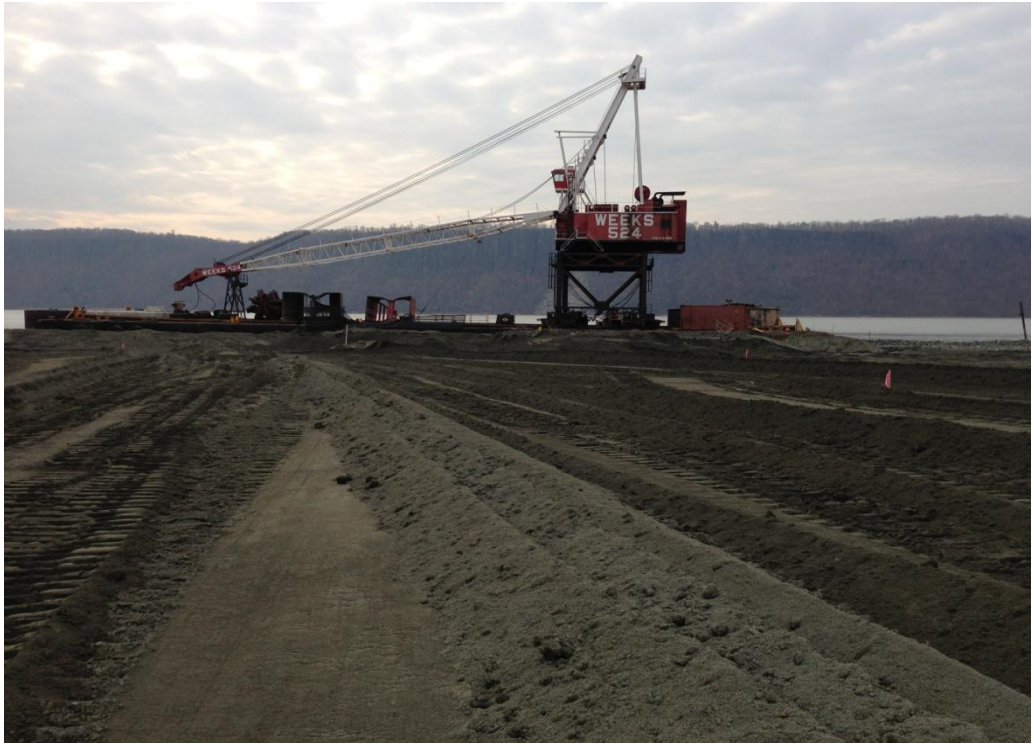


Photo 1: Facing west, observing crane barge offloading material

Photo 2: Looking northeast, observe recently grubbed area in south end of site

Photographs of Work Performed:

Date: Friday, November 30, 2012

Photo 3: Looking south, observing clean fill material

Photo 4: Looking north, observing new material

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	44F, Overcast
Project Number:	017.0151Y012		98%, 30.28" steady
Job:	Soil Cap for AOC1	Wind:	NNE 1 mph
		Date:	Monday, December 03, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
Seth Plitt-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Rob Snider - American	
Omar Hernandez - American	
Raphael Canales - American	
Bob Braban - American	
Ray Rivera - American	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe	Material barge	5-gas Meter
Front End Loader		
Bulldozer (2)		
Roller		
Generator		
Service truck		
Frac tank		

Reviewd by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Monday, December 03, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Permanently attach MW extenstions

Grubbing of south end of site

Restructured berm moving south

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Received one load of stone

Material Removed From Site:

- No material removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

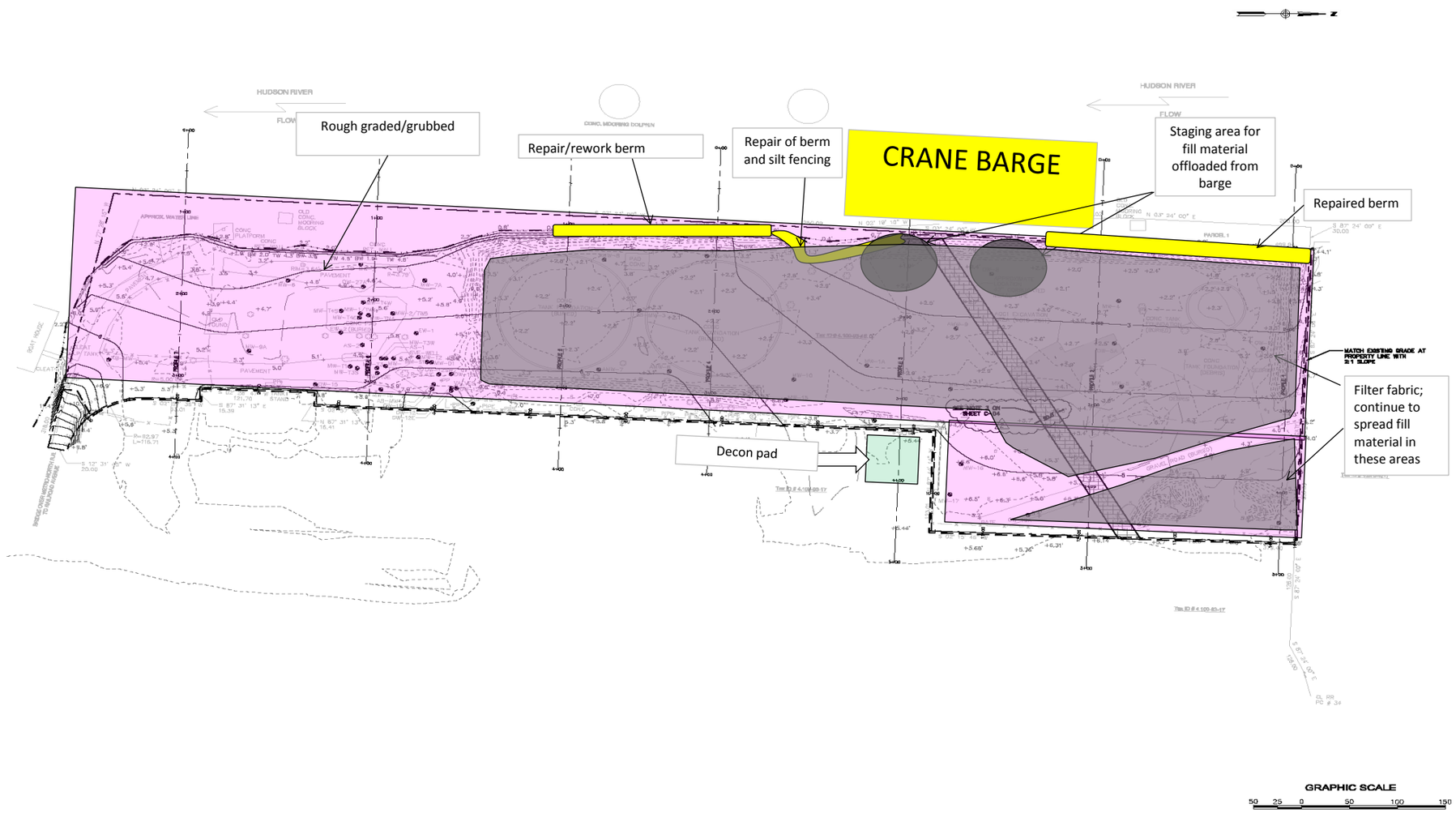
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

Monday, December 3, 2012



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REV	DESCRIPTION	DATE
1	ISSUE DRAWING	7/3/12

DESIGNED BY: JKS
CHECKED BY: JKS
DRAWN BY: JP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
TOSCO TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209920.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

Photographs of Work Performed:

Date: Monday, December 03, 2012

Photo 1: Facing NW, observing the spread of the 1/4" minus material (fill)

Photo 2: Looking WNW, observing the transport of material across site

Photographs of Work Performed:

Date: Monday, December 03, 2012

Photo 3: Looking north, observing placement of clean fill material

Photo 4: Looking north, observing placement of new material

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	45F, Light rain
Project Number:	017.0151Y012		95%, 30.30" steady
Job:	Soil Cap for AOC1	Wind:	NNE 2 mph
		Date:	Tuesday, December 04, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Ron Snider - American	
Bob Braban - American	
Ray Rivera - American	
Omar Hernandez - American	
Raphal Canales - American	
	Doug Mitchell - Angle of Attack
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe	Material barge	5-gas Meter
Front End Loader		
Bulldozer (2)		
Frac Tank		
Generator		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Tuesday, December 04, 2012

Description of Work Performed:

Lay filter fabric and spread fill material

General housekeeping of site

Permanently attach MW extenstions

Grubbing of south end of site

Continue to rework berms. Construction of berm is as follows:

- Construction of existing berm is: Existing base material to elevation 4, wrapped with filter fabric and covered with 2 ft of 3-8 inch stone
- Construction of new berm is: 1/4 minus material to elevation 4, wrapped with filter fabric and covered with 2 ft of 3-8 inch stone

Loaded out tree debris

Surveyor installed grade stakes on the south side of the property

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Received one barge of 1/4 minus after 3:30 pm

Material Removed From Site:

- One roll-off and one trailer of tree debris removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

- Rain throughout the majority of the day. CAMP performed only when barge arrived later in the day and began off-loading.

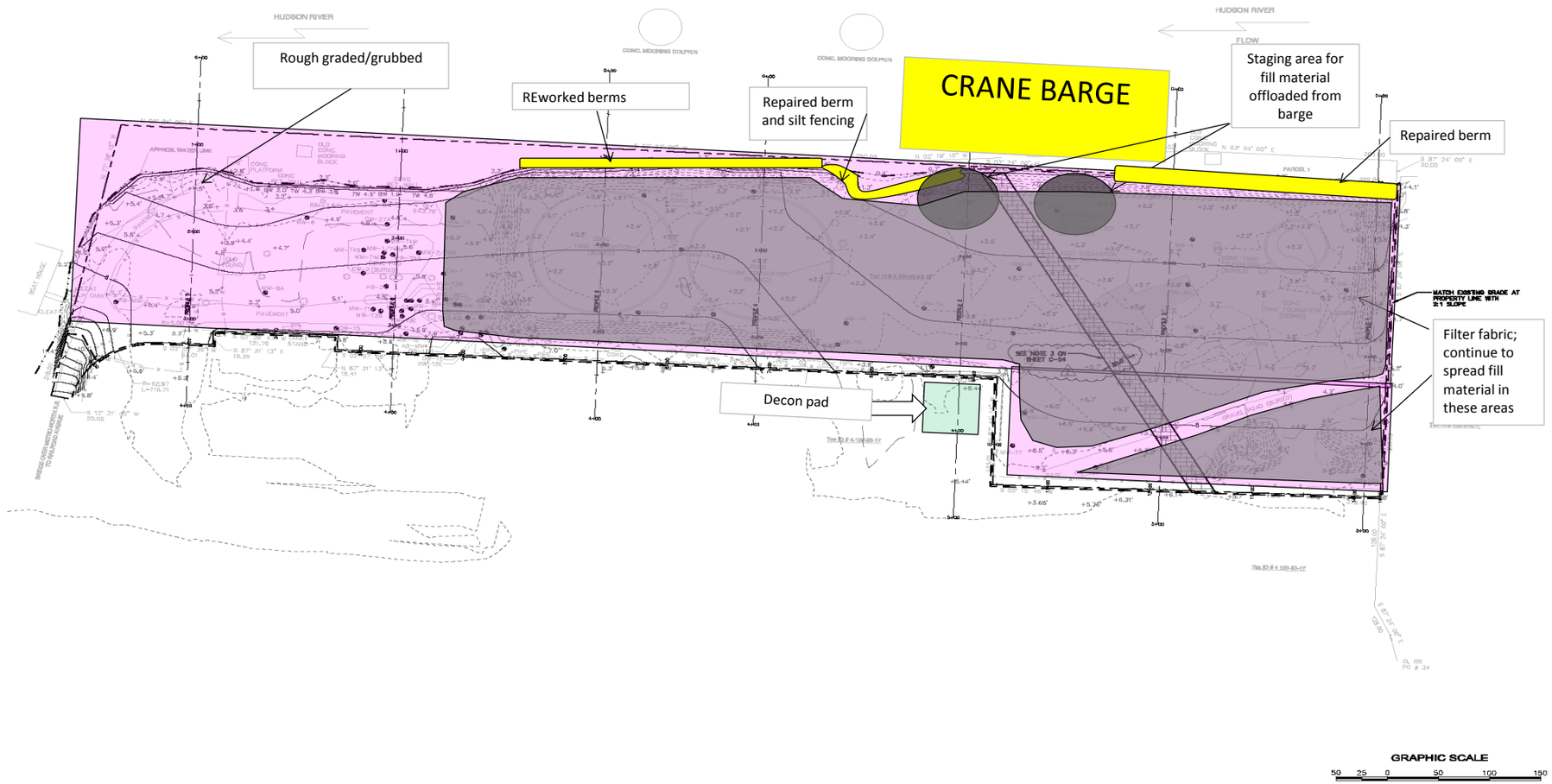
Elevated readings on the dust meters due high humidity. No VOC exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

Tuesday, December 4, 2012



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REV	DESCRIPTION	DATE
1	ISSUE DRAWINGS	7/13/12

DESIGNED BY: JKS
CHECKED BY: JKS
DRAWN BY: JP

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
TOSCO TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209920.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03

\\Qhemfile\projects\209920 Exxonmobil Tappan Terminal\dwg\Final Remedial Design\Cad Files\C-01\209920-C01 (2012.10.03).dwg, Oct 05, 2012 - 9:36am

Photographs of Work Performed:

Date: Tuesday, December 04, 2012

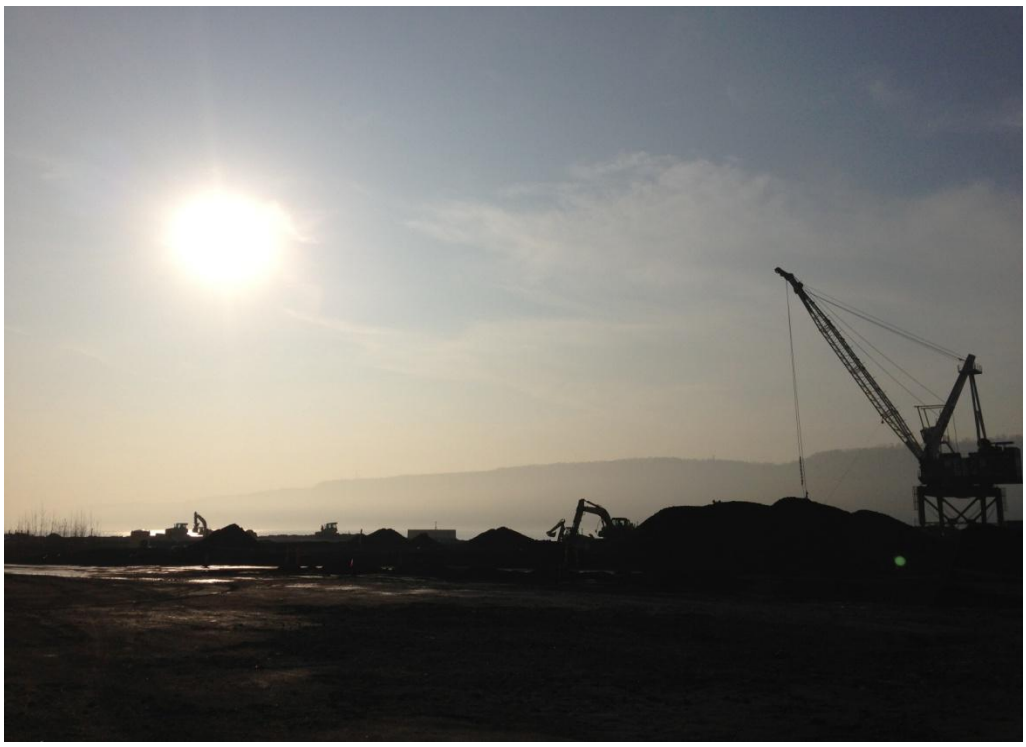


Photo 1: Facing WSW, observing the spread of the 1/4" minus material (fill)

Photo 2: Material along road

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Client:	ExxonMobil Oil Corporation	Field Representative:	Jessica Collins
Location:	1 Railroad Avenue, Hastings-on-Hudson, NY	Weather:	53F, Mostly sunny
Project Number:	017.0151Y012		77%, 30.11" rising
Job:	Soil Cap for AOC1	Wind:	NNW 3 mph
		Date:	Wednesday, December 05, 2012

Personnel On Site

Name and Affiliation	Name and Affiliation
John Clemente-American	Jessica Collins- Roux
Ken Brown-American	Jordanna Kendrot- Roux
Ray Rivera - American	
Omar Hernandez - American	
Hector - American	
Ron Snider - American	
Raphael Canales - American	
Bob Braban - American	
Gary Harris - Weeks	
Val Olesnovich - Weeks	
Ken Smith - Weeks	
Benny Sullivan - Weeks	

Equipment On Site

American	Weeks	Roux
Excavator (2)	Gantry crane/barge	CAMP air monitors
Backhoe	Material Barge	5-gas Meter
Front End Loader		
Bulldozer (2)		
Roller		
Frac Tank		

Reviewed by (initials): TB

ROUX ASSOCIATES, INC.
DAILY FIELD ACTIVITY REPORT

Date: Wednesday, December 05, 2012

Description of Work Performed:

Offload 1/4 minus material from barges using crane barge

Lay filter fabric and spread fill material

General housekeeping of site

Received and offload rip rap

Grub south end of site and load out 2 trailers of brush/trees

Restructured berm moving south. Berm constructed as follows:

- Construction of existing berm is: Existing base material to elevation 4, wrapped with filter fabric and covered with 2 ft of 3-8 inch stone
- Construction of new berm is: 1/4 minus material to elevation 4, wrapped with filter fabric and covered with 2 ft of 3-8 inch stone

Equipment Delivered To Site:

- No equipment delivered to site

Equipment Removed From Site:

- No equipment removed

Material Delivered To Site:

- Received 6 loads of rip rap

Material Removed From Site:

- 2 trailers of brush/trees removed from site

Sampling Performed:

- No sampling conducted

CAMP Performed (Note any exceedances or issues with the equipment):

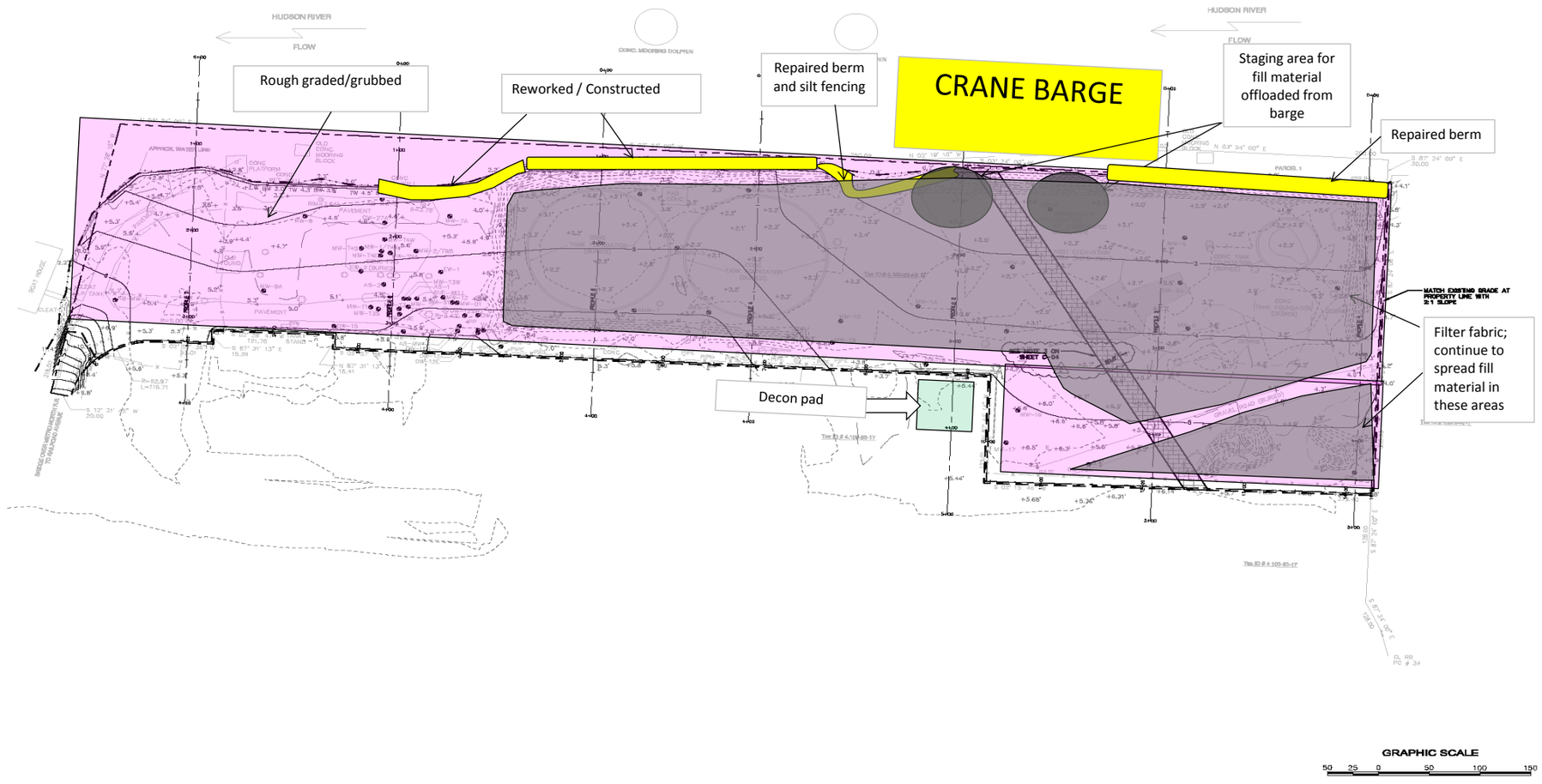
- CAMP performed. No exceedances.

Description of Upcoming Work Activities:

- Continue with site grading and tree removal
- Continue spreading material over site, and restructuring berm
- Continue offloading material, and placing of filter fabric

Reviewed by (initials): TB

Wednesday, December 5, 2012



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REV	DESCRIPTION	DATE
1	ISSUE DRAWING	7/13/12

DESIGNED BY: JKS
DRAWN BY: JP
CHECKED BY: JKS

SUB-GRADE PLAN

FORMER MOBIL TAPPAN TERMINAL PROPERTY
HASTINGS-ON-HUDSON, NEW YORK
TOSCO/EXXON TAPPAN TERMINAL
NYSDEC SITE NO. 3-60-015

CAP DESIGN FOR AOC 1

JOB NO.: 209920.09
DATE: DECEMBER 2011
SCALE: AS SHOWN
SHEET: 3 OF 5

C-03