DECISION DOCUMENT

POP Displays Manufacturing Site
Brownfield Cleanup Program
Astoria, Queens County
Site No. C241181
August 2018

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

POP Displays Manufacturing Site
Brownfield Cleanup Program
Astoria, Queens County
Site No. C241181
August 2018

Statement of Purpose and Basis

This document presents the remedy for the POP Displays Manufacturing Site site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the POP Displays Manufacturing Site site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Any underground storage tanks (USTs), fuel dispensers, underground piping or other structures will be excavated and removed from the site. About 80 cubic yards of soil will be removed from the site during this work.

3. Backfill

If necessary, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation to establish the designed grades at the site.

4. Vapor Barrier

Any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation.

5. Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2 restricted residential cleanup at a minimum and will include an environmental easement, and site management plan as described below.

6. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use OR commercial use OR industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- require compliance with the Department approved Site Management Plan.

7. Site Management Plan

A Site Management Plan is required, which includes the following:

an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 6 above.

Engineering Controls: The vapor barrier to be installed below the building foundation, discussed in Paragraph 4 above.

This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use, or groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

_____ _____

Date

Eric Obrecht, Director
Remedial Bureau A

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SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Queens Astoria Library
14-01 Astoria Boulevard
Long Island City, NY 11102
Phone: 718-278-2220

Queens Community Board 1
Attn: Florence Koulouris
45-02 Ditmars Boulevard
LL Suite 1025
Astoria, NY 11105

Phone: 718-626-1021

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location:
The site is about 2.75 acres and located in an urban area of Astoria, Queens which is characterized by residential, commercial, retail, and light industrial development. The site is bounded by 30th Drive to the northeast, 12th Street to the southeast, 31st Avenue to the southwest and Vernon Boulevard to the northwest.

Site Features:
There were one-story and a two-story commercial building on the northern portion of the site (built circa 1962), a one-story warehouse building (built circa 1936), and a concrete-paved parking lot associated with the warehouse. The structures located along 30th Drive were demolished prior to the start of investigation activities. The warehouse located on 31st Avenue is still occupied.

Current Zoning and Land Use:
The site is situated in R7A and R6 (general residence districts) with a C1-3 (local retail district) overlay. An E-designation was placed on the site, which is a zoning map designation that provides notice of potential hazardous materials contamination. The southern portion of the site is currently used by an advertising display company while the remaining area of the site is vacant.

Past Use of the Site:
From 1939 to 1970, General Motors Corporationâ€™s Parts Division operated on a portion of the site while the other portion of the site was occupied by Japanese food distributors. From 1983 to 2005, the site was occupied by POP Displays, Inc., a display manufacturer. Hazardous wastes formerly generated at this on-site facility included spent non-halogenated solvents and non-listed ignitable wastes from the mid-1980s to the early 2000s. Several notices of violations for unreported issues were identified for this facility in 1985, 1989, and 1990. There were two unregistered above-ground storage tanks (ASTs) on the site that have since been removed, and a permit was applied to install a new paint spray/drying booth and to install a new fuel oil storage tank to be used for a drying cycle for POP Displays in 1995. The exact status of the work performed on the paint spraying/drying booth and fuel oil storage tank is unknown. Various other industrial uses also took place at the site.

Site Geology and Hydrogeology:
The bedrock is present throughout the site at varying depths ranging from 30 to 68 feet below grade. In general, bedrock was encountered at deeper depths in the eastern portion of the site. The site is about 10 feet above mean sea level. There are no surface water bodies or streams on or adjacent to the site, and the closest open surface water to the site is the East River, which is about 100 feet west.

The remedial investigation concluded groundwater flows across the site in a westerly direction. The average depth to groundwater is 15 feet below grade and the range in depth is 13 to 18 feet below ground surface (bgs) across the site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the Remedial Investigation (RI) against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will

also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- air
- groundwater
- soil
- soil vapor
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

tetrachloroethene (PCE) trichloroethene (TCE)

The contaminant(s) of concern exceed the applicable SCGs for:

- soil vapor intrusion

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Aboveground Storage Tank Removal

During August 2016, three above ground storage tanks (ASTs) were removed from the former cellar located in the northern area of the site. Prior to the tank removal a total of 3,200 gallons of standing water profiled as "oil/water" was pumped out of the former cellar using a vacuum truck. Once at grade, any remaining liquid in the ASTs was removed using the vacuum truck and each AST was purged using nitrogen. After the tanks were purged, an access hatch was cut into each AST to facilitate interior inspection and cleaning. The tank interiors were cleaned with a high pressure rinse using as little water as possible to remove loose scale, corrosion and remaining product. A total of 915 gallons of waste water was removed from the ASTs with the vacuum truck. In addition, all solid "tank bottoms" were drummed for disposal, totaling one 55-gallon drum. The standing water, remaining liquid, waste water, and solids were manifested and transported off-site.

Seven soil borings were then completed around the perimeter of the former cellar. One soil sample was collected from each boring at depths corresponding with one to two feet below the former cellar floor. Sampling did not suggest that there were environmental impacts resulting from the ASTs.

All activities pertaining to the AST removal were documented in the Interim Remedial Measure Construction Completion Report Aboveground Storage Tank Closure, dated September 30, 2016.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

A Remedial Investigation (RI) was conducted from July 2016 through November 2016. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Soil vapor samples were analyzed for VOCs.

Soil: One soil sample located at the southern boundary of the site indicated acetone was present above the unrestricted use soil cleanup objective (SCO) of 0.05 parts per million (ppm), at 0.0672 ppm. Selenium was also detected above the unrestricted use SCO of 3.9 ppm in one sample, at 4.21 ppm in the northwestern portion of the site. SVOCs and PCBs were not detected above unrestricted use SCOs. Off-site samples were not collected during investigation activities.

Groundwater: No site related contaminants were detected in groundwater exceeding Class GA groundwater standards.

Soil Vapor: Sub-slab vapor and soil vapor samples collected showed VOC contamination in the southern portion of the site. Trichloroethene was detected at concentrations up to 15 micrograms per meter cubed (ug/m3), soil vapor samples collected from the southeastern portion of the site. Tetrachloroethene was detected at concentrations up to 321 ug/m3 in sub-slab vapor samples collected from underneath the 31st Avenue sidewalk as part of limited off-site sampling. Indoor air and ambient air samples collected were not above background levels.

One underground storage tank (UST) was encountered during the remedial investigation. While other USTs, fuel dispensers, underground piping or other structures associated with a source of contamination were not encountered they may exist.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

Volatile organic compounds may move through the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings as a result of this site.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Underground Storage Tank Removal and Vapor Barrier remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

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- maintaining site access controls and Department notification; and

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

FIGURES

FIGURE 1- Site Location Map

Project: Remedial Action Work Plan
Client: 11-12 30th Drive LLC
Site: POP Displays Manufacturing Site
30-80 12th Street & 30-77 Vernon Boulevard
NYSDEC Site No. C241181

H2M architects + engineers
31 Penn Plaza
132 W. 31st Street, Suite 604
New York, NY 10001

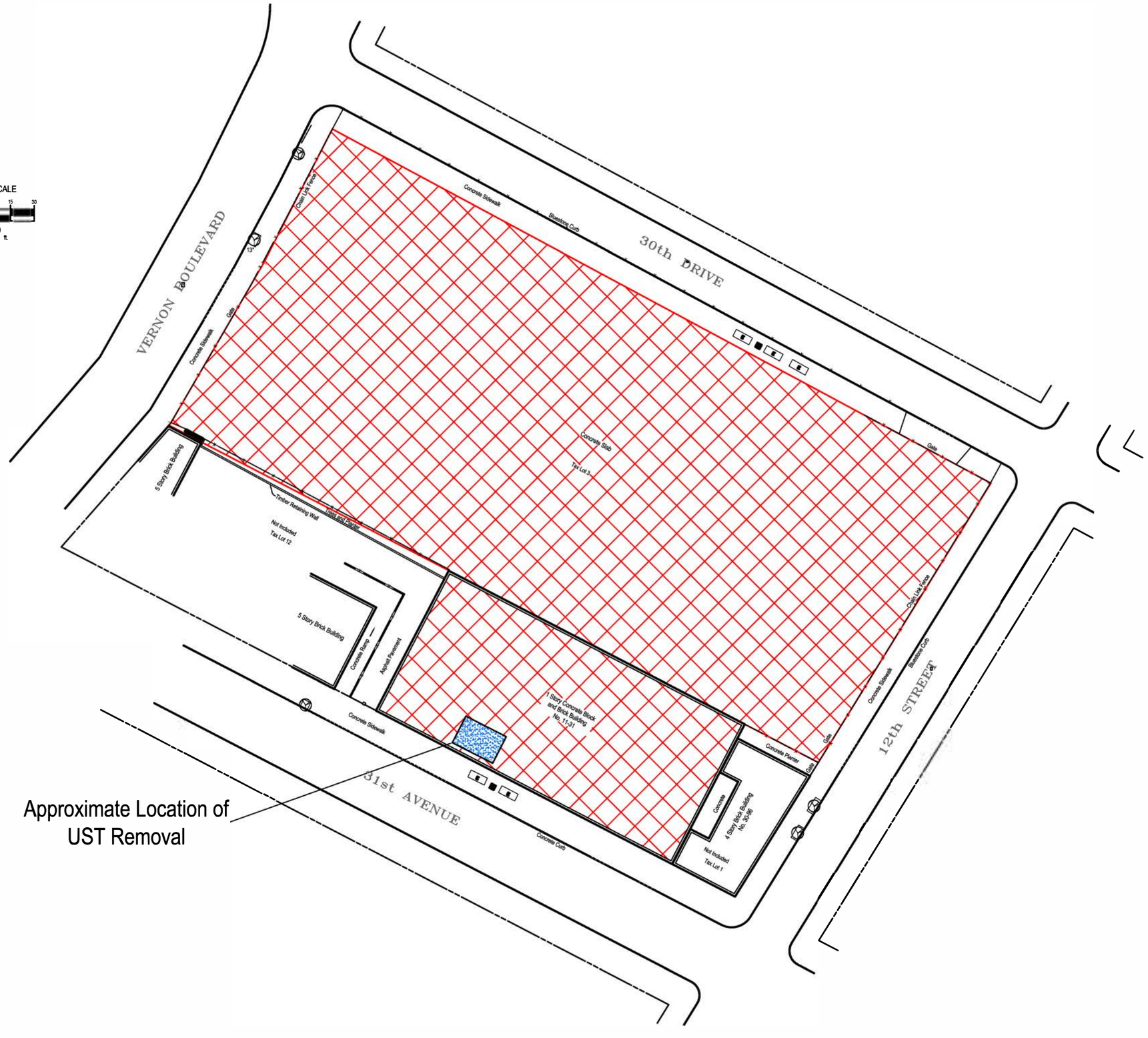
Date: 11.03.16

Project No: CRDG1601

GRAPHIC SCALE

30 0 15 30

(IN FEET)
1 inch = 30 ft.



GENERAL NOTES

1. ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A COMPLETE TITLE REPORT.
3. THE OFFSETS AND DIMENSIONS SHOWN FROM STRUCTURES TO THE PROPERTY LINE ARE FOR A SPECIFIC PURPOSE AND ARE NOT INTENDED TO GUIDE THE ERECTION OF FENCES WALLS POOLS PATIOS ADDITIONS TO BUILDINGS AND ANY OTHER CONSTRUCTION.
4. MAPPING BASED ON SURVEY BY LEONARD J. STRANDBERG AND ASSOCIATES, CONSULTING ENGINEERS AND LAND SURVEYORS, P.C. LAST DATED AUGUST 09, 2016

LEGEND

- TREE
- CURB
- DROP CURB
- FENCE
- SITE BOUNDARY LINE
- SITE EXCAVATION AREA FOR DEVELOPMENT
- EXCAVATION AREA FOR UST REMOVAL

H 2 M architects + engineers

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White Plains, NY 11604
New City, NY 10956
Parsippany, NJ 07054
Howell, NJ 07731

DESIGNED BY		CHECKED BY			
LJS ASSC.	JSG		CRDG-1601	12/08/2016	1"=30 FEET

SITE EXCAVATION PLAN

ASTORIA
CITY OF NEW YORK

QUEENS COUNTY
NEW YORK

POP DISPLAYS MANUFACTURING SITE FIGURE 5

QCTM: BLOCK 504 LOT 03