



Environmental and Planning Consultants

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July 14, 2014

Mr. Ralph Keating
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233

**Re: Modification to Remedial Work Plan (RWP)
 2477 Third Avenue, Bronx NY
 Tax Block 2320, Lot 11
 BCP No. C203047**

Dear Mr. Keating:

AKRF is submitting this Modified RWP on behalf of Jiten, LLC (the Volunteer) for the 2477 Third Avenue Brownfield Cleanup Program (BCP) site in the Bronx, New York. A site location map is provided as Figure 1. This Modified Remedial Work Plan (RWP) serves as an addendum to AKRF's June 2011 Remedial Action Work Plan (RAWP)/RWP and is intended to request approval for the following changes:

- Increase the diameter of the permanent monitoring wells to be installed at the site from two inches to four inches;
- Relocate two of the sidewalk monitoring wells to within the property boundary; and
- Install five injection wells to facilitate the application of in-situ treatment technologies following construction of the site cap.

Groundwater Monitoring Wells

Per AKRF's June 2011 RAWP/RWP, groundwater would be monitored via four new, post-construction monitoring wells installed to evaluate the effectiveness of the in-situ groundwater treatments. AKRF is proposing to increase the diameter of the monitoring wells from two inches to four inches to enhance the ability to conduct Enhanced Fluid Recovery (EFR) events as necessary. The monitoring wells will be otherwise installed in accordance with the QAPP provided in Appendix F of the RAWP/RWP.

In addition, AKRF proposes to move two wells originally designated for installation along the East 135th and Third Avenue sidewalks to within the property boundary, as shown on Figure 2. These new locations, less than 5 feet from the original proposed location, would still be within the contaminant plume and in the general configuration approved in the RAWP/RWP. The new locations would also avoid utilities discovered beneath the sidewalks.

Injection Wells

To facilitate contaminant reduction of elevated gasoline-related VOCs via the application of future in-situ treatments, as necessary, following the construction of the site cap, AKRF proposes to install five two-inch injection wells within the area of the delineated contaminant plume at the locations shown on Figure 2. The wells will be constructed of two-inch diameter PVC with five feet of 0.01-inch slotted PVC screen installed from 8 to 13 feet below grade, the target contaminant zone. The wells will be completed according to the following procedure:

- Install No. 2 sand filter pack around the well screen to a depth of one to two feet above the top of the screen.
- Install a bentonite seal to a depth of one to two feet above the filter pack.
- Backfill the remainder of the annular space using a bentonite-cement grout.
- Cut the exterior casing below grade surface.
- Complete the well with a locking cap and flush-to-grade manhole (road box) set in concrete. Seal the road box with a concrete collar to prevent water run-off into the well.

The well installation procedures will be consistent with those outlined in the QAPP provided in Appendix F of the RAWP/RWP.

The installation of the injection wells is not intended to supersede or replace any remedial actions or goals established in previously approved work plans but is intended to provide additional options for continued treatment in the future, as necessary. As noted in AKRF's April 30, 2014 Updated Modified RWP, treatment methods will be evaluated each quarter to determine if it appears to be a working technology to achieve the established remedial goals.

The monitoring wells and injection wells will be installed at the locations shown on Figure 2. An updated project schedule of the remedial and monitoring activities through the issuance of the Certificate of Completion (COC) is provided in Attachment A. Thank you for your continued assistance in achieving the established remedial goals. Please call me at (646) 388-9529 if you have any questions or comments.

Sincerely,
AKRF, Inc.



Axel Schwendt
Senior Technical Director

CERTIFICATION STATEMENT

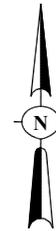
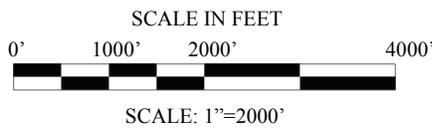
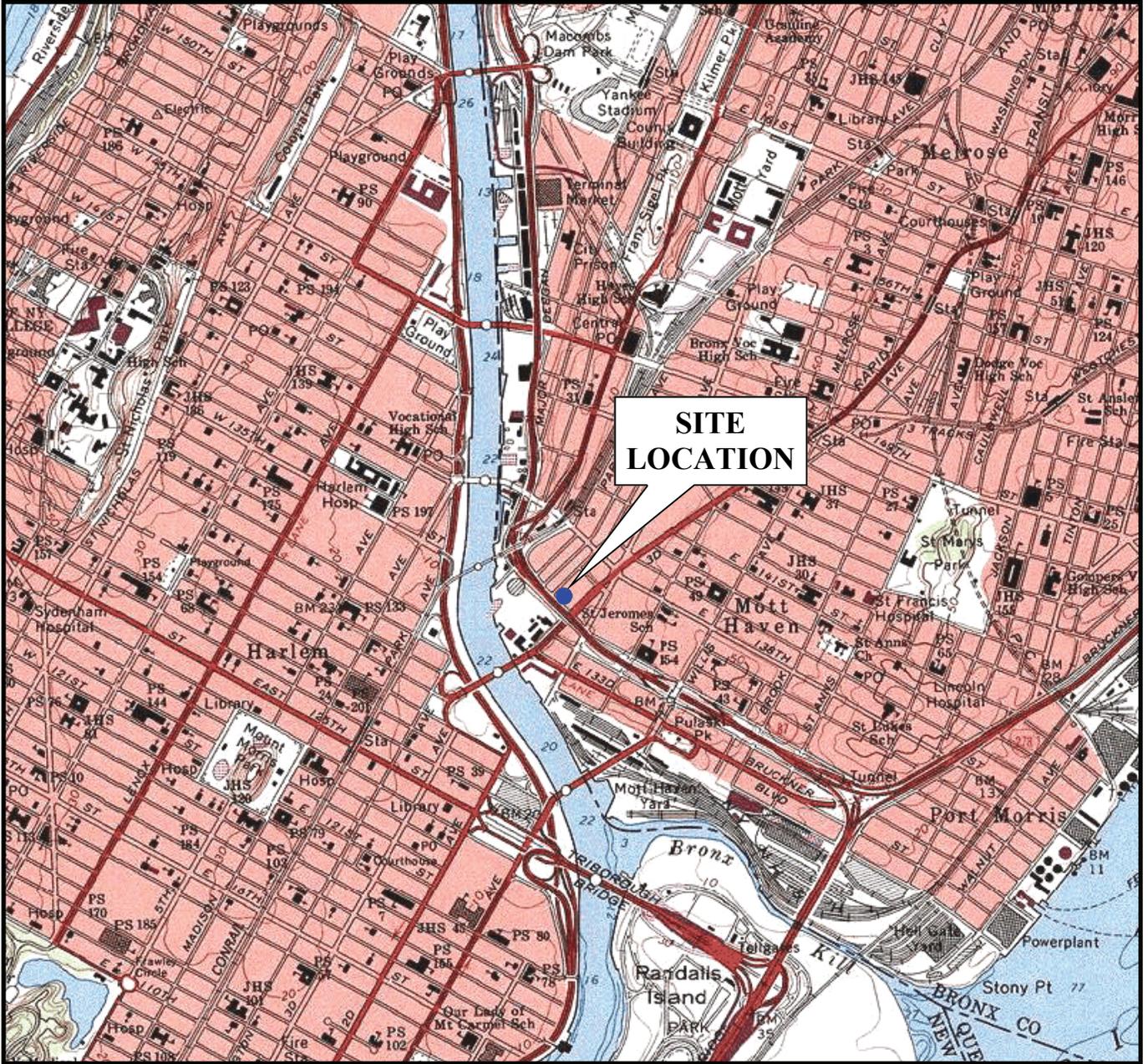
I, Michelle Lapin, am currently a registered professional engineer licensed by the State of New York. I have primary direct responsibility for implementation of the remedial program for the 2477 Third Avenue Site (NYSDEC Site No. C203047). I certify that the information and statements in this certification are true and consistent with the remedial goals and actions established in AKRF's June 2011 RAWP/RWP.



Signature
Michelle Lapin, P.E.
No. 073934-1
State of New York Licensed Professional Engineer

- cc: D. Cervino – Golub & Isabel
- B. Patel – Jiten LLC
- M. Lapin – AKRF, Inc.

FIGURES



SOURCE:
7.5 MINUTE SERIES USGS TOPOGRAPHIC MAP
QUADRANGLE: CENTRAL PARK, NY 1995

**2477 THIRD AVENUE
BRONX, NEW YORK**

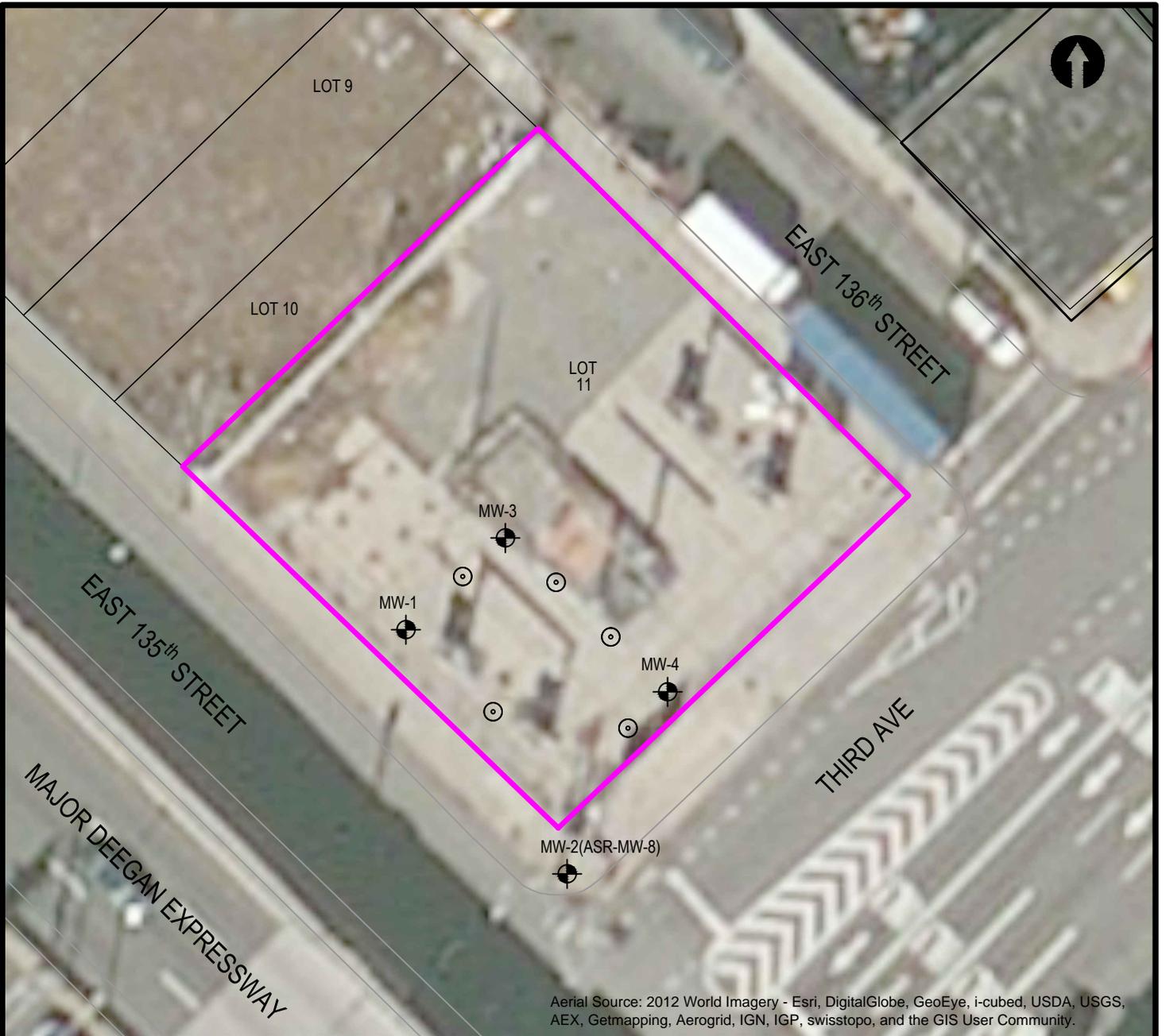
PROJECT SITE LOCATION



Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE 1.29.09
PROJECT No. 11160
SCALE AS SHOWN
FIGURE 1

©2014 AKRF, Inc. Environmental Consultants | M:\AKRF\Project Files\11160 - 2477 Third Avenue Bronx - (Jiten.L.C)\Remediation\Figures\11160_fig2_Site Plan.dwg



Aerial Source: 2012 World Imagery - Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.

LEGEND:

-  PROJECT SITE BOUNDARY
-  PROPOSED LOCATION OF 4" MONITORING WELL
-  PROPOSED LOCATION OF 2" INJECTION WELL



2477 Third Avenue
Bronx, New York

SITE PLAN



Environmental Consultants
440 Park Avenue South, New York, N.Y. 10016

DATE
4.21.2014

PROJECT No.
11160

SCALE
as shown

FIGURE
2

ATTACHMENT A
PROJECT SCHEDULE

Brownfield Cleanup Program Schedule
2477 Third Avenue, Bronx, New York - Site No. C203047
AKRF, Inc.

MONTHS:	May-12	Jun-12	Jul-12	Aug-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13
<u>TASK DESCRIPTION</u>																
UST Removal, Test Pit Investigation and Soil Disposal	█															
In-Situ Injection Treatment #1		█														
Hotel Construction and Monitoring	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Prepare and Submit Environmental Easement	█															
Interim Groundwater Monitoring and Reporting								█	█							
DEC Review and Approval of Environmental Easement			█	█	█	█	█	█	█							
Prepare/Submit Draft SMP			█	█												
NYSDEC SMP Review					█	█	█	█	█							
Environmental Easement Executed by Applicant														█	█	█
Environmental Easement Recorded and Notices Provided																
In-Situ Injection Treatment #2											█					
Groundwater Monitoring												█				
Data Evaluation and Reporting to DEC													█			
In-Situ Injection Treatment #3													█	█		
Groundwater Monitoring															█	
Attempted EFR & In-Situ Treatment #4																
Submission of Modified RWP																
NYSDEC Response to Modified RWP																
Groundwater Monitoring																
Submission of Revised Modified RWP w/ GW results																
Response from NYSDEC to Revised Modified RWP																
Conduct EFR from Construction Excavation																
Vapor Barrier and SSDS Installation																
Construction of Site Cap (Building Foundation/Parking)																
Monitoring Well Installation and Development																
Groundwater Monitoring																
Submit Groundwater Monitoring Report to DEC																
Conduct EFR from On-Site Wells																
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Prepare/Submit Draft FER																
SMP Finalization																
NYSDEC Review of Draft FER																
Final FER Submitted																
NYSDEC Review of FER and Finalization																
Issue IC/EC Notice (Fact Sheet)																
Issue Certificate of Completion																

LEGEND

- █ Volunteer Project Work
- █ NYSDEC Review
- █ Public Comment Period/Fact Sheets
- █ 3 month period during which site construction activities occurred.

Brownfield Cleanup Program Schedule
2477 Third Avenue, Bronx, New York - Site No. C203047
AKRF, Inc.

MONTHS:	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
<u>TASK DESCRIPTION</u>																
UST Removal, Test Pit Investigation and Soil Disposal																
In-Situ Injection Treatment #1																
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Brownfield Cleanup Program Schedule
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AKRF, Inc.

MONTHS:	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
<u>TASK DESCRIPTION</u>									
UST Removal, Test Pit Investigation and Soil Disposal									
In-Situ Injection Treatment #1									
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