
**Soils Management Plan
Stew Leonard's Site
East Farmingdale, New York**

Date: March 8, 2004

Revision: 01

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1. Introduction and Purpose

The purpose of a Soils Management Plan (SMP) is to provide information and procedures to those who may encounter soil that has been impacted by the historic uses of the property during intrusive construction activities that breach the asphalt parking lot or the building foundations (collectively referred to as the cover system). Specifically, this SMP provides the historic background of the property located south of Conklin Avenue (Route 24) and west of Broad Hollow Road (Route 110) in East Farmingdale, New York.

At the completion of this plan (March 2004), the subject property is being re-developed by Stew Leonard's as a commercial food store with associated parking; a commercial/office building is planned for the future at the southern end of the property. This SMP shall become effective after the re-development of the property has been completed (i.e., after the construction of the cover system, as discussed herein).

Based on the extent of the investigations conducted at the property, this plan is limited to the delineated 'Waste Areas' (discussed in detail herein) and to subsurface soil deeper than 12 feet below grade across the entire property. Additionally, this plan becomes effective during any non-emergency construction activities that breach the cover system in the Waste Areas (as designated by the snow fence and warning signs) or anywhere on the property in soil exceeding 12 feet below grade. For emergency construction activities, Stew Leonard's may delay certain aspects of this plan that will not potentially impact worker health and safety (i.e., state agency notifications) until such time that the emergency conditions have been corrected and the full plan can be utilized. It is important to note that soils within the Waste Areas may not exhibit visual or field screening results indicating the presence of contamination. This cannot be taken as a demonstration of the absence of contamination. Specifically, certain constituents of concern within the Waste Areas may not be detected by either visual or field screening methods. Therefore, the soils within the Waste Areas will require proper management as described in this Soil Management Plan.

1.1 Overview and Objectives

The site is a 19.26-acre commercial property. The location of the site is shown on Figure 1-1. The site has been characterized during numerous previous investigations that began in the early 1980's. These investigations have included soil sampling, groundwater sampling, sediment sampling and soil gas sampling. Based on the results of these investigations a Record of Decision for the site was issued in 1996. After the implementation of the ROD and through discussions with the New York State Department of Environmental Conservation (NYSDEC), the Old Recharge Basin (i.e., that portion of the site that had been listed on the Inactive Hazardous Waste Disposal Sites) was delisted in 1998. The user should refer to the previous investigation reports for more detail, as needed.

The properties discussed in this narrative are contiguous lots located south of Conklin Avenue (Route 24) and west of Broad Hollow Road (Route 110) in East Farmingdale, New York. As part of

the redevelopment of the properties by Stew Leonard's as a commercial food store, the lots have been combined into one site. Specifically, the site includes the former Fairchild Old Recharge Basin (ORB), the property adjacent to the north referred to as the Former Johnson Property (also previously owned by Fairchild), and the USA Signs property.

The objective of this SMP is to set guidelines for management of soil material during any post-redevelopment/future activities which would breach the cover system. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC) as shown in Exhibit A.

For the convenience of the plan user(s), summaries of previous environmental investigations have been restated in the SMP, where appropriate. Interested parties should refer to the previous investigation reports for more detail, as needed.

1.2. Site History

Based on data obtained from previous investigations and the remediation done at the site, a final remediation report entitled *Old Recharge Basin Bottom Sediment Investigation Report, dated August 2002* was developed by MAC Consultants, Inc. The following sections provide a brief summary of the historic and recent environmental information concerning the following properties that now constitute the Stew Leonard's site:

- Old Recharge Basin Parcel
- Johnson Property
- USA Signs Property

Old Recharge Basin Site

The ORB site was historically mined for sand by the Colonial Sand & Gravel Company (CS&G). This operation created the two large holes that became the North and South Recharge Basins. Due to the exceptional nature of the available sand, CS&G mined the sand from this area to depths well below the groundwater table. It has been reported that sand was mined to depths in excess of 40 feet below ground surface. Groundwater at the ORB site is encountered at approximately 20 to 25 feet below ground surface.

Fairchild-Republic (now The Fairchild Corporation) conducted aircraft manufacturing operations on the property east of Route 110 (referred to as Republic Airport) from 1931 to 1987. The ORB site was associated with the former Fairchild-Republic Main Plant Site at Republic Airport. Specifically, the 13-acre ORB was used to collect rainwater, non-contact cooling water, wastewater, process wastes and incinerator ash from the Main Plant Site. It has been estimated that the Main Plant discharged approximately 2,000,000 gallons per day to the ORB Site. Additionally, the ORB site was used to collect runoff from the local roadway (Route 110). These discharges were regulated under a New York State issued State Pollution Discharge Elimination System (SPDES) permit.

Surrounding land use consists of light industrial to the north, commercial areas to the south and east and residential areas to the west. It is believed that runoff from these areas also entered the ORB. The North Recharge Basin was used to receive these discharges with overflow discharging to the South Recharge Basin.

The Suffolk County Department of Health Services expressed concerns about the discharges entering the ORB in the early 1980s. These concerns and variants from the SPDES permit led to a Notice of Violation (NOV). This NOV triggered the environmental investigation of the ORB Site that began in 1982 and resulted in the ORB Site becoming listed as a Class 2 Inactive Hazardous Waste Disposal Site by the NYSDEC. The investigations of the soil, surface water, groundwater, and sediments of the ORB Site continued until the completion of the Record of Decision (ROD) in June 1996. Extensive investigations were completed at the ORB Site under the direction of the NYSDEC and with input from the Suffolk County Department of Health Services that characterized the soil, sediment, and groundwater.

The ROD determined that minor groundwater contamination discovered under the ORB Site was due to an upgradient source(s) and, since groundwater issues were to be managed under the ROD for the Fairchild Main Plant Site (also monitored by the NYSDEC as a listed inactive hazardous waste site), no remedial actions were required to be taken on the ORB site to address groundwater. In addition, the ROD determined that the sediments located at the bottom of the recharge basins (referred to as 'bottom sediments') are contaminated with elevated levels of some metals (especially chromium and lead) and Polychlorinated Biphenyl (PCBs). Specifically, direct contact with the metals and PCBs contained in the sediments presents a potential threat to human health and the environment.

The purpose of the ROD was to ensure that the proper measures were taken to protect human health and the environment through the establishment of remedial actions. Since direct contact with the ORB site bottom sediments is a concern, the ROD sets forth a means by which direct contact would be eliminated or at least significantly limited. Specifically, the ROD established deed restrictions whereby the recharge basins would not be used and the entire ORB site would be fenced and secured to bar access. The ROD also provided an option whereby Fairchild could fill the recharge basins and raise the site to level grade. This option would allow the redevelopment of the property while capping the sediments and thereby preventing direct contact. Since metals and PCBs in concentrations above the State cleanup guidelines would remain on the site after capping the bottom sediments, a deed restriction would still be required by the NYSDEC to protect potential future owners who may wish to excavate in areas where the bottom sediments remain.

Fairchild opted to fill the basins and bring the site to level grade. The filling of the ORB Site was completed using the cleaned and decontaminated Construction & Demolition (C&D) debris from the extant Fairchild-Republic Main Plant Site. The NYSDEC approved a plan by which clean sand and gravel was used to fill the recharge basins to 5 feet above the groundwater table. The cleaned Main Plant debris was placed above this clean sand/gravel layer and then the site was leveled to grade with a minimum of 9 feet of acceptable fill material. The recharge basins were filled to level grade and

the sediments covered in 1998.

Contaminated sediments from the bottom of the North Recharge Basin rose up to the surface during this filling activity. Four trenches were dug to contain these sediments and allow them to dry out. Once the sediments had dried out, the contaminated material was re-buried on the ORB Site. Additionally, chromium-impacted soil from the Main Plant Site was buried at a depth of four feet below grade along the western fence line of the ORB site.

At the completion of these activities by Fairchild to satisfy the requirements of the ROD, the NYSDEC removed the ORB site from the list of Inactive Hazardous Waste Disposal Sites, i.e., the ORB site was delisted. With this delisting, the NYSDEC closed the ORB site, which indicates that the NYSDEC believes that the ORB site no longer has an impact human health or the environment. Following its delisting, the only remaining administrative requirement was the establishment of protective deed restriction language. A deed restriction is a legal vehicle by which potential future site owners are alerted to the presence of materials (soil and sediments) left on the site that exceed state regulatory guidance values.

In 2002, additional investigations at the ORB Site were conducted as requested by the NYSDEC to allow for the mapping of the bottom sediments and chromium-impacted soils that remained on the site. These investigations included the collection of soil samples at various depths and the collection of soil gas samples. The results of these additional investigations confirmed the findings of the previous investigations and were used by the NYSDEC to develop the deed restriction language.

The purpose of deed restriction language is to alert anyone who may excavate on the property in the future to where the bottom sediments and chromium-impacted material is located and thereby prevent direct contact with the materials. Additionally, this deed restriction information will allow future users to develop plans that will protect both site workers and site users. As part of the deed restriction, two exhibits were developed to present the Waste Areas Map (Exhibit B) and the Elevation Map (Exhibit C). The Waste Areas Map shows the locations of the bottom sediments and the chromium-impacted soils. The Elevation Map provides the current grade elevation of the property. A copy of the deed restriction language provided by the NYSDEC is attached to this SMP as Exhibit D.

The Johnson Property

The Johnson Property is a 4.2-acre site that sits along Conklin Avenue (Route 24) adjacent to the north boundary of the ORB site. There is currently a gasoline station on the northeast corner of the property on Route 110 that is not part of this site. The Johnson Property consists of two adjoining lots: one lot is 0.6 acres and the other is approximately 3.6 acres. A restaurant had stood on the smaller lot, but has been demolished. Although the records are unclear as to when the demolition occurred, it is clear from aerial photographs that the restaurant was no longer on the site in December 1989. Similar to the ORB site, areas of the Johnson Property had also been used for sand mining and for the staging of construction vehicles. The records also indicate that a concrete plant and a

lumberyard were also present at various times on the Johnson Property. In December 1989, Mr. Johnson contracted with Jo-Mar Environmental Specialists, Inc. (Jo-Mar) to grade the property with clean fill in the areas where the extant restaurant and its septic field were located as well as low areas where past sand mining had occurred. Although Mr. Johnson was seeking to improve the property to allow for future development, no oversight of the filling operations was provided and Jo-Mar illegally dumped approximately 1,200 tons of petroleum-contaminated soil on the Johnson Property. Additionally, since there was no site security, other debris and wastes (tires, construction and demolition debris, etc.) were also illegally dumped on the site.

Following investigations by the Solid Waste Division of the NYSDEC, it was determined that Mr. Johnson was in violation of the New York State solid waste regulations by operating a solid waste management facility without a permit. Mr. Johnson was required to excavate the petroleum-contaminated soils and to address the other wastes and debris found on the site. Prior to addressing these requirements, Fairchild purchased this property from Mr. Johnson. After this purchase, Fairchild assumed the responsibilities associated with the remediation of the Johnson Property.

The remedial actions required to address the Johnson Property included the excavation of the petroleum-contaminated soils. Under a NYSDEC issued Beneficial Reuse Determination (BUD) permit (Permit #99-0001) these petroleum-impacted soils were excavated, treated and combined with an asphalt emulsion to create a material that is acceptable as a sub base for pavement, roadway, and related site improvements. The total amount of recycled subbase material created by this process is approximately 25,000 cubic yards. During these excavation activities, wastes and debris (tires, construction and demolition debris, etc.) that were intermingled with the petroleum-contaminated soils were screened out and disposed off-site. However, other buried wastes that were not intermingled with the petroleum-contaminated soils or were outside of those areas expected to be excavated during redevelopment have been left in-place. The NYSDEC agreed that these materials may remain on-site but a deed restriction would be issued to notify future property users of the potential presence of the debris. Additionally, the deed restriction would state that no debris would be permitted under future buildings. That is, debris found beneath the footprint of a proposed building must be removed and disposed off-site prior to construction. The NYSDEC has also required the installation of a gas venting system to be installed beneath the building slabs to vent gases that may volatilize from the groundwater.

On August 26, 2003 a new BUD (#788-1-30) was issued by the NYSDEC for the beneficial re-use of the sub base material; this BUD approval expires on October 31, 2004. The following use restrictions were established under this BUD (#788-1-30):

- The BUD is only applicable to the subbase material previously produced at the Former Johnson Property. No additional subbase material may be produced under this determination. No subbase material may be used off-site under this determination without specific NYSDEC approval.

- The BUD applies to the Former Johnson Property and ORB Site only. All subbase material not used in accordance with this BUD must be disposed in accordance with all applicable NYCRR Part 360 regulations.
- The thickness of the subbase material must correspond to the thicknesses specified in the site development plans/project specifications, but in no case may exceed one (1) foot in thickness.
- The subbase material must be spread in lifts four (4) to six (6) inches, maximum, and be compacted after each lift. The maximum thickness of the finished product must not exceed one (1) foot. Material, which is friable, shall not be considered adequately compacted. The subbase material must not be used as fill material or for any use where a hard and compact consistency similar to conventional asphalt pavement will not be produced.
- All subbase material must be covered by either blacktop or a building footprint. No subbase material is to be used as a watering course or surficial course.
- An annual report must be filed within 30 days of the end of each calendar year in which the subbase material is beneficially reused. This report is to include the quantity (in tons) beneficially reused and the quantity (in tons) of that disposed off-site in accordance with the NYCRR Part 360 regulations.

USA Signs Property

The USA Signs property consists of approximately one (1) acre of land. The site is located on East Carmans Road south of Conklin Avenue (Route 24) and consisted of one single story building. The facility was used to manufacture neon and sheet metal signs.

According to the available information, USA Sign purchased the site in 1985. Prior to beginning operations as a sign manufacturing facility, the site was used by a storm door manufacturer. The original building was extended in 1990 to increase manufacturing space. Based on a review of the aerial photographs, the building first appears in the 1966 photograph. The prior photograph (1953) indicates that the subject property was part of the Former Robert Johnson Property.

The offices and the loading dock were located on the west side of the building. The north side of the building sat close to the property line with the Former Johnson Property. There was no noted use of this narrow strip. The south side of the building provided access to the manufacturing portion of the facility. The western half of this side of the property is paved while the rear portion is unpaved. The south side of the building was used for storage of aluminum channels (raw materials) as well as the facility dumpsters (20 cubic yard capacity). One dumpster was used for general facility waste; the other dumpster was used for metal recycle. Approximately 2 to 3 dumpsters were removed per month. Additionally, waste materials (e.g., wood frames, empty Methanol drums) were stored on the south side of the building. USA Signs reported no operations conducted outside the building.

The east side (rear) of the building is a narrow strip (approximately 10 to 15 feet wide) that is unpaved and overgrown. There were approximately 10 to 12 rusted and unmarked, empty 55-gallon

drums in the southeast corner of the property. The origin of these drums was unknown, but believed to be empty methyl alcohol drums discarded by USA Signs. Soil sample results in this area detected no indication of contamination associated with these drums and the operations of the USA Signs facility.

Based on the initial assessment of the USA Signs property, a supplemental environmental investigation was conducted to assess the potential impact of the site operations on the environment. Specifically, soil samples were collected from the east side of the property under the abandoned drums and by an air compressor discharge line. A soil sample was also collected on the north side of the building near an exit door and on the west side of the building near the facility dumpsters.

The results of the supplemental investigation indicated that the surface soils on the property contain various metals in concentrations similar to those found on the ORB site and the Johnson Property. Specifically, cadmium, chromium, copper and iron were detected at all four sample locations at levels above the TAGM #4046 cleanup objectives. The TAGM recommended cleanup objectives for these analytes specify generic concentrations or site background concentrations. Site background concentrations are not available for this locale; however, the types and concentrations of metals detected in the soil samples were typical of similar urban, industrial settings. Additionally, the concentrations detected did not exceed the USEPA Region 3 Risk-Based Concentration (RBC) for industrial soil (October 9, 2002 RBC Table). The RBC for industrial soil is based on an adult worker's incidental ingestion of 100 mg of soil per day in an industrial setting for 250 days per year, for 25 years.

2. Previous Investigations

2.1 Chronology and Nature and Extent of Contamination

Old Recharge Basin Site

- This site has been investigated extensively between 1982 and 1997.
- The investigative work and the remedial actions taken at the site were completed under the direction of the NYSDEC and with input from the Suffolk County Department of Health Services. Based on the results of the investigations and remedial actions, the NYSDEC has delisted the site and has expressed its general satisfaction with the work completed to date.
- Under the approval of the NYSDEC and in accordance with the ROD, sediments remain on the site that contain concentrations of metals and PCBs that are above the state regulated concentrations. Additionally, chromium-impacted soils have been buried on site along the western fence line that exceed the TAGM #4046 soil cleanup objectives (i.e., 10 ppm or Site Background according to Table 4 of the TAGM #4046) as well as the Eastern USA Background concentration (i.e., 1.5 to 40 ppm for chromium according to Table 4 of the TAGM #4046). Recent investigations were completed under a NYSDEC approved Work Plan to map the locations of these sediments and chromium-impacted soils (refer to Exhibit B: Waste Areas). The results of this effort were reviewed by the NYSDEC and used to establish deed language that will limit future site use to commercial and limit excavation in impacted areas of the property.

The Johnson Property

- This property was determined to be an unpermitted solid waste management facility due to the presence of petroleum-contaminated soil and wastes (tires, C&D, etc.). The petroleum-contaminated soils and the intermingled wastes have been excavated. The petroleum-contaminated soils have been treated under a NYSDEC BUD permit and a pavement sub base material has been created that remains on the site. The intermingled wastes have been disposed off site.
- The NYSDEC issued BUD permit (#99-0001) required the reuse of the treated petroleum-impacted material as a pavement sub base by June 1, 2000. Since the sub base material was not reused by the required date, a new BUD permit was required and the sub base material needed to be retested to demonstrate that it is still useable as a pavement sub base. On August 26, 2003 a new BUD (#788-1-30) was issued by the NYSDEC for the beneficial reuse of the sub base material; this BUD approval expires on October 31, 2004.
- A notice covenant and deed restriction is required by the NYSDEC for waste material (buried tires, C&D, etc.) that may remain buried on the Johnson Property. Additionally, this deed restriction will require that any C&D-type waste material located under a proposed building be removed prior to construction.

USA Signs Property

- The main operation of this facility was the manufacturing of neon and sheet metal signs.
- No waste oils or hazardous wastes were generated at the site.
- No wastewaters are generated within the building. Floors and work areas are broom swept.
- The results of supplemental environmental investigations indicate that the USA Signs operations have not impacted the quality of the surface soils associated with this property. Additionally, the groundwater investigations conducted on the downgradient ORB site indicate that the USA Signs operations have not impacted the groundwater.

2.2 Summary of Contamination

The constituents of potential concern (COPCs) for soil at the property consist primarily of metals (especially chromium, cadmium and lead) and PCBs in the sediments of the ORB; chromium-impacted soils buried along the western boundary with East Carmens Road; C&D waste that may remain buried on the Former Johnson Property portion of the site; and metals at the USA Signs portion of the site. Results of groundwater sampling indicate that constituents in the sediments and soil/fill material have not impacted groundwater quality. The PCB and chromium impacted soils buried in the circular area (a.k.a. "Glove area") and the chromium impacted soil areas along the western boundary next to Carmens Road are covered by the deed restrictions as part of the ORB institutional Control Package. It is important to note that soils within the Waste Areas may not exhibit visual or field screening results indicating the presence of contamination. This cannot be taken as a demonstration of the absence of contamination. Specifically, certain constituents of concern within the Waste Areas may not be detected by either visual or field screening methods. Therefore, the soils within the Waste Areas will require proper management as described in this Soil Management Plan.

3. Contemplated Use

The former Fairchild ORB Site, the Former Johnson Property and the USA Signs property have been redeveloped by Stew Leonard's as a commercial food store (with associated parking lot) at the northern end and office/light industrial/retail planned for the southern end. The zoning specifically prohibits residential uses.

4. Summary of Remedy

The constituents of potential concern (COPCs) for soil and groundwater have been identified in Section 2.2 of this document.

The identification of the remedial action objectives (RAOs) for the Site is based primarily on the human health and environmental risks posed by the Site. For this Site, the NYSDEC TAGM #4046 is used to define the RAOs. Based on the commercial/industrial-contemplated use of the property, the RAOs for the Site are to minimize potential exposure to on-site surface soil, subsurface soil, and groundwater and to prevent releases from the contaminated sediments and chromium-impacted soil.

To achieve the RAOs for the Site, the contaminated sediments and the chromium-impacted soil areas (referred to as 'Waste Areas' in Exhibits B and C) were marked with cautionary snow fence and labels and a cover system was constructed over the entire property. The cover system has been placed directly on top of the regraded on-site soil/fill material and consists of the materials described in section 4.1. The PCB and chromium impacted soils buried in the circular area (a.k.a. "Glove area") and the chromium impacted soil areas along the western boundary next to Carmens Road are covered by the deed restrictions as part of the ORB institutional Control Package. Any intrusive site work that is conducted 12 feet or more below the existing grade in those areas not specifically restricted must include the appropriate environmental testing as described in Section 5.3 and on Figure 6-1. Unknown quantities of onsite C&D debris may remain buried on the ORB property following redevelopment. In the event that such materials are not removed from the Site, proper engineering controls will need to be incorporated into the design of any site structure to account for any buried C&D materials that may remain in place.

4.1 Cover System

The purpose of the surface cover system is to eliminate the potential for human contact with the contaminated sediments and the chromium-impacted soil and to eliminate the potential for contaminated runoff from the property. Additionally, the surface cover system provides the foundation for the buildings and associated parking lot for the Stew Leonard's commercial food store. The cover system consists of the following types of clean material, depending on the area of interest:

- Soil: 12 inches of vegetated soil cover underlain by a demarcation layer, in outdoor vegetated areas.
- Asphalt: a minimum of 9 inches of material (asphalt and sub base material) in areas that will become roads, sidewalks, and parking lots. Cross sections of other areas (such as loading docks and associated truck driveways) will be determined based on the intended use of the area.

- Concrete: a minimum of 6 inches of material (concrete and sub base material) in areas that are slab-on-grade structures or for roads, sidewalks, and parking lots in lieu of asphalt. For slab-on-grade structures, a 6-mil polyethylene vapor barrier has been installed beneath the concrete (for sites impacted by VOC contamination only).
- Sub-Slab Venting System: a sub-slab passive venting system is required under each building and all future buildings on the Stew Leonard's Site. The purpose of this passive system is to vent potential subsurface vapors that may rise through the soil matrix and potentially enter the buildings. The venting system is a passive system, but may be altered to become active if found to be necessary.

5. Management of Soil/fill and Long-Term Maintenance of Cover System

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill and the long-term maintenance of the cover system during any intrusive work that breaches the cover system in the designated 'Waste Areas' or where the planned construction activities will exceed 12 feet below grade.

5.1 Site Preparation – SECTION NOT USED

5.2. Excavation and Grading Below the Cover System

During intrusive activities below the cover system, the excavation of soil/fill material may be necessary for the repair or installation of utility corridors. A Professional Engineer's representative with construction/remediation experience, representing the subject property owner will monitor soil/fill excavations or disturbances for excavation work below the cover system. This Professional Engineer (P.E.) must also provide a stamped/signed certification that excavation work below the cover system and subsequent repair/replacement of the cover system was conducted in a manner consistent with this SMP. This P.E. certification must be included in the annual certification report required in Section 9 of this document.

Excavated soil/fill may be used on-site as fill below the cover system. Soil/fill that is excavated as that cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. Any soils removed from the designated 'Waste Areas' below the snow fence need to be segregated, characterized, and properly transported for off-site disposal.

5.2.1. Visibly impacted soil/fill or soil/fill that exhibits elevated PID readings

Stained soil is soil that is observed to be discolored, tinted, dyed, unnaturally mottled, or has a sheen. Soil/fill screening and sampling is described in Section 5.3. Excavated soil/fill that is visibly stained or produces elevated photoionization detector (PID) readings (i.e., sustained 10 ppm or greater) will be considered potentially contaminated and stockpiled on the property for further assessment. The potentially contaminated soil/fill will be stockpiled (maximum 50 cubic yard piles) on polyethylene sheeting and then sampled for reuse, treatment, or disposal. The stockpiled, potentially contaminated soil/fill will also be completely covered using polyethylene sheeting to reduce the infiltration of precipitation and the migration of dust. Sampling and analysis will be completed in accordance with the protocols delineated in Section 5.3. Visibly impacted soil/fill containing one or more constituents in excess of the Site Specific Action Levels (SSALs) established in the NYSDEC TAGM #4046 Soil Cleanup Objectives will be transported off-site to an appropriate permitted waste management facility. It is important to note that soils within the Waste Areas may not exhibit visual or field screening results indicating the presence of contamination. This cannot be taken as a demonstration of the absence of contamination. Specifically, certain constituents of concern within the Waste Areas may not be detected by either visual or field screening methods. Therefore, the soils within the Waste Areas will require proper management as described in this Soil Management Plan.

5.2.2. Buried drums or underground storage tanks

If buried drums or underground storage tanks are encountered during soil excavation activities, excavation will cease and the NYSDEC will be immediately notified. All drums and/or underground storage tanks encountered will be evaluated and the contractor will submit a removal plan for NYSDEC approval. Appropriately trained personnel will excavate all of the drums and/or underground storage tanks while following all applicable federal, state, and local regulations. Removed drums and underground storage tanks will be properly characterized and disposed off-site. The soil/fill surrounding the buried drums or underground storage tanks will be considered as potentially contaminated and will be stockpiled and characterized.

5.3. Soil/fill Characterization

A soil characterization flowchart is provided on Figure 6-1.

5.3.1. Excavated and Stockpiled Soil/Fill

Excavated soil/fill may be used on-site as fill below the cover system. Soil/fill that is excavated that cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and a duplicate sample will be collected for 2000 cubic yards of stockpiled soil, and a minimum of 1

sample will be collected for volumes less than 2000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. The composite sample will be analyzed by a NYSDOH ELAP-certified laboratory for pH (EPA Method 9045C), Target Compound List (TCL) SVOCs, pesticides, and PCBs, and TAL metals, and cyanide. The grab sample will be analyzed for TCL VOCs.

Soil samples will be composited by placing equal portions of fill/soil from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

5.3.2. Soil/Fill Disposal or Reuse

Visually contaminated soil/fill that has been characterized and found to meet the SSALs (i.e., TAGM #4046 SOIL CLEANUP OBJECTIVES) may be reused as subgrade or excavation subgrade backfill, if appropriate. On-site soil/fill may not be reused as backfill in landscaping berms to be used for the planting of trees and shrubs. If the analysis of the soil/fill samples reveals unacceptably high levels of any analytes, the soil may not be used as backfill on-site and additional analyses will be necessary to further classify the material for disposal purposes. Any materials that are found to contain one or more constituents in excess of the SSALs will be further characterized and managed appropriately. Since the ORB Site is a delisted NYS Hazardous Waste Site, at a minimum, a duplicate sample may need to be analyzed for the toxicity characteristic using the Toxicity Characteristic Leaching Procedure (TCLP) for the particular analytes that were detected at concentrations exceeding the SSALs. The duplicate sample may also be analyzed for the other RCRA Characteristics including reactivity, corrosivity, and ignitability. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner may also choose to characterize each stockpile individually. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received and reviewed by a P.E.

5.4. Subgrade Material

Subgrade material used to backfill excavations or placed to increase site grades or elevation shall meet the following criteria. These criteria are also summarized in Figure 6-2.

- Excavated on-site soil/fill that appears to be visually impacted shall be sampled and analyzed. Analytical results shall indicate that the contaminants, if any, are present at concentrations below the SSALs (i.e., TAGM #4046 Soil Cleanup Objectives).
- Off-site borrow soils will be documented as having originated from locations having no evidence of disposal or release of hazardous, toxic or radioactive substances, wastes or petroleum products.
- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and cyanide. The soil will be acceptable for use as backfill provided that all parameters meet the SSALs (i.e., TAGM #4046 Soil Cleanup Objectives).
- Non-virgin soils will be tested via collection of one composite sample per 500 cubic yards of material from each source area. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 cubic yards meet SSALs, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the SSALs (i.e., TAGM #4046 Soil Cleanup Objectives).

5.5. Cover System Specifications: Refer to Section 4.1

5.6. Erosion Control

When the activities planned will breach the cover system and disturb more than 5 acres of land, Federal and State laws require that the project obtain coverage under the NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activities that are classified as "Associated with Industrial Activity", Permit #GP-93-06 (Construction Storm Water General Permit). Federal and State laws require that the project obtain coverage under the NYSDEC SPDES General Permit for Storm Water Discharges from Construction Activities for certain activities disturbing between 1 and 5 acres of land. Requirements for coverage under the Construction Storm Water General Permit include the submittal of a Notice of Intent form and the development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must fulfill all permit requirements and must be prepared in accordance with "Chapter Four: The Storm Water Management and Erosion Control Plan" in Reducing Impacts of Storm Water Runoff from New Development, NYSDEC, 1992. This Storm Water Management and Erosion Control Plan, in accordance with permit requirements, will provide the following information:

- A background discussion of the scope of the construction project
- A statement of the storm water management objectives
- An evaluation of post-development runoff conditions
- A description of proposed storm water control measures
- A description of the type and frequency of maintenance activities required to support the control measure

The SWPPP will address issues such as erosion prevention, sedimentation control, hydraulic loading, pollutant loading, ecological protection, physical site characteristics that impact design, and site management planning. All descriptions of proposed features and structures at the Site will include a description of structure placement, supporting engineering data and calculations, construction scheduling, and references to established detailed design criteria. The SWPPP will conform to all requirements as established by applicable regulatory agencies.

Proven soil conservation practices will be incorporated in the construction and development plans to mitigate soil erosion, off-site sediment migration, and water pollution from erosion. The use of appropriate temporary erosion control measures such as silt fencing and/or hay bales will be required around all soil/fill stockpiles and unvegetated soil surfaces during redevelopment activities. These methods are described below. Stockpiles shall be graded and compacted as necessary for positive surface water runoff and dust control. Stockpiles of soil/fill will be placed a minimum of 50 feet from the property boundaries.

Temporary erosion control measures.

Temporary erosion and sedimentation control measures and facilities will be employed during active construction stages. Prior to any construction activity, temporary erosion and sediment control measures shall be installed and maintained until such time that permanent erosion control measures

are installed and effective. Appropriate temporary measures will be incorporated into the excavation activities prior to the start of these activities.

As sediment collects along the silt fences {hay bales, etc.}, they will be cleaned to maintain desired removal performance and prevent structural failure of the fence. Accumulated sediment will be removed when 50% of the storage capacity of the silt fence is full. Removed sediment will be stockpiled and characterized in accordance with Section 5.3. The perimeter silt fences will remain in place until excavation activities in the area are completed and vegetative cover or other erosion control measures are adequately established. Silt fences will be provided and installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control.

Permanent erosion control measures.

Permanent erosion control measures and facilities will be incorporated during cover construction and during site redevelopment for long-term erosion protection. Permanent measures and facilities will be installed as early as possible during construction phases. Parking and building systems associated with redevelopment shall not include dry wells or other subsurface injections/disposal piping or facilities.

The remedial construction activities will involve the installation of a cover system including asphalt, concrete, or topsoil over the entire site. Permanent erosion control measures incorporate a combination of design features to limit overall erosion and sediment problems to practical design limits, and the placement of permanent facilities during site restoration for long-term erosion protection.

Design features incorporated into the excavation plans to control erosion will include limiting steep slopes, routing runoff to surface water collection channels, limiting flow velocities in the collection channels to the extent practical, and lining collection channels, where appropriate. In areas where flow will be concentrated (i.e., collection channels) the channel slopes and configuration will be designed to maintain channel stability.

Any final slopes greater than 33 percent will be reinforced, and will have a demarcation layer under the clean cover to indicate if erosion has extended to the subgrade. Following the placement of final cover soils over regraded areas, a revegetation program will be implemented to establish permanent vegetation. Vegetation serves to reduce erosion, enhance evapotranspiration, and improve runoff water quality.

5.7. Dust Control

The surface of unvegetated or disturbed soil/fill areas will be wetted with water or other dust suppressive agents to control dust during excavation activities that breach the cover system. No subgrade material will be left exposed for extended interim periods (greater than 90 days) prior to replacement of final cover without a temporary cover system (i.e., tarps, spray type cover system, etc.) or planted with vegetation to control fugitive dust to the extent practicable.

5.8. Construction Water Management - SECTION NOT USED

5.9. Access Controls

Access to soil/fill on the property must be controlled until replaced under the cover system or removed off site for disposal. Excavated subgrade material that is stockpiled on site must be temporarily covered to limit access to that material.

5.10. Institutional Controls

The use of the property has been restricted through a deed restriction that prevents the use of ground water and disturbance of the final cover system. Deed restrictions are described in detail in Deed Restriction.

5.11. Maintenance

Maintenance of the cover system and adherence to this SMP is the responsibility of the property Owner. The purpose of routine maintenance is to ensure that the cover system continues to operate in a manner consistent with the intent of the Deed Restriction. Maintaining a vegetative cover will reduce erosion of the soil cover system. In order to reduce the disturbance of the soil cover material, berms or mounds composed of clean soil will be constructed in areas in which trees and shrubs will be planted. Cover materials, fencing, signs, and gates will be inspected annually and repaired as needed.

The main features of the operation and maintenance of the cover system are:

- Inspection procedures
- Evaluation of the final cover system (i.e., vegetative cover, roads, buildings, parking lots, etc.) for sloughing, cracks, settlement, erosion, distressed vegetation, damaged fencing, gates or signs
- Repair of any deficiencies found

6. Health and Safety

Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.

If intrusive work is expected to breach the cover system at the property, all contractors performing redevelopment or maintenance activities will be required to prepare a site-specific, activity-specific Health and Safety Plan (HASP). The HASP must also include provisions for protection of the community as described in Section 6.2.

6.1. Construction Personnel Protection

Contractors engaged in subsurface construction or maintenance activities (e.g., foundation and utility workers) will be required to implement appropriate health and safety procedures. These procedures will involve, at a minimum, donning adequate personal protective equipment, performing appropriate air monitoring, and implementing other engineering controls as necessary to mitigate potential ingestion, inhalation, and contact with residual constituents in the soils. Recommended health and safety procedures include, but may not be limited to, the following:

- While conducting invasive work at the Site, the Contractor shall provide safe and healthful working conditions. The Contractor shall comply with all New York State Department of Labor regulations and published recommendations and regulations promulgated under the Federal Occupational Safety and Health Act of 1970 and the Construction Safety Act of 1969, as amended, and with laws, rules, and regulations of other authorities having jurisdiction. Compliance with governmental requirements is mandated by law and considered only a minimum level of safety performance. The Contractor shall insure that all work is performed in accordance with recognized safe work practices.
- The Contractor shall be responsible for the safety of the Contractor's employees and the public. The Contractor shall be solely responsible for the adequacy and safety of all construction methods, materials, equipment and the safe prosecution of the work.
- The Contractor is responsible to ensure that all project personnel have been trained in accordance with 29 CFR 1910.120.
- The Contractor shall have a HASP, written in accordance with 29 CFR 1926.65, prepared, signed and sealed by a safety professional; a safety professional and/or a trained safety representative(s) active on the job whenever the work is in progress; an effective and documented safety training program; and a safety work method check list system.

- Recognition as a safety professional shall be based on a minimum of certification by the Board of Certified Safety Professionals as a Certified Safety Professional and 5 years of professional safety management experience in the types of construction and conditions expected to be encountered on the Site.
- All personnel employed by the Contractor or his subcontractors or any visitors whenever entering the job site, shall be required to wear appropriate personal protection equipment required for that area.

6.2. Community Air Monitoring Program

In the event that more than 100 square feet of the cover system is disturbed, air monitoring will be performed in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan, which is included in Exhibit E. All air monitoring readings will be recorded in a logbook and will be available for review by the NYSDEC and NYSDOH.

7. Quality Assurance/Quality Control

7.1. Analytical Data

All characterization samples collected during site redevelopment activities will be analyzed using the most recent NYSDEC Analytical Services Protocol (ASP), consistent with Section 2 of DER-10, the Technical Guidance for Site Investigation and Remediation.

The laboratory proposed to perform the analyses will be certified through the New York State Department of Health Environmental Laboratory Approval Program (ELAP) to perform Contract Laboratory Program (CLP) analysis and Solid Waste and Hazardous Waste Analytical testing on all media to be sampled during this investigation. The laboratory will maintain this certification for the duration of the project.

The detection limit for compounds listed as SSALs in as established in the NYSDEC TAGM #4046 Soil Cleanup Objectives shall be equal to or less than the noted action level.

Procedures for chain of custody, laboratory instrumentation calibration, laboratory analyses, reporting of data, internal quality control, and corrective actions shall be followed as per NYSDEC ASP and as per the laboratory's Quality Assurance Plan. Where appropriate, trip blanks, field blanks, field duplicates, and matrix spike, matrix spike duplicate shall be performed at a rate of 5% (1 per up to 20 samples) and will be used to assess the quality of the data. The laboratory's in-house QA/QC limits will be utilized whenever they are more stringent than those suggested by the EPA methods.

8. Operation, Monitoring & Maintenance

The cover system shall be maintained on a routine basis to be determined by Stew Leonard's to be appropriate for its use. Inspections of the cover system shall be conducted semi-annually, at a minimum.

9. Notification and Reporting

There shall be no non-emergency excavation activities that result in the disturbance of the property, which threatens the integrity of the cover system or which would result in human exposure to contaminated soils, unless prior written approval by the NYSDEC is obtained. Therefore, notification of NYSDEC at the address below should precede any such work by at least 30 days, to allow time for review and any necessary revisions of a work plan.

The following minimum notification and reporting requirements shall be followed by the property owner prior to and following site development, as appropriate:

- If buried drums or underground storage tanks are encountered during soil excavation activities, excavation will cease and the NYSDEC will be immediately notified.
- Annual certifications must be submitted, by an engineer licensed to practice in New York State, to the NYSDEC, substantiating that the institutional and engineering controls and restrictions are still in place and being properly maintained. The annual certification must be submitted by January 15th of each year to the following NYSDEC contact:

Mr. Jerry Rider, P.E.
NYSDEC
Division of Environmental Remediation
625 Broadway, Albany, NY 12233-7010

If the cover system has been breached during the year covered by that Annual Report, the owner of the property shall include the following in that annual report:

- A certification that all work was performed in conformance with this SMP
- Plans showing areas and depth of fill removal
- Copies of daily inspection reports for soil-related issues
- Description of erosion control measures
- A text narrative describing the excavation activities performed, health and safety monitoring performed (both site specified and Community Air Monitoring), quantities and locations of soil/fill excavated, disposal locations for the soil/fill, soil sampling locations and results, a description of any problems encountered, location and acceptability test results for backfill sources, and other pertinent information necessary to document that the site activities were carried out properly

If the disturbed area exceeds one acre, the following must also be included in the annual certification:

- Plans showing before and after survey elevations on a 100-foot grid system to document the thickness of the clean soil cover system

Notification contacts are as follows:

NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7011

LOCATION MAP

N.T.S

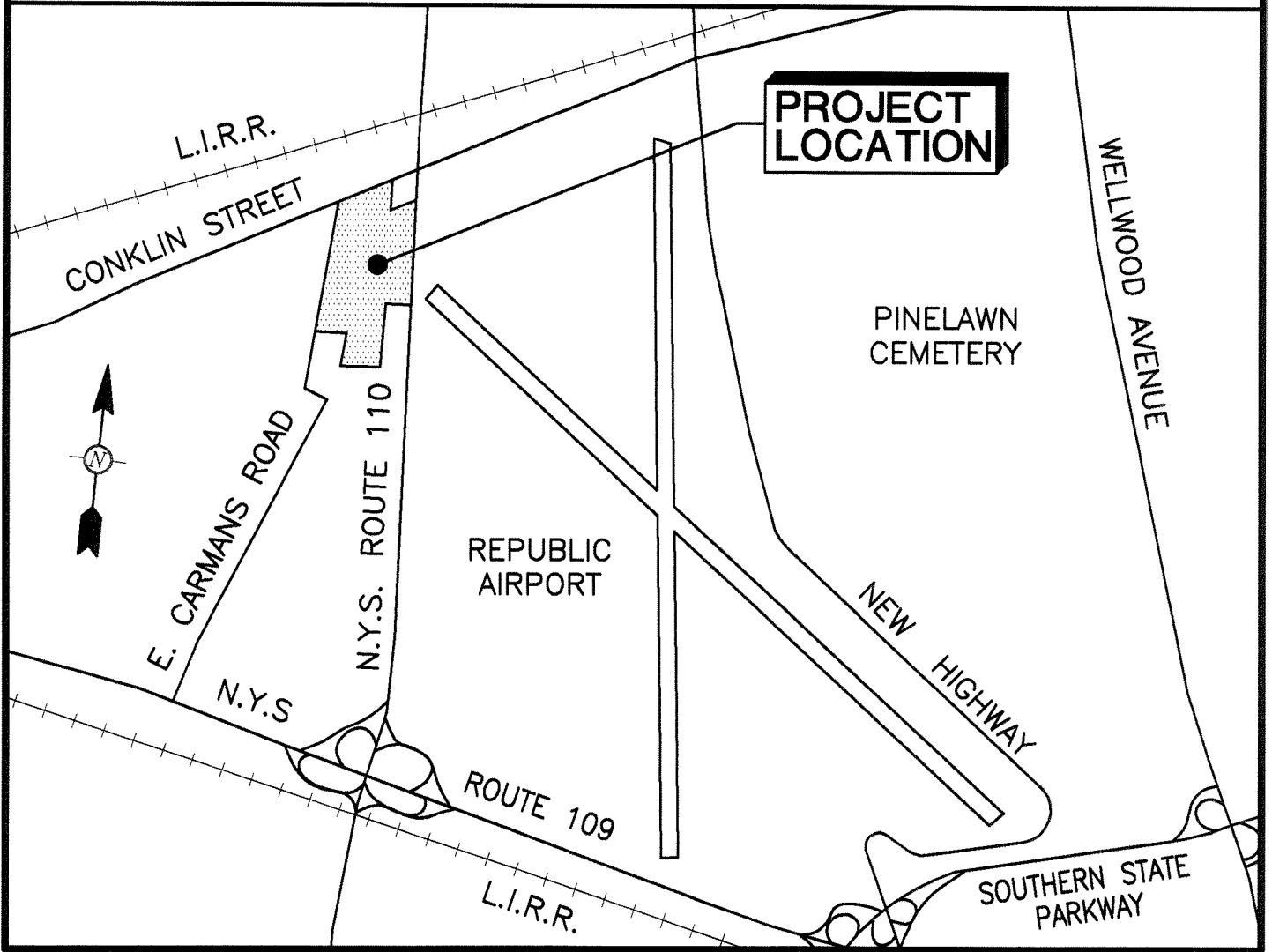
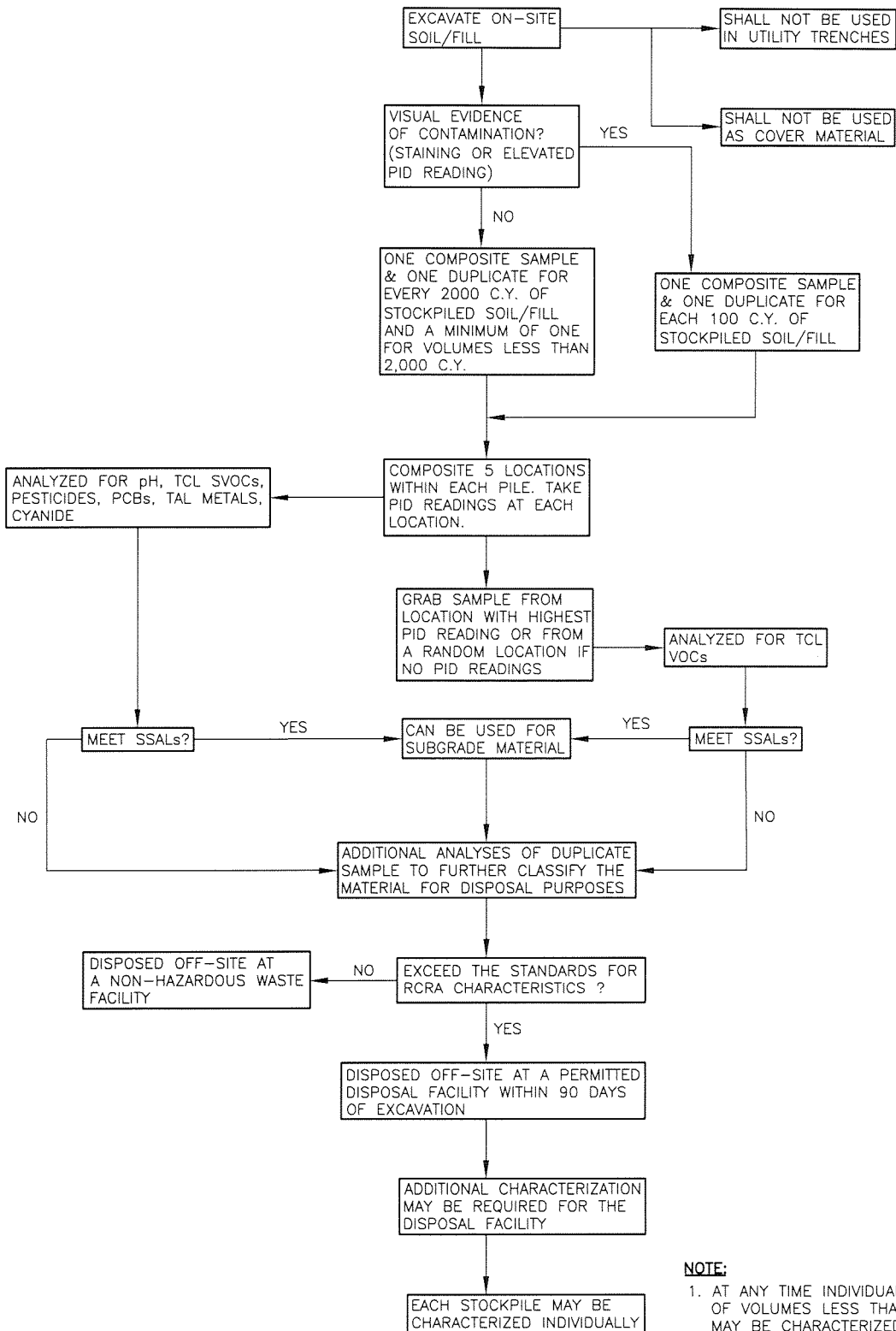


FIGURE 1-1

FIGURE 6-1

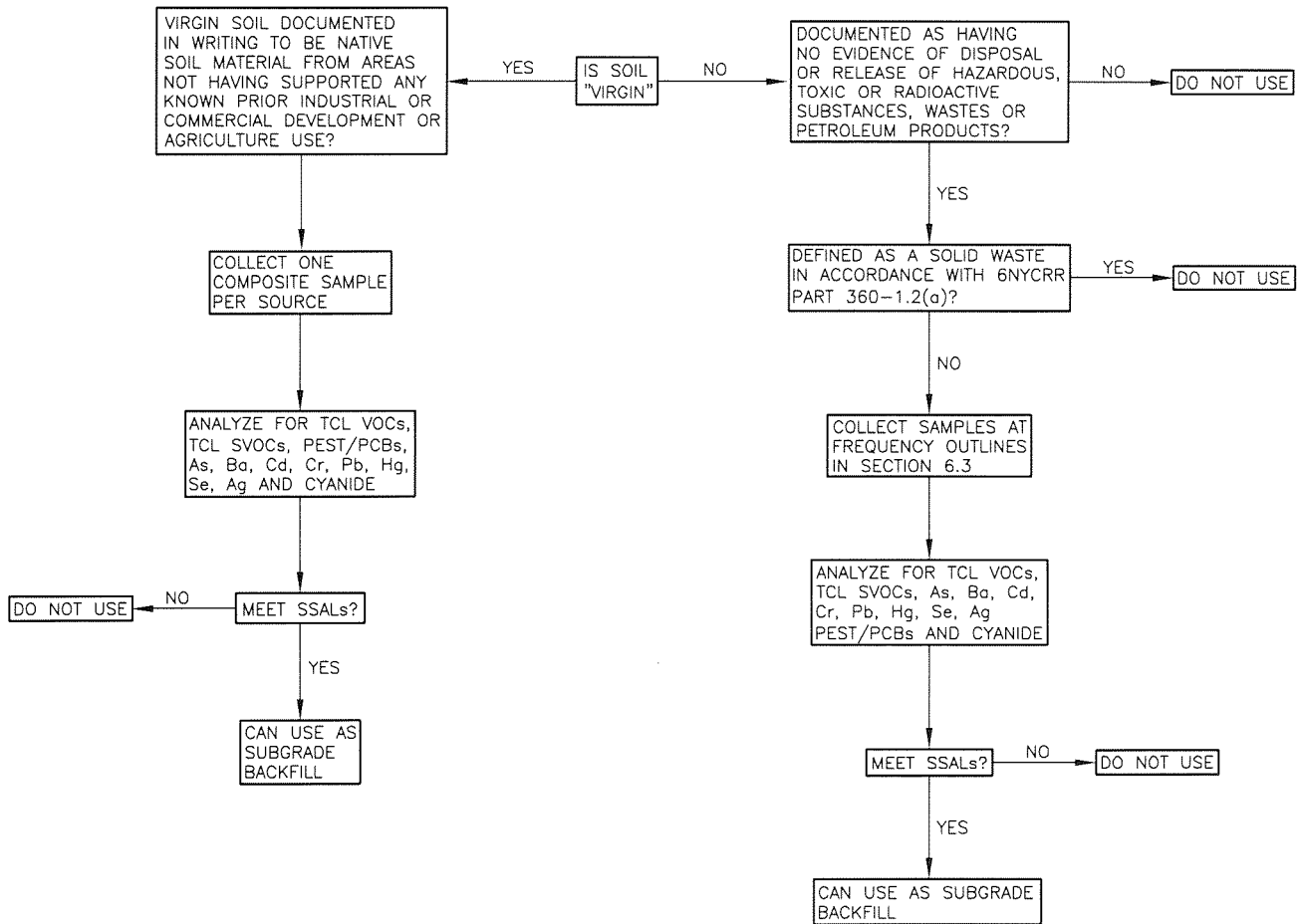


NOTE:
 1. AT ANY TIME INDIVIDUAL STOCKPILES OF VOLUMES LESS THAN THOSE STATED MAY BE CHARACTERIZED INDIVIDUALLY.

Soil Characterization Flow Chart

FIGURE 6-2

DWG PATH: I:\DIV83\PROJECTS\10569\25466\DWGS\PHASE II\008.DWG

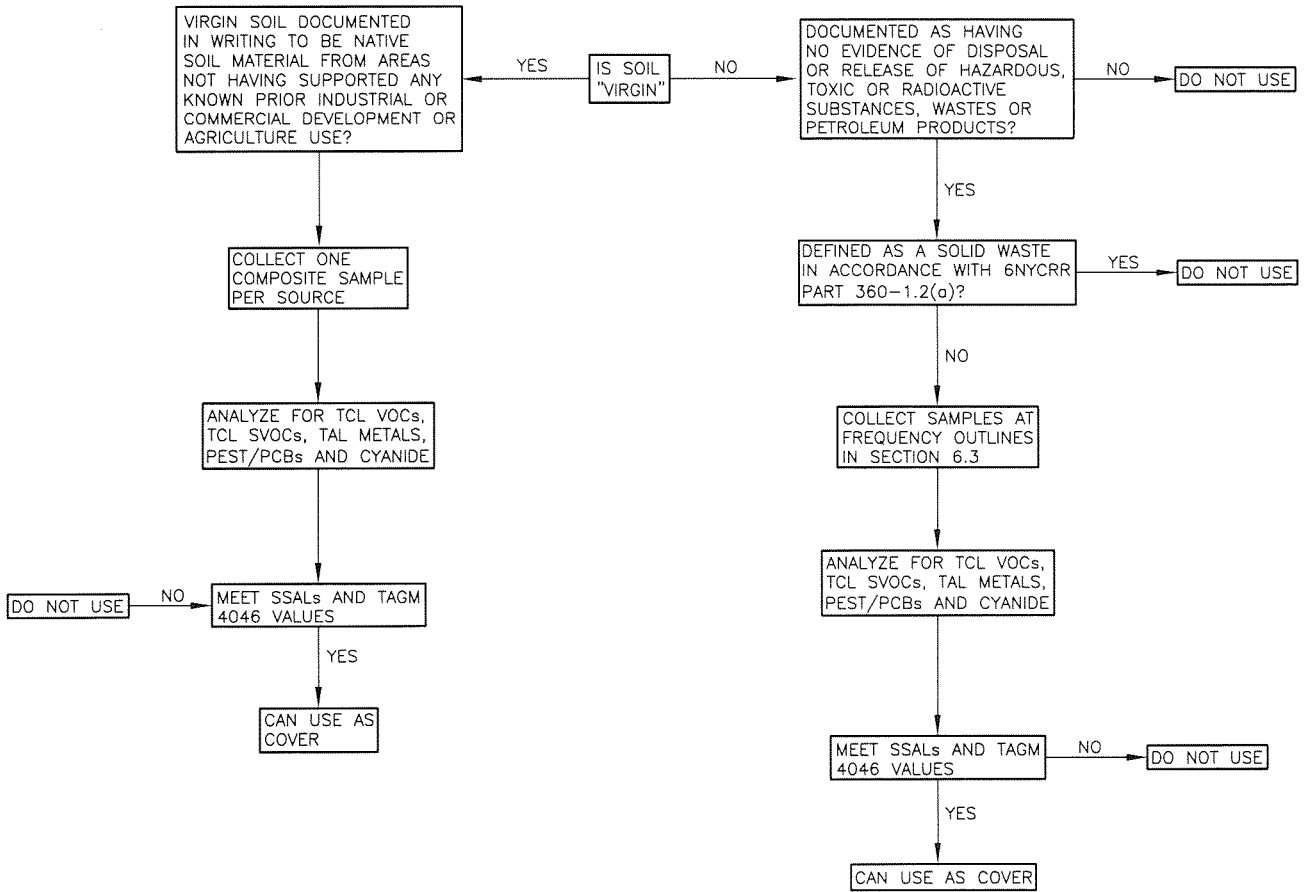


NOTE:

1. AT ANY TIME INDIVIDUAL STOCKPILES OF VOLUMES LESS THAN THOSE STATED MAY BE CHARACTERIZED INDIVIDUALLY.

Flow Chart for Subgrade Backfill Using Offsite Sources

FIGURE 6-3



Flow Chart for Cover Soil Using Offsite Sources

NOTE:

1. AT ANY TIME INDIVIDUAL STOCKPILES OF VOLUMES LESS THAN THOSE STATED MAY BE CHARACTERIZED INDIVIDUALLY.

Exhibit A
NYSDEC letter approving this Soils Management
Plan

NYSDEC APPROVAL LETTER

TO BE INSERT

Exhibit B
Waste Area Map

CHROMIUM SOIL
PARCEL A (along East Carmens Road fence)

ALL THAT PIECE OR PARCEL OF LAND SITUATE AND BEING IN THE TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK, AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE INTERSECTION OF THE SOUTHERLY SIDE OF CONKLIN STREET WITH THE EASTERLY SIDE OF EAST CARMANS ROAD; THENCE RUNNING ALONG THE EASTERLY SIDE OF EAST CARMANS ROAD, SOUTH 11 DEGREES 00 MINUTES 46 SECONDS WEST, 348.25 FEET TO A POINT;

THENCE RUNNING INTO THE PROPERTY KNOWN AS STEW LEONARD'S @ BABYLON THE FOLLOWING TWO (2) COURSES AND DISTANCES:

- (1) SOUTH 87 DEGREES 39 MINUTES 24 SECONDS EAST, 13.67 FEET TO A POINT;
- (2) SOUTH 02 DEGREES 20 MINUTES 36 SECONDS WEST, 23.01 FEET TO THE POINT OF BEGINNING.

FROM THE POINT OF BEGINNING THENCE RUNNING THE FOLLOWING EIGHT (8) COURSES AND DISTANCES:

- (1) SOUTH 10 DEGREES 43 MINUTES 47 SECONDS WEST, 644.40 FEET;
- (2) SOUTH 78 DEGREES 59 MINUTES 00 SECONDS WEST, 86.32 FEET;
- (3) NORTH 23 DEGREES 48 MINUTES 00 SECONDS EAST, 218.51 FEET;
- (4) NORTH 82 DEGREES 34 MINUTES 00 SECONDS WEST, 85.00 FEET;
- (5) NORTH 11 DEGREES 01 MINUTES 00 SECONDS EAST, 384.00 FEET;
- (6) SOUTH 87 DEGREES 40 MINUTES 00 SECONDS EAST, 80.00 FEET;
- (7) NORTH 01 DEGREES 40 MINUTES 00 SECONDS EAST, 60.00 FEET;
- (8) NORTH 87 DEGREES 40 MINUTES 00 SECONDS WEST, 124.00 FEET TO THE POINT OR PLACE OF BEGINNING.

CHROMIUM SOIL
PARCEL B (Isolated Area East of Parcel A)

ALL THAT PIECE OR PARCEL OF LAND SITUATE AND BEING IN THE TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK, AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE INTERSECTION OF THE SOUTHERLY SIDE OF CONKLIN STREET WITH THE EASTERLY SIDE OF EAST CARMANS ROAD; THENCE RUNNING ALONG THE EASTERLY SIDE OF EAST CARMANS ROAD, SOUTH 11 DEGREES 00 MINUTES 46 SECONDS WEST, 348.25 FEET TO A POINT;

THENCE RUNNING INTO THE PROPERTY KNOWN AS STEW LEONARD'S @ BABYLON THE FOLLOWING SIX (6) COURSES AND DISTANCES:

- (1) SOUTH 87 DEGREES 39 MINUTES 24 SECONDS EAST, 13.67 FEET TO A POINT;
- (2) SOUTH 02 DEGREES 20 MINUTES 36 SECONDS WEST, 23.01 FEET;
- (3) SOUTH 10 DEGREES 43 MINUTES 47 SECONDS WEST, 644.40 FEET;
- (4) SOUTH 78 DEGREES 59 MINUTES 00 SECONDS WEST, 86.32 FEET;
- (5) NORTH 23 DEGREES 48 MINUTES 00 SECONDS EAST, 218.51 FEET;
- (6) NORTH 48 DEGREES 32 MINUTES 54 SECONDS EAST, 57.25 FEET TO THE POINT OR PLACE OF BEGINNING.

FROM THE POINT OF BEGINNING THENCE RUNNING THE FOLLOWING FOUR (4) COURSES AND DISTANCES:

- (1) SOUTH 87 DEGREES 39 MINUTES 54 SECONDS EAST, 30.00 FEET;
- (2) NORTH 02 DEGREES 20 MINUTES 06 SECONDS WEST, 30.00 FEET;
- (3) NORTH 87 DEGREES 39 MINUTES 54 SECONDS WEST, 30.00 FEET;
- (4) SOUTH 02 DEGREES 20 MINUTES 06 SECONDS EAST, 30.00 FEET TO THE POINT OR PLACE OF BEGINNING.

BURIED BOTTOM SEDIMENT
(aka Glove Area)

ALL THAT PIECE OR PARCEL OF LAND SITUATE AND BEING IN THE TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK, AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE INTERSECTION OF THE SOUTHERLY SIDE OF CONKLIN STREET WITH THE EASTERLY SIDE OF EAST CARMANS ROAD; THENCE RUNNING ALONG THE EASTERLY SIDE OF EAST CARMANS ROAD, SOUTH 11 DEGREES 00 MINUTES 46 SECONDS WEST, 348.25 FEET TO A POINT;

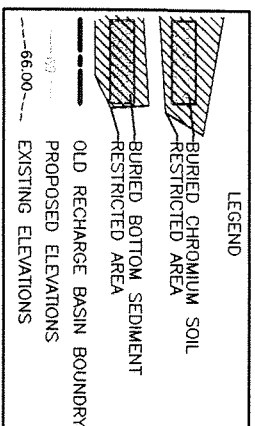
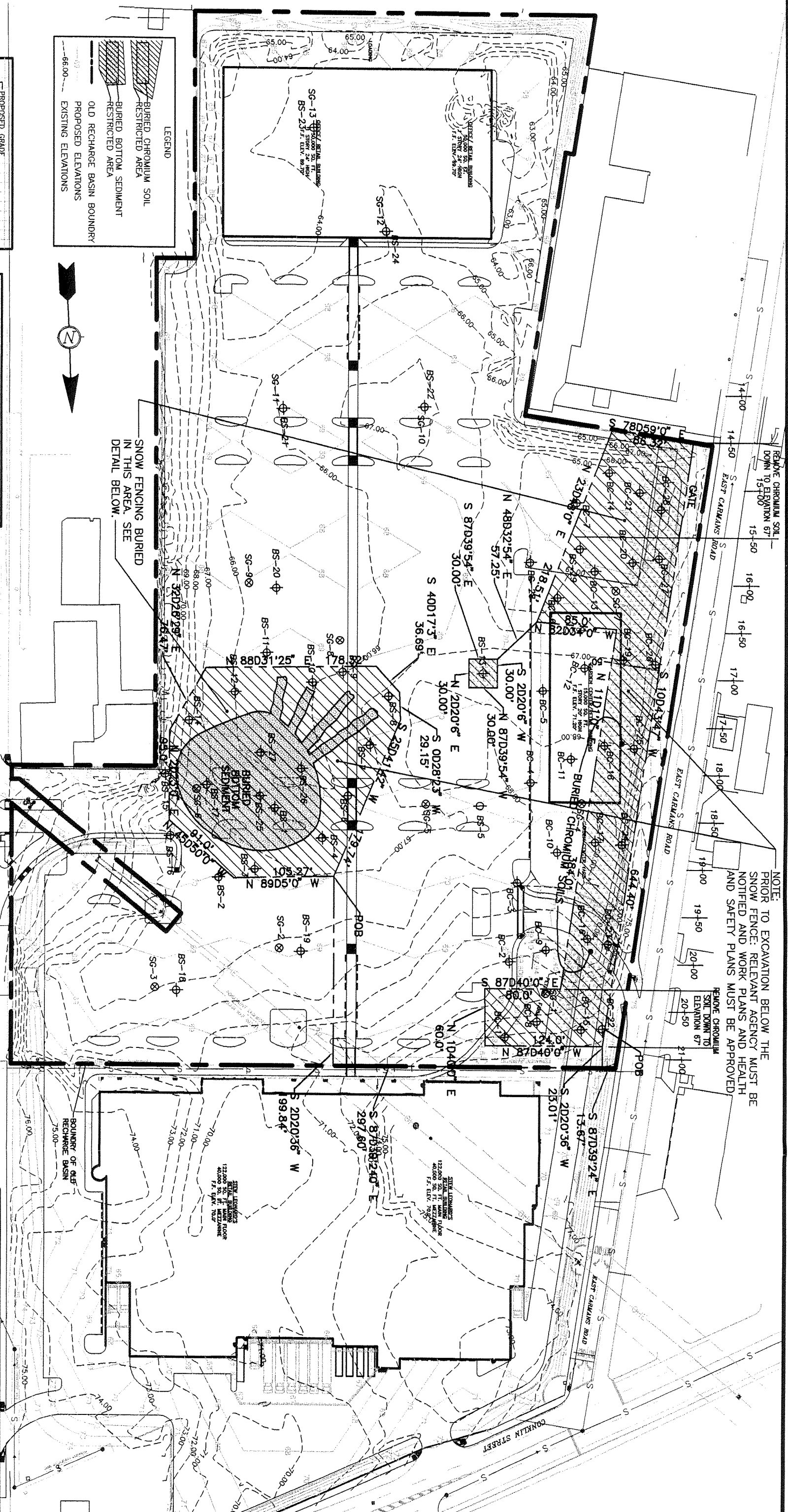
THENCE RUNNING INTO THE PROPERTY KNOWN AS STEW LEONARD'S @ BABYLON THE FOLLOWING TWO (2) COURSES AND DISTANCES:

- (1) SOUTH 87 DEGREES 39 MINUTES 24 SECONDS EAST, 297.60 FEET TO A POINT;
- (2) SOUTH 02 DEGREES 20 MINUTES 36 SECONDS WEST, 199.84 FEET TO THE POINT OF BEGINNING.

FROM THE POINT OF BEGINNING THENCE RUNNING THE FOLLOWING EIGHT (8) COURSES AND DISTANCES:

- (1) SOUTH 25 DEGREES 41 MINUTES 42 SECONDS WEST, 179.74 FEET;
- (2) SOUTH 00 DEGREES 28 MINUTES 23 SECONDS WEST, 29.15 FEET;
- (3) SOUTH 40 DEGREES 17 MINUTES 03 SECONDS EAST, 36.69 FEET;
- (4) NORTH 88 DEGREES 31 MINUTES 25 SECONDS EAST, 178.32 FEET;
- (5) NORTH 32 DEGREES 26 MINUTES 29 SECONDS EAST, 76.47 FEET;
- (6) NORTH 02 DEGREES 23 MINUTES 00 SECONDS EAST, 95.00 FEET;
- (7) NORTH 45 DEGREES 50 MINUTES 00 SECONDS WEST, 91.00 FEET;
- (8) NORTH 89 DEGREES 05 MINUTES 00 SECONDS WEST, 105.27 FEET TO THE POINT OR PLACE OF BEGINNING.

NOTE: TO EXCAVATION BELOW THE SNOW FENCE: RELEVANT AGENCY MUST BE NOTIFIED AND WORK PLANS AND HEALTH AND SAFETY PLANS MUST BE APPROVED.



TYPICAL SECTION - EXISTING GRADE

STATION	ELEVATION OF FENCE
14+50	65
15+00	65
15+50	65
16+00	65
16+50	66
17+00	66
17+50	66
18+00	66
18+50	66
19+00	69
19+50	70
20+00	67
20+50	67
20+87	67

BURIED FENCE AT ELEV. 63.00 - ELEV. 70.00

TYPICAL SECTION - PROPOSED GRADE

STATION	ELEVATION
17+00	68
17+50	68
18+00	68
18+50	68
19+00	69
19+50	70
20+00	67
20+50	67
20+87	67

BURIED FENCE AT ELEV. 66.00 - ELEV. 67.00

SOIL BORING LOG

BORING	CHROMIUM DEPTH & CONCENTRATION	EXISTING ELEVATION	PROPOSED ELEVATION
BC-1	4-12" > 40 mg/kg	74.65	70.13
BC-6	4-12" > 40 mg/kg	64.77	70.91
BC-14	4-8" > 40 mg/kg	64.80	67.82
BC-16	4-12" > 40 mg/kg	69.66	70.72
BC-17	4-12" > 40 mg/kg	68.82	70.81
BC-18	4-12" > 40 mg/kg	67.42	71.42
BC-19	4-12" > 40 mg/kg	68.90	70.99
BC-20	4-12" > 40 mg/kg	69.95	71.50
BC-24	4-8" > 40 mg/kg	67.59	72.24
BC-25	4-12" > 40 mg/kg	68.07	72.24
BC-26	4-8" > 40 mg/kg	64.86	70.56
BC-27	4-12" > 40 mg/kg	64.71	70.01
BC-28	4-12" > 40 mg/kg	64.71	70.01

SOIL BORING LOG

BORING	PCB DEPTH & CONCENTRATION	CHROMIUM DEPTH & CONCENTRATION	EXISTING ELEVATION	PROPOSED ELEVATION
BS-3	0-4" 2.1 mg/kg	BC	67.13	70.62
BS-4	4-8" 1.5 mg/kg	BC	66.50	71.10
BS-8	8-12" 8.4 mg/kg	BC	65.52	70.03
BS-10	0-4"	BC	65.30	69.96
BS-12	4-8" 5.0 mg/kg	BC	67.79	70.10
BS-13	4-8" 4.0 mg/kg	BC	69.90	72.12
BS-15	4-8"	BC	66.15	71.42
BS-25	12-18" 590 mg/kg	BC	66.15	71.42
BS-27	8-12" 370 mg/kg	BC	66.15	71.01

NOTE: THE BARRIER FENCE SHALL BE PLACED AT THE POINT OF THE WASTE AREAS. THE PLANS AND SPECIFICATIONS SHALL NOT BE ALTERED IN ANY MANNER EXCEPT AS PROVIDED UNDER SECTION 209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

CAUTION: NO DIGGING BEYOND THIS POINT W/O NYSED APPROVATION

NOTE: SIGNS TO BE PLACED 25' O.C.

TYPICAL SIGN FOR WASTE AREAS

EAST FARMINGDALE
SUFFOLK COUNTY, NEW YORK

STEW LEONARD'S @ BABYLON

EXHIBIT B
WASTE AREAS

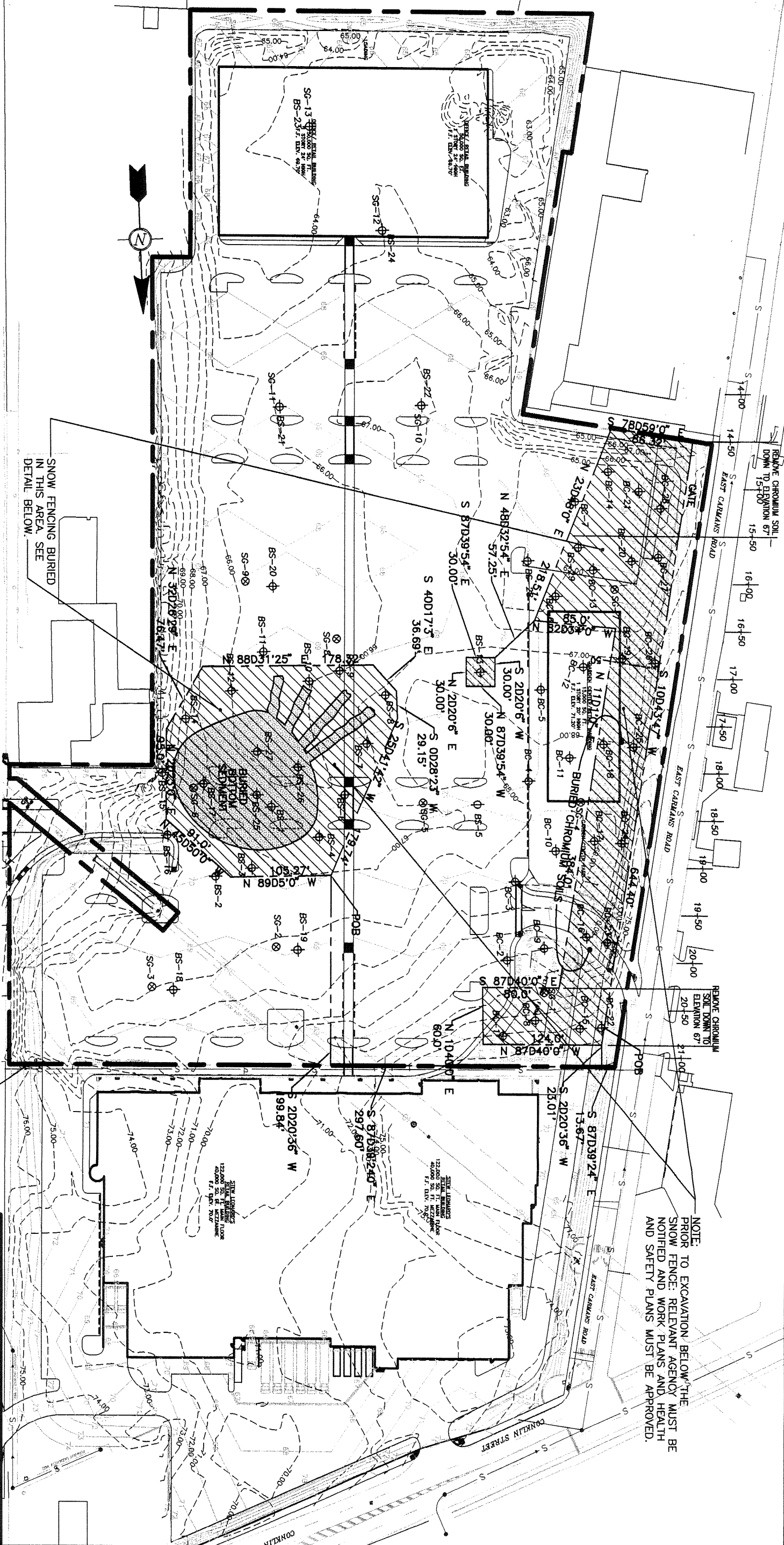
SAVK & MURRAY, LLP
CONSULTING ENGINEERS

DATE: 10-31-03
SCALE: 1"=100'
PROJECT NO.: 202012.04
CAD FILE: 202012.04PBRN

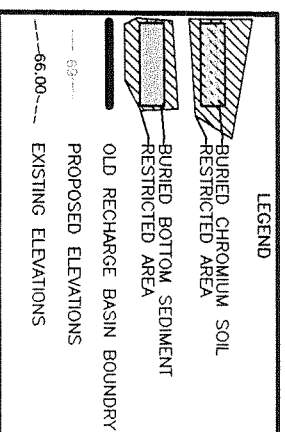
SHEET NO. 1 OF 1

Exhibit C
Elevation Map

NOTE: TO EXCAVATION BELOW THE SNOW FENCE: RELEVANT AGENCY MUST BE NOTIFIED AND WORK PLANS AND HEALTH AND SAFETY PLANS MUST BE APPROVED.



NOTE:
NO DIGGING OR EXCAVATING SHALL OCCUR BELOW
A DEPTH OF 12 FEET FROM EXISTING TOP OF
GRADE WITHOUT A PRIOR RELEVANT AGENCY
APPROVED WORK PLAN AND APPROPRIATE
ENVIRONMENTAL TESTING.



SNOW FENCING BURIED
IN THIS AREA SEE
DETAIL BELOW.

BOUNDARY OF OLD
RECHARGE BASIN

THE PLANS AND SPECIFICATIONS SHALL NOT BE
ALTERED IN ANY MANNER EXCEPT AS PROVIDED
UNDER SECTION 7209 SUBDIVISION 2 OF THE
NEW YORK STATE EDUCATION LAW.

EAST FARMINGDALE
SUFFOLK COUNTY, NEW YORK

STEW LEONARD'S @ BABYLON

EXHIBIT C
ELEVATION MAP

SAVK & MURRAY, LLP
CONSULTING ENGINEERS

DATE: 10-31-03
SCALE: 1"=100'
PROJECT NO.: 202012.04
CAD FILE: 202012.04P1R1

SHEET NO. 1 OF 1

**Exhibit D
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Exhibit E
New York State Department of Health Generic
Community Air Monitoring Plan



Department of Environmental Conservation

Division of Environmental Remediation

DRAFT DER-10

TECHNICAL GUIDANCE

FOR

SITE INVESTIGATION AND REMEDIATION

December 2002
(12/25/02)

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN M. CROTTY, *Commissioner*

DIVISION OF ENVIRONMENTAL REMEDIATION

TECHNICAL GUIDANCE FOR

SITE INVESTIGATION AND REMEDIATION

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APPENDIX 1A

New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.