

# Shaw Environmental & Infrastructure Engineering of NY, P.C.

**Shaw Environmental & Infrastructure  
Engineering, of NY, P.C., Inc.**

1633 Broadway, 30<sup>th</sup> Floor  
New York, New York 10019  
212-290-6000  
FAX: 212-290-6001

October 18, 2013

David Rubin  
Project Manager  
Consolidated Edison Company of New York  
31-01 20<sup>th</sup> Avenue  
Building 136, 2<sup>nd</sup> Floor  
Long Island City, New York 11105

**Re: Area of Concern  
Former Kent Avenue Generating Station  
500 Kent Avenue  
Brooklyn, New York**

Dear Mr. Rubin:

During preparation for the upcoming remediation (see Figure 1) at the Former Kent Avenue Generating Station (now referred to as the "Site"), surface soil results from a 2000 site investigation as identified in the Phase II Site Investigation Report: Kent Avenue Site prepared by LMS, showed two contaminated samples outside of the area of remediation. Surface soil samples SS-14 and SS-15, located west of the South Excavation Area (see Figure 2), had reported concentrations of a few metals and semi-volatile organic compounds (SVOCs) with slight exceedances of the 6NYCRR Part 375 – 6.8 (b) Restricted Residential Soil Cleanup Objectives (RRSCOs). This Area of Concern (AOC) with the surface soil contamination is approximately 7,140 square feet (ft<sup>2</sup>) and is shown on Figure 3. It includes the entire area due west of the South Excavation Area.

On October 3, 2013, representatives from Consolidated Edison Company of New York (Con Edison) and Shaw Environmental & Infrastructure Engineering of NY, P.C. (Shaw) visited the Site to observe the conditions in, and around, the AOC. The majority of the entire Site is covered with clean fill topped with 4 inches of ¾-inch clean stone. A portion of the clean fill cover extends into the AOC (represented by the blue colored background on Figure 3). The very southern and western portions of the Site are currently not covered with clean fill. The clean fill cover appears to add approximately one foot to the overall grade at the site. This can be seen in Photo 1 (looking westward along the southern edge of the clean fill cover), Photo 2 (two manholes along the southern edge of the clean fill cover) and Photo 3 (looking north along the western edge of the clean fill cover) presented in Attachment 1.

In order to minimize any potential exposure to the public and the environment from the identified contaminants and possible asbestos containing material (ACM), Shaw recommends that the remainder of the AOC, approximately 6,730 ft<sup>2</sup>, be covered with two feet of clean fill. A demarcation barrier, as identified in Section 02315, Part 2.03 of the Contract Documents, should first be placed on the ground surface. Approximately 20 inches of clean structural backfill material (690 tons), as identified in Section 02315, Part 2.01(C) of the Contract Documents, should be placed on top of the demarcation barrier. The structural fill should be placed in compliance with Section 02315, Part 3.04 of the Contract Documents.

Mr. David Rubin  
 October 18, 2013  
 Page 2

The structural fill should be capped with 4 inches of ¾-inch clean stone (143 tons). This would generate a clean fill cover of two feet over the entire AOC, meeting New York State Department of Environmental Conservation (NYSDEC) requirements.

In order to maintain sufficient grade (0.5 percent) for drainage to Wallabout Channel in this area of the Site, additional structural fill (676 tons) will be placed over a portion of the west side of the South Excavation Area. Figure 4 shows the existing and final contours of the completed cover. Figure 4 also shows the areal limit of the additional structural fill required in the South Remediation area. Because the edge of the clean cover along the Wallabout Channel bulkhead could be exposed to erosion during extreme weather conditions, the edge of the cover will be completed with 2-inch stone (61 tons) as shown on Figure 5. The areas and corresponding additional volumes and weights of the above mentioned clean fill cover are presented in the table below.

Material	Area (ft <sup>2</sup> )	Volume (CY)	Weight (tons)
Area of Concern			
	7,140		
Area With Existing Clean Fill Cover			
Structural Fill	410	10	17*
¾ Inch Stone	410	5	8*
Area of Concern Requiring Clean Fill Cover			
Structural Fill	6,730	415	673*
¾ Inch Stone	6,730	83	135*
Portion of South Excavation Area Requiring Additional Fill			
Structural Fill	10,000	417	676*
Clean Cover Edge Along Wallabout Channel			
2-Inch Stone	512	40	61*

\* Based on Unit Weight of 120 Pounds per Ft<sup>3</sup>

Please call me at 212 290-6102 if you have any questions or require additional information.

Sincerely,

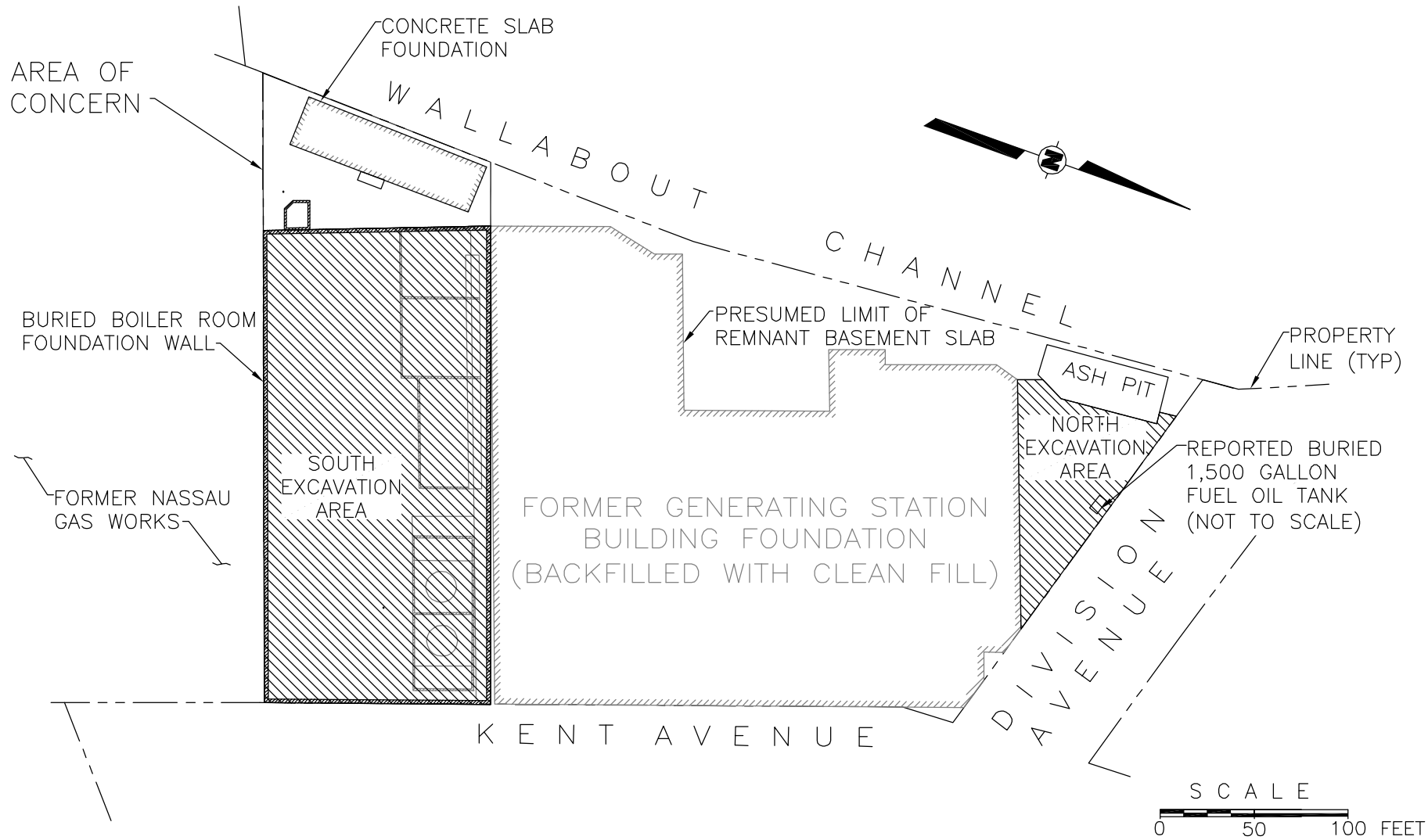
SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NY, P.C..



Curtis A. Kraemer, P.G.  
 Senior Geologist

- Figure 1 Site Plan Areas of Remediation
- Figure 2 Surface Soil Sample Locations Sampling Performed in 2000 by LMS
- Figure 3 Area of Concern Existing Site Conditions
- Figure 4 Area of Concern Final Contour Plan
- Figure 5 Area of Concern Typical Cross Section
- Attachment 1 Photographs

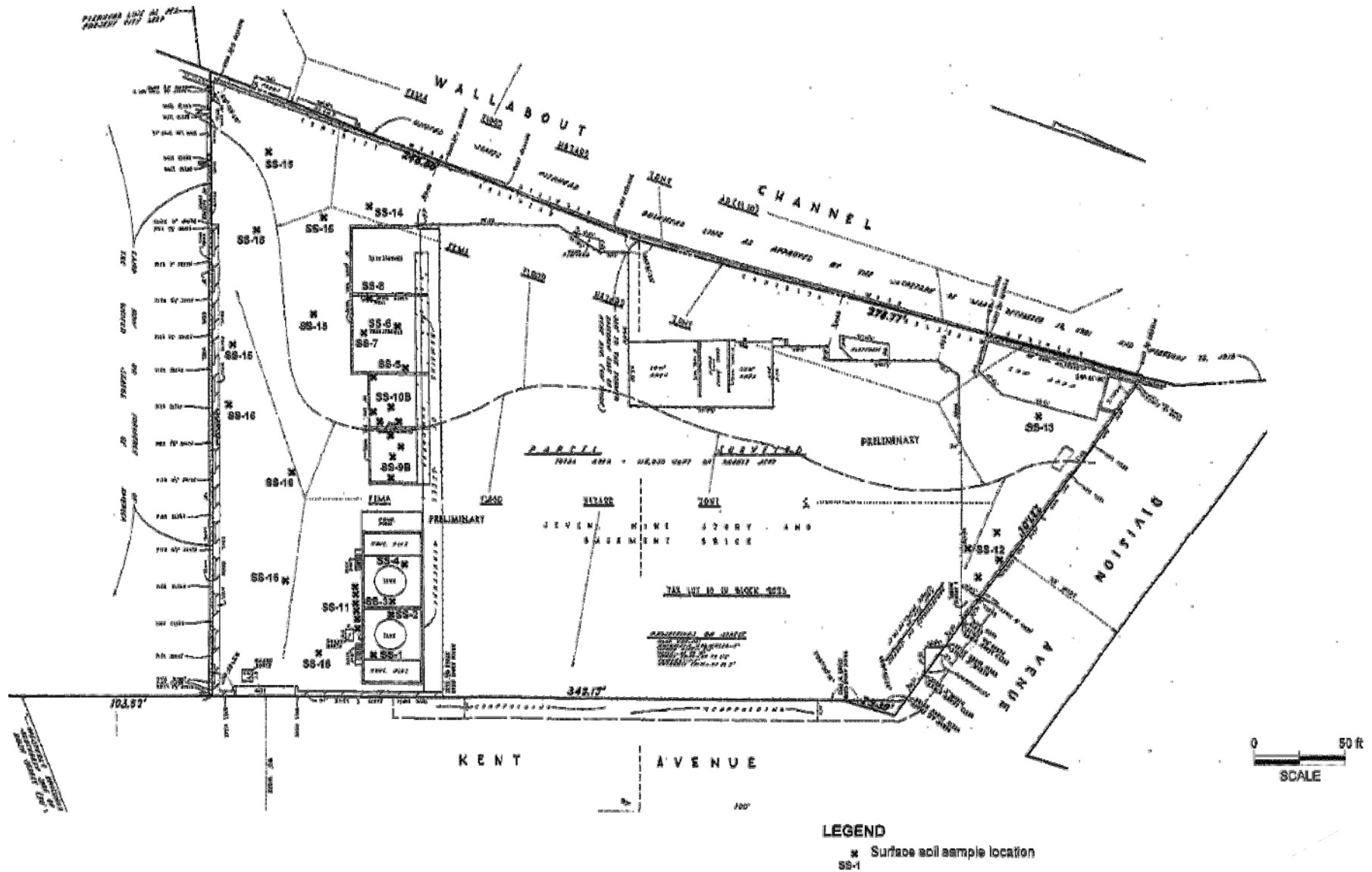
## **FIGURES**



LEGEND

 AREA ALREADY CONTRACTED TO BE REMEDIATED

Shaw Environmental & Infrastructure Engineering of NY, PC				
DESIGNED BY: <b>C. KRAEMER</b>	CON EDISON LONG ISLAND CITY, NEW YORK			
DRAWN BY: <b>S. SHATZ</b>	SITE PLAN AREAS OF REMEDIATION FORMER KENT AVENUE GENERATING STATION 500 KENT AVENUE, BROOKLYN, NEW YORK			
CHECKED BY: <b>C. KRAEMER</b>				
APPROVED BY: <b>T. LARSON</b>	DATE: 10/07/13	SCALE: AS SHOWN	DRAWING NO. FIGURE 1	REV. NO. -



NOTE:  
FIGURE TAKEN FROM LAWLER, MATUSKY, & SKELLY  
ENGINEERS, LLP, PHASE II SITE INVESTIGATION REPORT  
FOR THE KENT AVENUE SITE, FEBRUARY 6, 2000.

Shaw Environmental & Infrastructure Engineering of NY, PC				
DESIGNED BY: <b>C. KRAEMER</b>	CON EDISON LONG ISLAND CITY, NEW YORK			
DRAWN BY: <b>S. SHATZ</b>	SURFACE SOIL SAMPLE LOCATIONS SAMPLING PERFORMED IN 2000 BY LMS FORMER KENT AVENUE GENERATING STATION 500 KENT AVENUE, BROOKLYN, NEW YORK			
CHECKED BY: <b>C. KRAEMER</b>	APPROVED BY: <b>T. LARSON</b>	DATE: 10/07/13	SCALE: AS SHOWN	REV NO. FIGURE 2



AREA REQUIRING  
CLEAN FILL COVER

WALLABOUT CHANNEL

CONCRETE SLAB  
FOUNDATION

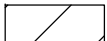
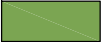

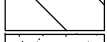

PROPERTY  
LINE (TYP)

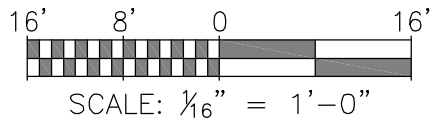
MW-2

APPROX. LIMIT OF  
EXISTING CLEAN  
FILL COVER

AREA ALREADY  
CONTRACTED TO  
BE REMEDIATED

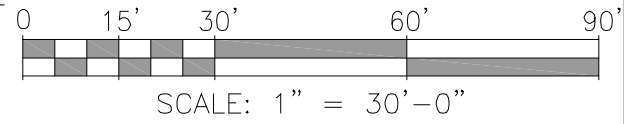
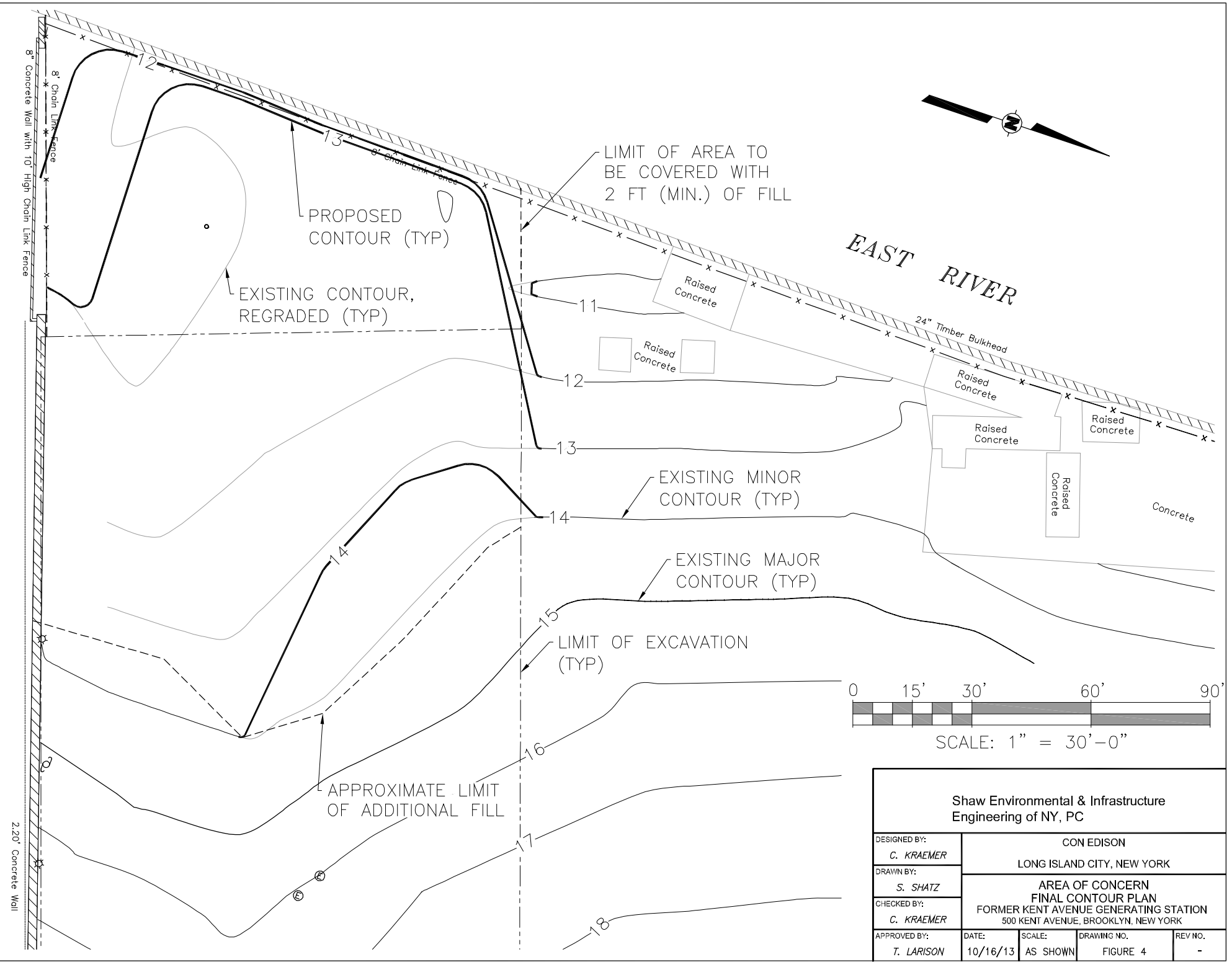
LEGEND

-  AREA OF CONCERN
-  AREA REQUIRING CLEAN FILL COVER
-  AREA WITH EXISTING CLEAN FILL COVER
-  ALREADY CONTRACTED FOR REMEDIATION
-  EXISTING CLEAN FILL COVER

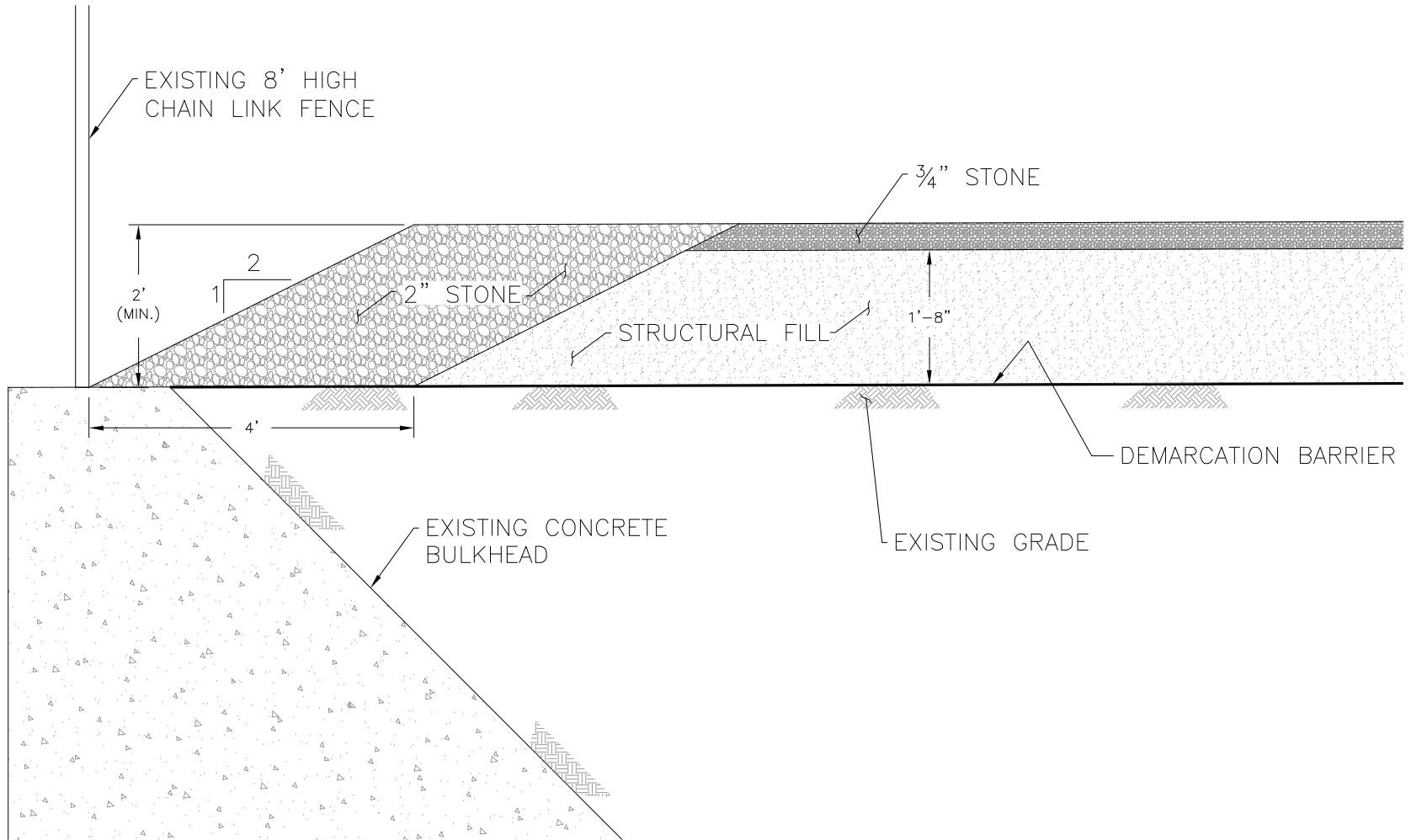


Shaw Environmental & Infrastructure  
Engineering of NY, PC

DESIGNED BY: <b>C. KRAEMER</b>		CON EDISON LONG ISLAND CITY, NEW YORK		
DRAWN BY: <b>S. SHATZ</b>		AREA OF CONCERN EXISTING SITE CONDITIONS FORMER KENT AVENUE GENERATING STATION 500 KENT AVENUE, BROOKLYN, NEW YORK		
CHECKED BY: <b>C. KRAEMER</b>		APPROVED BY: <b>T. LARSON</b>	DATE: <b>10/16/13</b>	SCALE: <b>AS SHOWN</b>
		DRAWING NO. <b>FIGURE 3</b>	REV. NO. <b>-</b>	



<b>Shaw Environmental &amp; Infrastructure Engineering of NY, PC</b>				
DESIGNED BY: <i>C. KRAEMER</i>	CON EDISON LONG ISLAND CITY, NEW YORK			
DRAWN BY: <i>S. SHATZ</i>	AREA OF CONCERN FINAL CONTOUR PLAN FORMER KENT AVENUE GENERATING STATION 500 KENT AVENUE, BROOKLYN, NEW YORK			
CHECKED BY: <i>C. KRAEMER</i>	APPROVED BY: <i>T. LARISON</i>	DATE: 10/16/13	SCALE: AS SHOWN	DRAWING NO. FIGURE 4
				REV. NO. -



H.H.W.  $\nabla$  +8.50'



SCALE:  $\frac{1}{2}$ " = 1'-0"

Shaw Environmental & Infrastructure  
Engineering of NY, PC

DESIGNED BY: <i>C. KRAEMER</i>	CON EDISON LONG ISLAND CITY, NEW YORK			
DRAWN BY: <i>S. SHATZ</i>	AREA OF CONCERN TYPICAL CROSS SECTION FORMER KENT AVENUE GENERATING STATION 500 KENT AVENUE, BROOKLYN, NEW YORK			
CHECKED BY: <i>C. KRAEMER</i>				
APPROVED BY: <i>T. LARISON</i>	DATE: 10/16/13	SCALE: AS SHOWN	DRAWING NO. FIGURE 5	REV NO. -



**ATTACHMENT 1**  
**PHOTOGRAPHS**



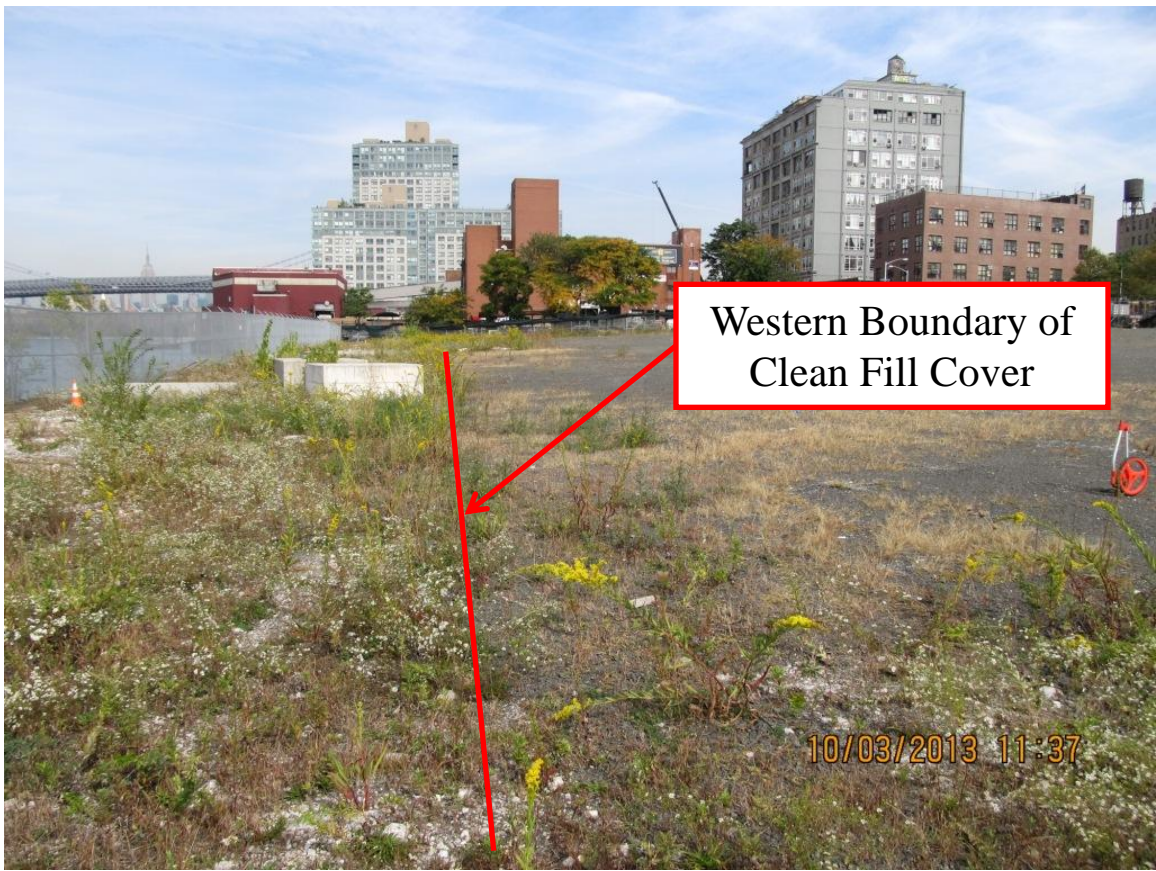
**Photo 1**

looking westward along the southern edge of the clean fill cover



**Photo 2**

two manholes along the southern edge of the clean fill cover



Western Boundary of  
Clean Fill Cover

10/03/2013 11:37

**Photo 3**

looking northward along the western edge of the clean fill cover