

January 8, 2014

New York City Department of Environmental Remediation
City Voluntary Cleanup Program
c/o Shaminder Chawla
100 Gold Street, 2nd Floor
New York, NY 10038

ATC Group Services, Inc.
dba Cardno ATC

104 East 25th Street
10th Floor
New York, NY 10010

Phone +1 212 353 8280
Fax +1 212 353 8306
www.cardno.com

www.cardnoatc.com

Re: 14CVCP180K
177 Front Street
Brooklyn, NY
Remedial Action Work Plan (RAWP) Stipulation List

Dear Ms. Bud:

Cardno ATC (the consultant) hereby submits a Remedial Action Work Plan (RAWP) Stipulation List for the 177 Front Street (the Site) to the New York City Office of Environmental Remediation (OER) on behalf of Dumbo Assemblage LLC. This letter serves as an addendum to the RAWP to stipulate additional content, requirements, and procedures that will be followed during the Site remediation. The contents of this list are added to the RAWP and will supersede the content in the RAWP where there is a conflict in purpose or intent. The additional requirements/procedures include the following Stipulation List below:

1. The criterion attached in **Appendix 1** will be utilized if additional petroleum containing tanks or vessels are identified during the remedial action or subsequent redevelopment excavation activities. All petroleum spills will be reported to the NYSDEC hotline as required by applicable laws and regulations. This contingency plan is designed for heating oil tanks and other small or moderately sized storage vessels. If larger tanks, such as gasoline storage tanks are identified, OER will be notified before this criterion is utilized.
2. A pre-construction meeting is required prior to the start of remedial excavation work at the Site. A pre-construction meeting will be held at the Site and will be attended by OER, the developer or developer representative, the consultant, excavation/general contractor, and if applicable, the soil broker.
3. A pre-approval letter from all disposal facilities will be provided to OER prior to any soil/fill material removal from the Site. Documentation specified in the RAWP - Appendix D - Section 1.6 "Materials Disposal Off-Site" will be provided to OER. If a different disposal facility for the soil/fill material is selected, OER will be notified immediately.
4. A CD containing the final RAWP including this approved Stipulation List will be placed in the library that constitutes the primary public repository for project documents.

5. Signage for the project will include a sturdy placard mounted in a publically accessible right of way to building and other permits signage will consist of the NYC VCP Information Sheet (attached **Appendix 2**) announcing the remedial action. The Information sheet will be laminated and permanently affixed to the placard.
6. This NYC VCP project involving the removal and transportation of hazardous waste may be subject to the New York state Department of Environmental Conservation's Special Assessment Tax (ECL 27-0923) and Hazardous Waste Regulatory Fees (ECL 72-00402). See DEC's website for more information:
<http://www.dec.ny.gov/chemical/9099.html>.
7. Collection and analysis of four post-excavation samples from the bottom of the excavation will be collected to evaluate the performance of the remedy with respect to attainment of Track 4 Site Specific SCOs. Figure 6 indicating End point post-excavation sampling locations is attached in **Appendix 3**. Samples will be analyzed for contaminants of concern (SVOCs and metals).
8. Truck route is included in (**Appendix 4**).
9. **Appendix 5** includes Vapor Barrier Pre-Certification letter from Vapor Barrier manufacturer stating that the proposed vapor barrier system mitigates against the contaminants of concern at the site.
10. OER requires parties seeking City Brownfield Incentive Grants to carry insurance. For a cleanup grant, both the excavator and the trucking firm(s) that handle removal of soil must carry or be covered under a commercial general liability (CGL) policy that provides \$1 million per claim in coverage. OER recommends that excavators and truckers also carry contractors pollution liability (CPL) coverage, also providing \$1 million per claim in coverage. The CGL policy, and the CPL policy if obtained, must name the City of New York, the NYC Economic Development Corporation, and Brownfield Redevelopment Solutions as additional insured. For an investigation grant, an environmental consultant must be a qualified vendor in the BIG program and carry \$1 million of professional liability (PL) coverage. A fact sheet regarding insurance is attached as **Appendix 6**.
11. Daily report will be provided during active excavation work. If no work is performed for extended time period, daily report frequency will be reduced to weekly basis. Daily report template is attached in **Appendix 7**.

Sincerely,



Jed A. Myers, Ph.D.
Senior Project Manager
for Cardno ATC
Direct Line +1 631 451 0617
Email: jed.myers@cardno.com

cc: S. Chawla, OER

Appendix 1

Generic Procedures for Management of Underground Storage Tanks identified under the NYC VCP

Prior to Tank removal, the following procedures should be followed:

- Remove all fluid to its lowest draw-off point.
- Drain and flush piping into the tank.
- Vacuum out the “tank bottom” consisting of water product and sludge.
- Dig down to the top of the tank and expose the upper half.
- Remove the fill tube and disconnect the fill, gauge, product, vent lines and pumps. Cap and plug open ends of lines.
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location.
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank.
- Clean tank or remove to storage yard for cleaning.
- If the tank is to be moved, it must be transported by licensed waste transporter. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport.
- After cleaning, the tank must be made acceptable for disposal at a scrap yard, cleaning the tanks interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal, the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.).
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with a calibrated photoionization detector (PID).

Impacted Soil Excavation Methods

The excavation of the impacted soil will be performed following the removal of the existing tanks. Soil excavation will be performed in accordance with the procedures described under Section 5.5 of Draft DER-10 as follows:

- A description and photographic documentation of the excavation.

- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with calibrated photoionization detector (PID).

Final excavation depth, length, and width will be determined in the field, and will depend on the horizontal and vertical extent of contaminated soils as indentified through physical examination (PID response, odor, staining, etc.). Collection of verification samples will be performed to evaluate the success of the removal action as specified in this document.

The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan.
- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated.
- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile, or dispose of, separate from the impacted soil.
- If additional UST's are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued trenching around the perimeter to minimize its disturbance.
- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc.) an attempt will be made to remove it, to the extent not limited by the site boundaries or the bedrock surface. If possible, physically impacted soil will be removed using the backhoe or excavator, segregated from clean soils and overburden, and staged on separated dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present.
- Excavated soils which are temporarily stockpiled on-site will be covered with tarp material while disposal options are determined. Tarp will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property.

Once the site representative and regulatory personnel are satisfied with the removal effort, verification of confirmatory samples will be collected from the excavation in accordance with DER-10.

Appendix 2

Signage



NYC Voluntary Cleanup Program

This property is enrolled in the New York City Voluntary Cleanup Program for environmental remediation. This is a voluntary program administered by the NYC Office of Environmental Remediation.

For more information, log on to:

www.nyc.gov/oer



If you have questions or would like more information, please contact:

Shaminder Chawla at (212) 788-8841

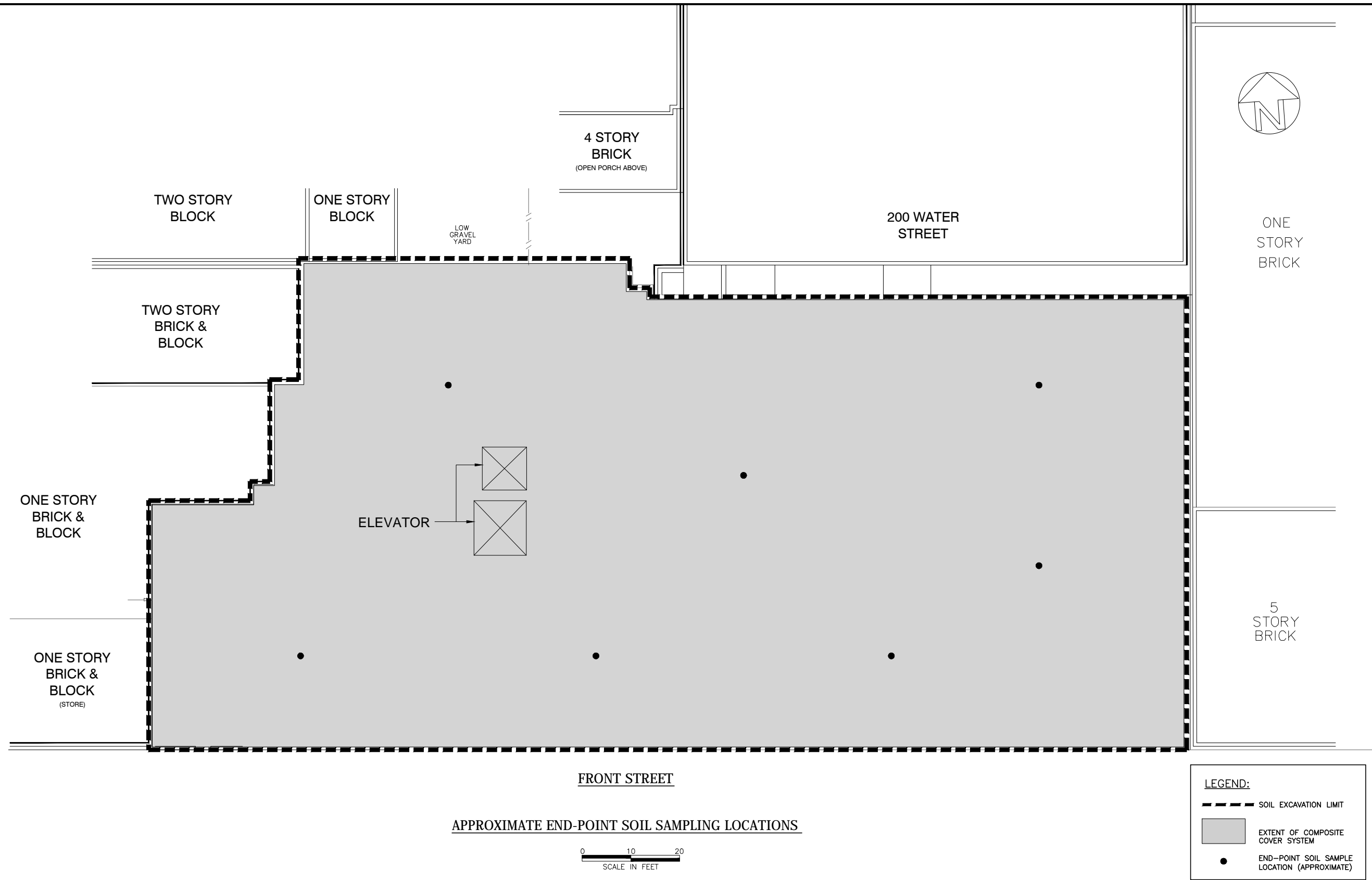
or email us at brownfields@cityhall.nyc.gov


556 Columbia Street – Basis School

Site #: 14CVCP193K

Appendix 3

Endpoint Sampling Map



CLIENT: DUMBO ASSEMBLAGE LLC ADDRESS: 22 CORTLAND STREET 16TH FLOOR NEW YORK, NY 10007	SITE ADDRESS: 177 FRONT STREET BROOKLYN, NY 11201	<div> Cardno ATC Shaping the Future 104 EAST 25th STREET, 10th FLOOR NEW YORK, NY 10010 TEL: (212) 353-8280 FAX: (212) 353-8306</div>	DRAWING BY: N.KOGELMAN		DRAWING TITLE: END-POINT SOIL SAMPLING LOCATIONS		DRAWING NO. FIG-6	
			INSPECTED BY: J. MYERS				SHT. OF	
			DESIGNED BY: J. MYERS				DATE: 12.20.13	
			CHECKED BY:		SCALE		REVISION No.	
					SEE SCALE BAR		ATC PROJECT: # 15.44291.0004	

Appendix 4

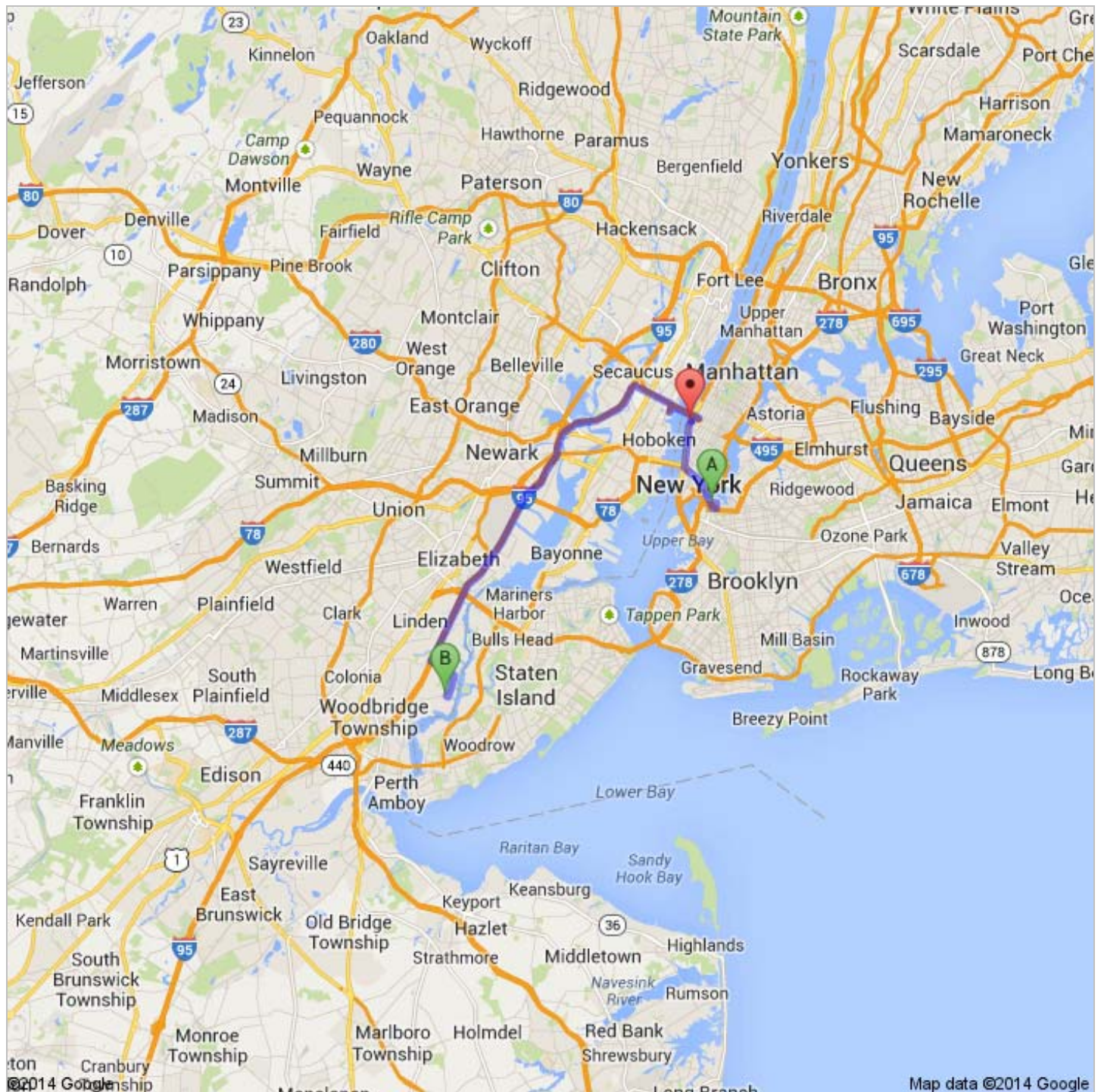
Truck Route


**Directions to 24 Middlesex Ave, Carteret, NJ 07008****29.2 mi – about 47 mins**

Clean Earth of Carteret


24 Middlesex Avenue

Carteret, NJ 07008




 177 Front St, Brooklyn, NY 11201

1. Head **east** on **Front St** toward **Bridge St** go 0.2 mi
total 0.2 mi

 2. Turn right onto **Gold St** go 0.3 mi
About 59 secs total 0.4 mi

 3. Turn right onto **Nassau St** go 0.1 mi
total 0.6 mi

 4. Turn right onto **Manhattan Bridge** go 1.3 mi
About 3 mins total 1.9 mi


 5. Turn left onto **Canal St** go 1.1 mi
About 5 mins total 3.0 mi

 6. Turn right onto **West St** go 0.9 mi
About 2 mins total 3.9 mi

7. Continue onto **11th Ave** go 0.6 mi
About 2 mins total 4.5 mi

8. Continue onto **12th Ave** go 0.9 mi
About 3 mins total 5.5 mi

 9. Turn right onto **W 40th St** go 0.2 mi
total 5.7 mi

 10. Merge onto **Lincoln Tunnel** via the ramp to **New Jersey** go 0.7 mi
Entering New Jersey total 6.4 mi
About 2 mins


 11. Continue onto **NJ-495 W** go 3.2 mi
About 6 mins total 9.7 mi


 12. Keep left at the fork, follow signs for **New Jersey Turnpike S** and merge onto **I-95 S/** go 16.7 mi
New Jersey Turnpike S total 26.4 mi
Partial toll road
About 16 mins

 13. Take exit **12** toward **Carteret Rahway** go 0.3 mi
Toll road total 26.7 mi

14. Continue straight go 0.3 mi
Toll road total 26.9 mi

 15. Slight left onto **Peter J Sica Industrial Hwy** go 2.1 mi
Partial toll road total 29.1 mi
About 4 mins

 16. Turn right onto **Middlesex Ave** go 0.1 mi
Destination will be on the right total 29.2 mi

 24 Middlesex Ave, Carteret, NJ 07008

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

Appendix 5

Vapor Barrier Pre-Certification letter



19103 Gundle Road
Houston, TX 77073
800 435 2008 • 281 443 8564
281 230 8650 Fax
www.gseworld.com

Vapor Barrier Pre-Certification Letter

December 26, 2013

Jed A. Myers
Cardno ATC
104 East 25th Street, 10th Floor
New York, NY 10010

Re: DUMBO – 177 Front Street
173, 177 & 185 Front Street, Brooklyn, NY
Block 41, Lots 41, 42 and portion of 13, OER# 14EHAN030K
DOB Job # 320877627

Dear Mr. Myers:

I have reviewed the following documents for the above referenced project:

- Tables 1 through 5 from RIR – Soil Analytical Results prepared by Cardno ATC, dated 07-09-2012 and 7-10-2012
- Tables 6 through 10 from RIR - Groundwater Analytical Results prepared by Cardno ATC, dated 07-12-2012
- Table 11 from RIR - Soil Vapor Analytical Results prepared by Cardno ATC, dated 07-11-2012
- Figures 6 & 7, vapor barrier design and details prepared by Cardno ATC, dated 09-03-2013

The identified contaminants at the levels reported will not have an adverse effect on the waterproofing or vapor barrier properties of the GSE 20-mil Geomembrane, manufactured by GSE Environmental, provided standard design and installation procedures are followed.

Upon receipt of "proof of installation" by the qualified vendor/installer, GSE Environmental would issue a warranty of 1 year for the product.

A handwritten signature in blue ink, appearing to read "Michael Schneider".

Michael Schneider
Northeast Regional Sales Manager
GSE Environmental, LLC

Appendix 6

BIG Program Insurance Requirements



FACT SHEET – BIG PROGRAM INSURANCE REQUIREMENTS

Investigation Grants – for a developer or site owner to be eligible for a BIG investigation grant, its environmental consultant(s) must be:

- a Qualified Vendor in the BIG Program; and
- maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

Cleanup Grants – for a developer or site owner to be eligible for a BIG cleanup grant:

- Its general contractor or excavation/foundation contractor hired to perform remedial work must maintain Commercial General Liability (CGL) insurance of at least \$1M per occurrence and \$2M in the general aggregate. It is recommended that the general contractor or excavation/foundation contractor also maintain a Contractors Pollution Liability policy (CPL) of at least \$1M per occurrence.
- Its subcontractors who are hired by the general contractor etc. to perform remedial work at a site, including soil brokers and truckers, must also maintain a CGL policy in the amount and with the terms set forth above. It is recommended that subcontractors also maintain a CPL policy in the amount and with the terms set forth above.

The CGL policy, and the CPL policy if in force, must list the city, EDC and BRS as additional insureds, include completed operations coverage and be primary and non-contributory to any other insurance the additional insureds may have.

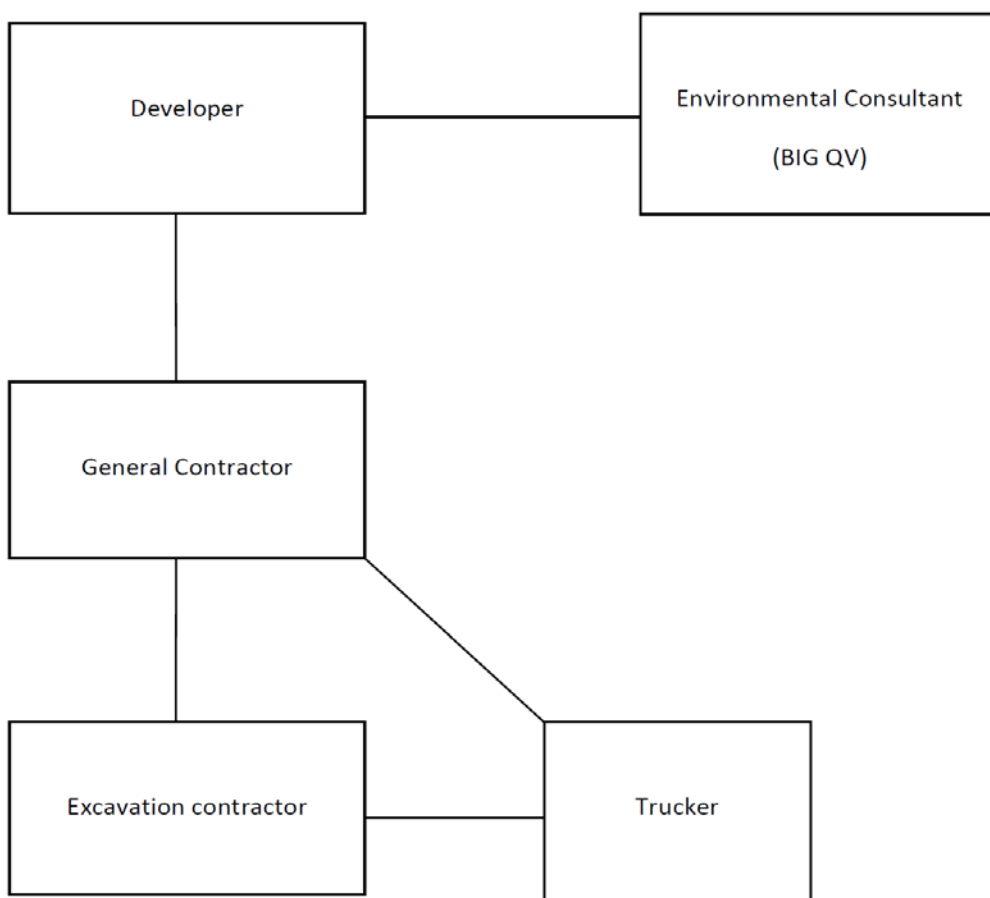
- Its environmental consultant(s) hired to oversee the cleanup must be:
 - a. a BIG Qualified Vendor; and
 - b. maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

If, in the alternative, the developer hires its environmental consultant to perform the cleanup, the environmental consultant must maintain CGL insurance in the amount and with the terms set forth above. It is recommended that the environmental consultant also maintain CPL coverage in the amount and with the terms set forth in the first two bulleted items listed above.

A schematic presenting the contractual relationships described above appears on page 2. Parties who must be named as Additional Insureds on Cleanup Grant insurance policies (CGL and CPL) are presented on page 3.

Example of Contractual Relationships for Cleanup Work

The Office of Environmental Remediation's Voluntary Cleanup Plan program requires applicants to identify the parties who are engaged in active remediation of their sites including: the General Contractor hired to remediate and/or the excavation contractor hired to excavate soil from the site and the trucking firm(s) that remove soil from the site for disposal at approved facilit(ies).



The chart above shows contractual relationships that typically exist for projects that are enrolled in the Voluntary Cleanup Program.

BIG Program Additional Insureds

The full names and addresses of the additional insureds required under the Required CGL Policy and recommended CPL Policy are as follows:

“City and its officials and employees”

New York City Mayor’s Office of Environmental Remediation
253 Broadway, 14th Floor
New York, NY 10007

“NYC EDC and its officials and employees”

New York City Economic Development Corporation
110 William Street
New York, NY 10038

“BIG Grant Administrator and its officials and employees”

Brownfield Redevelopment Solutions, Inc.
739 Stokes Road, Units A & B
Medford, NJ 08055

Appendix 7

Daily Report Template

Generic Template for Daily Status Report

Instructions

The Daily Status Report submitted to OER should adhere to the following conventions:

- Remove this cover sheet prior to editing.
- Remove all the **red text** and replace with site-specific information.
- Submit the final version as a Word or PDF file.

Daily Status Reports

Daily status reports providing a general summary of activities for each day of *active remedial work* will be emailed to the OER Project Manager by the end of the following day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP excursions, if any;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with OER project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to OER of emergencies (accidents, spills), requests for changes to the RAWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the RAWP will be communicated directly to the OER project manager by personal communication. Daily reports will be included as an Appendix in the Remedial Action Report.

DAILY STATUS REPORT

WEATHER	Snow		Rain		Overcast		Partly Cloudy	X	Bright Sun	
TEMP.	< 32		32-50		50-70	X	70-85		>85	

Prepared By:

Enter Your Name Here _____

VCP Project No.:	13CVCP000M	E-Number:	13EHAN000M	Date:	01/01/2013
Project Name:	Name or Address				

Consultant: Person(s) Name and Company Name	Safety Officer: Person(s) Name and Company Name
General Contractor: Person(s) Name and Company Name	Site Manager/ Supervisor: Person(s) Name and Company Name
Work Activities Performed (Since Last Report): Provide details about the work activities performed.	
Working In Grid #: A1, B1, C1	

Samples Collected (Since Last Report): No samples collected or provide details

Air Monitoring (Since Last Report): No air monitoring performed or provide details
Problems Encountered: No problems encountered or provide details
Planned Activities for the Next Day/ Week: Provide details about the work activities planned for the next day/ week.

Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Facility # Name Location Type of Waste Solid <u>Or</u> Liquid		Facility # Name Location Type of Waste Solid <u>Or</u> Liquid		Facility # Name Location Type of Waste Solid <u>Or</u> Liquid		Facility # Name Location Type of Waste Solid <u>Or</u> Liquid		##### Clean Earth Carteret, NJ petroleum soils Solid	
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds. <u>Or</u> Gallons	Trucks	Cu. Yds. <u>Or</u> Gallons	Trucks	Cu. Yds. <u>Or</u> Gallons	Trucks	Cu. Yds. <u>Or</u> Gallons	Trucks	Cu. Yds.
Today									5	120
Total									25	600

NYC Clean Soil Bank		Receiving Facility: Name/ Address (Approved by OER)			
Tracking No.:	13CCSB000				
Today		Trucks 5	Cu. Yds. 25	Total	Trucks 120 Cu. Yds. 600

Site Grid Map

Insert the site grid map here

Photo Log

Photo 1 – provide a caption	Insert Photo Here – Photo of the entire site
Photo 2 – provide a caption	Insert Photo Here – Photo of the work activities performed

Photo 3 – provide a caption	Insert Photo Here – Photo of the work activities performed
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