Steven P. Stucker, C.P.G.
Lead Engineer
Environmental Department

April 26, 2013

Mr. Scott Deyette
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Re: **Malone (Amsden St.) Former MGP Site**
Site #: V00469
IRM Pre-design Investigation of Tax Parcel 98.81-1-4 (Carter Property)

Dear Mr. Deyette:

This letter provides a proposed scope of work for conducting a pre-design investigation of Tax Parcel 98.81-1-4 (previously referred to as "Carter property"). As discussed during the March 26, 2013 meeting at the New York State Department of Environmental Conservation's (NYSDEC's) Albany office, the purpose of the investigation is to obtain information necessary to support the design of an Interim Remedial Measure (IRM) to address manufactured gas plant (MGP) related wastes encountered on Tax Parcel 98.81-1-4 and the adjacent riverbank. This tax parcel is located approximately 300 feet north of National Grid's Malone (Amsden Street) former MGP site (the Site) located at 25 Amsden Street in Malone, Franklin County, New York (Figure 1). The presence of MGP-related wastes on Tax Parcel 98.81-1-4 and the adjacent riverbank is associated with the Site.

This letter has been organized as follows:

- Section 1 - Background Information;
- Section 2 - Anticipated General Scope of the IRM;
- Section 3 - Property Survey and IRM Pre-Design Investigation; and
- Section 4 - Anticipated Project Schedule and Deliverables.

Section 1 – Background Information

The Site is being addressed by National Grid, in accordance with a Voluntary Cleanup Order (No. D0-0001-0011, dated January 25, 2002) between National Grid and the NYSDEC for the investigation and, where necessary, remediation of existing contamination associated with former MGP operations at 24 former MGP sites located throughout New York State. The Malone (Amsden Street) site is one of those sites. The results of the previous characterization and remedial investigation activities (summarized below) indicate the presence of potential MGP-related wastes at some locations on Tax Parcel 98.81-1-4. MGP-related wastes present on

Tax Parcel 98.81-1-4 are "covered contamination" under the Voluntary Cleanup Order between National Grid and the NYSDEC.

The results of the previous characterization and remedial investigation activities conducted by National Grid on Tax Parcel 98.81-1-4 and the adjacent riverbank were presented in the following submittals to NYSDEC:

- March 2, 2011 National Grid Letter to NYSDEC, Re: Remedial Investigation Data Summary Report;

- August 23, 2011 National Grid Letter to NYSDEC, Re: Results for Off-Site Investigation on Carter Property (or as identified in this document or other project-documents as Tax Parcel 98.81-1-4); and

- March 30, 2012 National Grid Letter to NYSDEC, Re: Salmon River Sediment Sampling Results.

As detailed in these submittals, the previous characterization and remedial investigation activities conducted by National Grid included the following:

- Test pits were excavated at nine locations on Tax Parcel 98.81-1-4, as detailed in National Grid's May 4, 2011 letter work plan (approved by NYSDEC in a May 17, 2011 letter) and as agreed-upon in the field with the on-site NYSDEC representative. The locations of these previous test pit locations are shown on Figure 1, with identifying labels as CTP-1 through CTP-6, and CTP-2A through CTP-2C. Test pits CTP-2A, CTP-2B and CTP-2C were excavated outward from CTP-2 to define the limits of the taffy-like tar observed in CTP-2. These test pits were approximately 9 to 15 feet long and were excavated to approximately 1 foot below the water table, which was encountered between 4 and 6.5 feet below grade.

- Sediment and solidified tar samples were collected for laboratory analysis from the riverbank on/adjacent to Tax Parcel 98.81-1-4.

The results of these characterization and remedial investigation activities were presented in the aforementioned submittals, are pertinent to the pre-design investigation for the IRM, and are summarized below. The investigation locations cited are shown on Figure 1.

- Three softball size pieces of solidified tar were observed on the surface of the western riverbank of the Salmon River adjacent to Tax Parcel 98.81-1-4, and approximately 300 to 500 feet downstream from the Site. Based upon observed distribution of the pieces of tar proximal to the riverbank, the tar appears to have been incorporated into fill placed on Tax Parcel 98.81-1-4, rather than transported from the Site via the Salmon River.

- Two softball size pieces of solidified tar embedded soil were observed at approximately 2 feet below grade surface (bgs) in test pit CTP-1.

- A limited (6-inch) layer of taffy-like tar approximately 4.5 to 5 feet below grade in test pit CTP-2. CTP-2 was excavated on Tax Parcel 98.81.-1-4, and is located proximate to sediment sample NG-SR-SD-19, where the highest concentration of total Polycyclic Aromatic Hydrocarbons (PAHs) (290.50 milligrams per kilogram [mg/kg]) was detected (Figure 1). The extent of the tar layer was defined and appeared to be approximately 7 to 10 feet in diameter.

- A trace amount of blue-stained pebbles was observed at the surface of the east end of test pit CTP-4 excavated on Tax Parcel 98.81-1-4, indicating potential MGP purifier waste.

- Tax Parcel 98.81-1-4 appears to have been the historical location of uncontrolled dumping utilized by the public (National Grid's March 30, 2012 letter to NYSDEC). Observations documented during National Grid's August 2011 investigation activities on this property consistently revealed a varying degree of anthropogenic materials (e.g., glass, wood, brick, plastic, etc.), as shown in the photographs included in Attachment A.

Section 2 - Anticipated General Scope of the IRM

The general scope of the IRM for Tax Parcel 98.81-1-4 is anticipated to include, at a minimum, the components summarized below.

1. Preparation of an IRM Work Plan by ARCADIS on behalf of Niagara Mohawk (or as identified in this document or other project-documents as Niagara Mohawk d/b/a National Grid [National Grid]). The IRM Work Plan will include Contract Drawings signed and stamped by an ARCADIS New York State registered Professional Engineer. The IRM Work Plan will be prepared in accordance with all applicable statutes and regulations and in substantial conformance with NYSDEC's *DER Technical Guidance for Site Investigation and Remediation* (DER-10).

2. A preconstruction kick-off meeting with National Grid's IRM Contractor at the property after receiving NYSDEC's approval of the IRM Work Plan and permission/access from the Property Owner. National Grid/ARCADIS will coordinate the schedule for this meeting with NYSDEC, New York State Department of Health (NYSDOH) and the Property Owner and will provide a minimum 10 calendar days advance notification of this meeting.

3. Mobilization of equipment and personnel to implement the IRM.

4. Implementation of a community air monitoring program (compliant with Appendix 1A of DER-10) prior to and during any dust generating or ground intrusive activities.

5. Excavation/removal and handling of MGP-related wastes observed in the test pits and along the adjacent riverbank.

6. Transportation and off-site treatment/disposal of MGP-related wastes.

7. Backfilling and restoration of work areas.

8. Demobilization.

Section 3 - Property Survey and IRM Pre-Design Investigation

The goal of the pre-design investigation will be to further assess the absence/presence and distribution of MGP-related wastes on Tax Parcel 98.81-1-4 and along the adjacent riverbank, with the intent of defining the limits of removal for the IRM. Prior to conducting the pre-design investigation, the entire eastern property line for Tax Parcel 98.81-1-4 and approximately 100 feet of the northern and southern property lines (Figure 1) will be surveyed and corners staked by a New York State licensed surveyor. The previous test pit locations will also be staked by the surveyor.

The pre-design investigation will consist of excavating test pits along the eastern portion of Tax Parcel 98.81-1-4 and conducting a reconnaissance of the adjacent riverbank to further assess the presence/absence of MGP-related wastes. Waste characterization sampling and analysis will also be conducted for the purpose of completing the waste profiles required by the offsite treatment/disposal facility to be used during the IRM. These pre-design investigation activities are described below.

<u>Proposed Test Pits on Tax Parcel 98.81-1-4</u>

The pre-design investigation will consist of excavating a minimum of eight additional test pits along the eastern property line of Tax Parcel 98.81-1-4 to further assess the absence/presence and distribution of MGP-related wastes. As shown on Figure 1, additional test pit locations are proposed to the north and south, as well as in-between (perpendicular to), the previous test pit locations. The test pits will be excavated using a rubber-tired backhoe within the approximate areas shown on Figure 1. Additional test pits will be excavated outward from these test pits, if necessary, in order to determine the extent of observed MGP-related wastes. The number and location of test pits will be based on field conditions, presence of MGP-related wastes (if any) within each test pit, and discussions with the NYSDEC. National Grid assumes a representative from the NYSDEC will be present during the test pitting activities to provide concurrence on the locations of test pits.

Test pits will be approximately 8 to 10 feet long and will be excavated approximately one foot into the water table or until refusal, whichever is encountered first. Soils recovered from the test pits will be visually characterized (e.g., for staining, presence of MGP-related wastes, soil type, etc.) and screened using a photoionization detector (PID) to assess the presence of volatile organic vapors. Observations and measurements made at each test pit will be recorded in a field notebook and each test pit will be photo-documented.

Representative samples of the MGP-related wastes observed in the test pits will be collected and submitted for laboratory analysis of the parameters anticipated to be required by the receiving treatment/disposal facility to be used during the IRM. Based on a number of considerations, including presence of tar and overall ease of implementing the IRM in a cost-effective manner, it is anticipated that the excavated/removed material will be disposed at Environmental Soil Management, Inc.'s (ESMI's) low-temperature thermal desorption (LTTD) facility located in Fort Edward, New York. Accordingly, the waste characterization analyses will include (at minimum) the following: Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-VOCs (SVOCs), polychlorinated biphenyls (PCBs), Target Analyte List (TAL) Metals, Percent Sulfur, Total Petroleum Hydrocarbons (TPH [DRO/GRO]), British Thermal Unit (BTU) value, Total Cyanide, Full Toxicity Characteristic Leaching Procedure (TCLP) analytes, Ignitability, Reactivity, and Corrosivity.

The actual disposal facility(ies) will be determined during the design for the IRM based on the waste characterization results, as well as other considerations such as estimated volumes.
Each test pit will be backfilled using material excavated from that test pit. The material will be returned to the test pit in the approximate order from which it was removed. Additionally, the test pits will be excavated and backfilled in a manner to minimize (to the extent practicable) disturbing/comingling MGP-related wastes (if any) with other soils/fill material. The ground surface will be restored with the upper foot of soil initially set aside during the start of the test pit to match surrounding surface cover conditions.

Investigative derived waste (IDW) generated during the field activities will be placed in New York State Department of Transportation- (NYSDOT-) approved 55 gallon drum(s) for future disposal by National Grid. Additionally, isolated MGP-related wastes (if any) observed in the test pits may be segregated and placed in a separate NYSDOT-approved drum(s) for future treatment/disposal by National Grid. This will facilitate efficient removal of (for example) isolated pieces of hardened tar pieces or pieces of solidified tar-embedded soil that can be removed using hand tools. Unless significant impacts are encountered, National Grid assumes decontamination will not be necessary between test pits.

A New York State-licensed surveyor will locate and determine the elevation of completed test pits relative to the existing datum already established for the Site.

Consistent with previous work completed at the Site, field activities, sample collection, and laboratory analyses will be conducted in general accordance with the NYSDEC-approved *Generic Site Characterization/IRM Work Plan for Site Investigations at Non-Owned Former MGP Sites* and supporting appendices (Field Sampling Plan [FSP] and Quality Assurance Project Plan [QAPP]), dated November 2002. In addition, air monitoring will be conducted in accordance with the NYSDOH's most recent version of the Community Air Monitoring Plan (CAMP), as identified in Appendix 1A of DER-10.

Reconnaissance of Riverbank Adjacent to Tax Parcel 98.81-1-4

The pre-design investigation will also include a reconnaissance of the riverbank adjacent to Tax Parcel 98.81-1-4. The purpose of the reconnaissance will be to visually assess the presence and extent of the surficial hardened tar pieces previously observed. Probing and manually moving rocks/debris along the riverbank during the reconnaissance may also be conducted to facilitate determining the extent of the tar pieces. The visual appearance and the extent of the tar pieces will be recorded in a field notebook and photo-documented. A New York State-licensed surveyor will determine the locations of the observed pieces of tar relative to the existing datum already established for the Site.

As identified above for the proposed test pits, tar pieces observed along the riverbank may be placed in a NYSDOT-approved 55 gallon drum and transported back to the Site for future treatment/disposal by National Grid. Additionally, representative samples of the tar pieces will be collected (as necessary) for laboratory analysis of the aforementioned parameters required for offsite treatment/disposal.

Section 4 - Anticipated Project Schedule and Deliverables

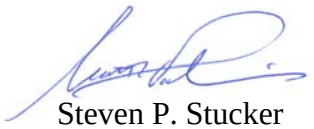
National Grid anticipates commencing the pre-design investigation field activities approximately four weeks after receiving NYSDEC's approval and permission/access from the Property Owner. We estimate the field activities will require approximately 5 days (or less) to complete.

A letter report will be submitted to the NYSDEC approximately six weeks after the field activities are completed. The report will include a discussion of the completed field activities, observations of MGP-related wastes, analytical results of the waste characterization samples, and proposed schedule for next steps, including the IRM Work Plan. The discussion will be supported by:

- test pit logs;
- summary of the appearance and extent of tar pieces observed along the riverbank and within test pits;
- analytical data summary tables for the waste characterization samples;
- appropriate photographs; and
- a figure showing the surveyed property line of Tax Parcel 98.81-1-4 and surveyed locations of the completed test pits and tar pieces observed along the riverbank.

Please feel free to contact me by phone at 315-428-5652 or by e-mail at Steven.Stucker@us.ngrid.com if you have any questions.

Sincerely,


, for
Steven P. Stucker
Environmental Department

Attachments

cc: Deanna Ripstein, NYSDOH
Michael Moore, Young/Sommer LLC (Carter Property)
John T. Parkinson, National Grid
Brian M. Stearns, National Grid
Terry Young, ARCADIS
Scott Powlin, ARCADIS
Cathy Geraci, ARCADIS

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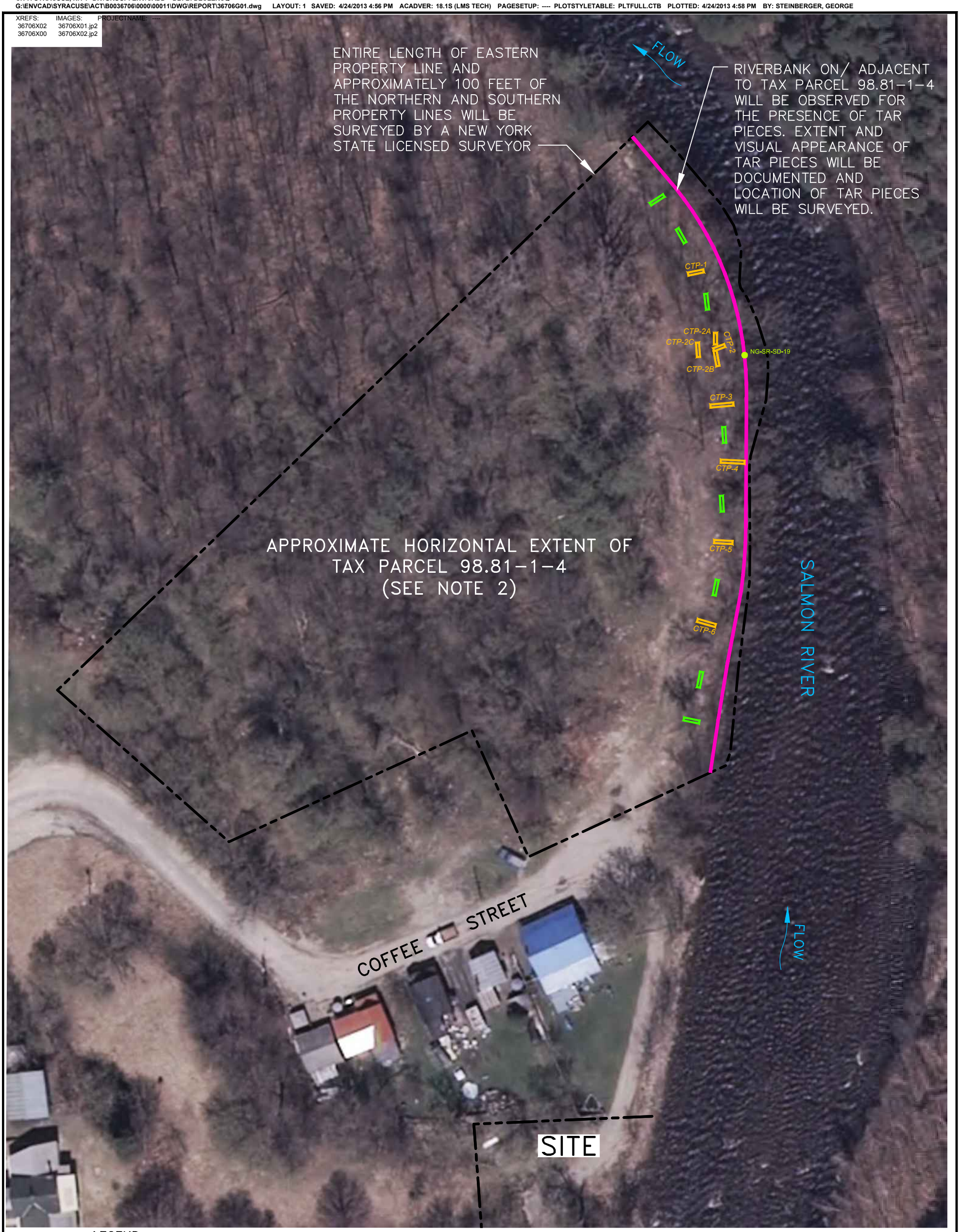

LEGEND:

- APPROXIMATE HORIZONTAL EXTENT OF TAX PARCEL 98.81-1-4 (SEE NOTE 2)
- EXISTING TEST PIT LOCATION
- PROPOSED TEST PIT LOCATION
- RIVERBANK OF TAX PARCEL 98.81-1-4 PROPERTY
- SEDIMENT SAMPLE LOCATION

0 60' 120'
GRAPHIC SCALE

NOTES:

1. AERIAL PHOTOGRAPHS OBTAINED FROM THE NEW YORK STATE GEOGRAPHIC INFORMATION SYSTEM (NYS GIS) WEBSITE DATED 2008.
2. PROPERTY LINES FOR TAX PARCEL 98.81-1-4 WERE DIGITIZED FROM A PAPER COPY OF A SURVEY PERFORMED BY LANGDON LAND SURVEYING, DATED 11/10/11, AT A SCALE OF 1"=40', TITLED MAP OF SURVEY PREPARED FOR TRAVIS PRITCHARD & TIM CARTER, MAP NO. 11-037, AS PROVIDED BY NATIONAL GRID.

NATIONAL GRID • MALONE, NEW YORK
MALONE (AMSDEN STREET) FORMER MGP SITE
IRM PRE-DESIGN INVESTIGATION - TAX PARCEL 98.81-1-4

INVESTIGATION LOCATIONS

ARCADIS

FIGURE
1

Attachment A – Anthropogenic Materials
Carter Property Test Pits – August 3, 2011
Malone (Amsden Street) Former MGP Site

Fill Materials from CTP-4

Fill Materials from CTP-5