

Appendix E-2
Kracke Property, Phase I ESA

Phase I
Environmental Site Assessment

Kracke Property

East Quogue, New York

NP&V Job# 14003

January 14, 2013

CONFIDENTIAL AND PRIVILEGED

**Phase I
Environmental Site Assessment**

Kracke Property

1.0 SUMMARY

The subject property has been inspected and reviewed independently by Nelson, Pope & Voorhis, LLC in order to determine potential environmental or public health concerns. This report is intended to identify Recognized Environmental Conditions (as defined in Standard Practice for Environmental Site Assessment; ASTM E 1527-13 and United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries (AAI)) on the subject property based on four (4) components of a Phase I Environmental Site Assessment (ESA): records review, site reconnaissance, interviews and evaluation and reporting. **Appendix A** provides a statement of limiting conditions. **Appendix B** includes the resumes of key personnel.

The subject property lies in the Hamlet of East Quogue, Town of Southampton, County of Suffolk, New York. The subject property consists of a ±61.6 acre undeveloped property, located on the north side of Lewis Road and the south side of Sunrise Highway, approximately 590 feet west of Spinney Road. The property consists of three (3) separate tax parcels, more particularly described as Suffolk County Tax Map #s 0900-250-02-4 and 0900-288-01-59.1 and 60. The surrounding area is moderately developed and contains a mix of residential, agricultural, and vacant land.

The subject property consists of an irregularly-shaped, undeveloped parcel of land with moderately sloped topography, that trends from higher elevations in the northern portion of the property towards lower elevations in the southern portion of the property. The majority of the subject property is wooded with underbrush with the exception of an agricultural nursery area in the southernmost portion of the property, a cleared dirt trail that runs along the eastern property edge and forms a loop in the northern portion of the property, and some additional areas on the property that have been previously cleared and are currently undergoing natural succession. There was no evidence of any existing or past structures on the subject property.

Farming and construction debris and natural debris piles were observed in several areas along the cleared dirt path and previously cleared areas. Debris observed consisted of slate roof tiles, broken concrete fragments, planting containers, a rusted and dilapidated trailer, wooden crates, a rusted and dilapidated vehicle, pieces of machinery, plastic, tires, and piles of natural material including: wood chips, leaves, twigs and soil. The soil piles appeared to consist of dumped landscaping debris piles, possible composting piles, and native soil piles from past clearing.

A large amount of debris was observed in the northern portion of the subject property, in the vicinity of the previously cleared area and dirt path loop. The debris observed included several 55-gallon drums. The drums appeared to be empty and rusted, and were possibly utilized for recreational target practice. No staining was observed in the vicinity of any of the drums or debris. However, it was not possible to inspect some of the drums located within the debris

piles. There was no evidence of any staining, storage tanks, discharge, areas of stressed vegetation, residue of oils or other toxic substances, pools of discharge, petroleum or chemical odors, or other such indicators noted during the site reconnaissance.

Sanborn map coverage was not available for the area of the subject property. Aerial photographs from 1938, 1957, 1961, 1969, 1976, 1980, 1994, 2006, 2008, 2009 and 2011 were reviewed in order to determine if any prior uses occupied the subject property. The subject property was not visible in the 1938 aerial photograph, but the surrounding area consisted mainly of farmland and wooded land, with some areas of residential development. In all of the remaining aerial photographs, the subject property appeared to be vacant land, with farmland in the southern portion of the subject property, a cleared path along the eastern and northern edges of the subject property, and wooded land in the remainder of the subject property. The presently wooded area along the cleared path in the southern portion of the subject property appeared to be cleared and utilized as farmland in the 1957-1980 aerial photographs, and appeared to be undergoing natural succession in all of the remaining aerial photographs. The surrounding area appeared to be lightly developed with a large amount of vacant, wooded land and farmland and some residential development east and south of the subject property. In addition, an area directly northwest of the subject property appeared to be undergoing development or sand mining.

The USGS Riverhead and Quogue Quadrangle Maps dated 1904, 1947 and 1956 were reviewed. Review of the topographic maps revealed that the subject property was vacant, wooded land in all of the maps, with cleared areas in the southern portion of the subject property and along the eastern edge of the subject property, and a topographic swale that transects the subject property. No structures were depicted on the subject property in any of the topographic maps. The surrounding area appeared to consist of mostly vacant land or lightly developed land in all of the topographic maps, with the Oakwood Cemetery directly southeast of the subject property.

An extensive government records search did not identify any sources of environmental degradation on the subject property. Some Federal, State and County documented regulated sites were noted in the vicinity of the subject property. Specifically, one (1) Solid Waste Facility, as well as two (2) active and eight (8) closed spill incidents are located within one-half (0.5) mile of the subject property. In addition, five (5) Petroleum Bulk Storage (PBS) facilities are located within one-quarter (0.25) mile of the subject property.

A Tier 1 Vapor Encroachment Condition (VEC) Assessment was conducted as part of this Phase I ESA, due to the proximity of several spill incidents. The assessment was conducted in accordance to the methods and procedures, outlined within ASTM E2600-10, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

For this assessment, under conditions where the direction of groundwater flow can be ascertained, critical search distances are used to determine if a VEC exists. Specifically, the following distances are applied to the Tier I Assessment:

Upgradient Sources

1,760 feet for Chemical of Concern (COC)

520 feet for petroleum hydrocarbons

Cross-gradient Sources

365 feet for COC

165 feet for petroleum hydrocarbon LNAPL sources & 95 feet dissolved petroleum hydrocarbon sources with plume considerations

Down-gradient Sources

100 feet for COC/petroleum hydrocarbon LNAPL sources

30 feet dissolved petroleum hydrocarbon sources

Review of the regulatory agency database report provided for the subject property revealed one (1) site that was identified as a PBS facility and a Solid Waste facility within the critical up-gradient distance. All of the storage tanks on the site appeared to be above ground storage tanks containing petroleum with the exception of two (2) underground tanks that were reportedly closed and removed several years ago. In addition, the site was identified as a registered C&D Processing Facility of concrete and natural wood wastes, which are not expected to adversely affect the subsurface resources of the subject property. The facility is permitted and regulated by state or federal agencies and is not expected to adversely affect the subject property. Therefore, the subject property is not expected to be adversely affected by a VEC. Based on the information reviewed, it is concluded that a VEC can be ruled out.

This assessment has identified the following with respect to recognized environmental conditions, historic recognized environmental conditions and de minimus conditions in connection with the subject property, subject to the methodology and limitations of this report.

Three (3) recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

1. Several soil and debris piles were observed along the cleared path on the eastern property edge and in the vicinity of the cleared area in the northern portion of the subject property. Some of these piles appeared to have been imported or dumped from outside sources. These piles should be sampled in order to ensure that they are not adversely affecting the subsurface resources of the subject property. Following sampling, all of the debris piles should be removed and properly disposed of.
2. A rusted and dilapidated vehicle and other pieces of machinery were observed during the reconnaissance of the subject property. Any metal debris associated with the vehicle and machinery should be removed and properly disposed of. Any engines encountered during removal should be inspected for evidence of staining and sampled beneath in order to ensure that they have not adversely affected the subsurface resources of the subject property.
3. Several 55-gallon drums were observed in the vicinity of the previously cleared area and dirt path loop. The drums appeared to be empty and rusted, and were possibly utilized for recreational target practice. No staining was observed in the vicinity of any of the drums or debris. However, it was not possible to inspect some of the drums located within the debris piles. The debris pile should be sampled in locations that drums are present and the drums should be more closely inspected. Any drums found to be sealed

and containing liquid should be inspected for leakage and sampled in order to ensure that they have not adversely affected the subsurface resources of the subject property. Following inspection and sampling, all drums should be removed from the subject property and properly disposed of.

No controlled recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

Two (2) de minimus conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

1. The southernmost portion of the subject property is presently utilized as an agricultural nursery. In addition, historic aerial photographs revealed that a larger area along the existing dirt path in the southern portion of the subject property was previously cleared for agricultural use. If the property is to be used for residential or active recreation, it is recommended that a pesticide survey be conducted in order to ensure that the surface soils have not been impacted by previous agricultural operations.
2. Farming and construction debris and some piles of native natural material were observed along the cleared dirt path on the eastern property edge and throughout the previously cleared areas of the subject property. Debris observed consisted of slate roof tiles, broken concrete fragments, planting containers, a rusted and dilapidated trailer, wooden crates, plastic, tires, and some piles of native natural material. This debris is not expected to have adversely affected the subsurface resources of the subject property; however, the debris should be removed and properly disposed of.

No historic recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

NP&V has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 and USEPA AAI for the Kracke Property located in East Quogue, New York. Any exceptions to, or deletions from, this practice are described in Section 11.0 of this report. In conclusion, this assessment has revealed evidence of three (3) recognized environmental conditions and two (2) de minimus conditions in connection with the subject property, subject to the methodology and limitations of this report.

3.0 SITE DESCRIPTION & RECONNAISSANCE

3.1 OBJECTIVES

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the subject property. The site reconnaissance typically involves observing all areas of the subject property in order to determine if any potential recognized environmental conditions are present.

3.2 METHODOLOGY

All portions of the subject property were observed to the best extent possible based on the existing vegetation in order to identify any potential recognized environmental conditions which may be present.

3.3 LIMITATIONS

There were no limitations encountered during the site reconnaissance of the subject property. All areas of the property were inspected without impediments.

3.4 LOCATION, SETTING AND LEGAL DESCRIPTION

The subject property lies in the Hamlet of East Quogue, Town of Southampton, County of Suffolk, New York. The subject property consists of a ±61.6 acre undeveloped property, located on the north side of Lewis Road and the south side of Sunrise Highway, approximately 590 feet west of Spinney Road. The property consists of three (3) separate tax parcels, more particularly described as Suffolk County Tax Map #s 0900-250-02-4 and 0900-288-01-59.1 and 60. The surrounding area is moderately developed and contains a mix of residential, agricultural, and vacant land. **Figure 1** provides a location map depicting the subject property and the surrounding area. *All figures are located in a separate section immediately following the text of this report.*

3.5 EXISTING AND PAST SITE USES

The subject property consists of an irregularly-shaped, undeveloped parcel of land with moderately sloped topography, that trends from higher elevations in the northern portion of the property towards lower elevations in the southern portion of the property. The majority of the subject property is wooded with underbrush with the exception of an agricultural nursery area in the southernmost portion of the property, a cleared dirt trail that runs along the eastern property edge and forms a loop in the northern portion of the property, and some additional areas on the property that have been previously cleared and are currently undergoing natural succession. There was no evidence of any existing or past structures on the subject property. A copy of a recent aerial illustrating the conditions on the subject property is provided as **Figure 2**.

In terms of available records, historical use can be documented using a variety of standard records. The intent is to trace land use to a period prior to 1940. For the purpose of this Environmental Site Assessment, as many sources as are reasonably available have been consulted. The following are considered standard historical sources:

- Aerial Photographs
- Fire Insurance Maps (Sanborn Maps)
- Property Tax Files
- Recorded Land Title Records
- USGS 7.5 Minute Topographic Maps
- Local Street Directories (Cole Directories)
- Building Department Records
- Zoning/Land Use Records

3.5.1 Aerial Photography

Aerial photographs from 1938, 1957, 1961, 1969, 1976, 1980, 1994, 2006, 2008, 2009 and 2011 were reviewed in order to determine if any prior uses occupied the subject property. The subject property was not visible in the 1938 aerial photograph, but the surrounding area consisted mainly of farmland and wooded land, with some areas of residential development. In all of the remaining aerial photographs, the subject property appeared to be vacant land, with farmland in the southern portion of the subject property, a cleared path along the eastern and northern edges of the subject property, and wooded land in the remainder of the subject property. The presently wooded area along the cleared path in the southern portion of the subject property appeared to be cleared and utilized as farmland in the 1957-1980 aerial photographs, and appeared to be undergoing natural succession in all of the remaining aerial photographs. The surrounding area appeared to be lightly developed with a large amount of vacant, wooded land and farmland and some residential development east and south of the subject property. In addition, an area directly northwest of the subject property appeared to be undergoing development or sand mining. Refer to **Appendix E** for a copy of the aerial photographs.

3.5.2 Sanborn Maps

Sanborn map coverage was not available for the area of the subject property, since it has always consisted of vacant land.

3.5.3 USGS Quadrangle Maps

The USGS Riverhead and Quogue Quadrangle Maps dated 1904, 1947 and 1956 were reviewed. Review of the topographic maps revealed that the subject property was vacant, wooded land in all of the maps, with cleared areas in the southern portion of the subject property and along the eastern edge of the subject property, and a topographic swale that transects the subject property. No structures were depicted on the subject property in any of the topographic maps. The surrounding area appeared to consist of mostly vacant land

or lightly developed land in all of the topographic maps, with the Oakwood Cemetery directly southeast of the subject property. Refer to **Appendix G** for a copy of the topographic maps.

3.5.4 Other Sources

No other sources of information were obtained or known to be available with regard to historical uses of the subject property.

3.5.5 Data Gaps

The aerial photographs received exceeded the five (5) year interval in several consecutive photographs in the series as noted above. The data gap has been evaluated and it is noted that the subject property has always been vacant land.

3.6 SITE AND VICINITY CHARACTERISTICS

The subject property consists of an irregularly-shaped, undeveloped parcel of land with moderately sloped topography, that trends from higher elevations in the northern portion of the property towards lower elevations in the southern portion of the property. The majority of the subject property is wooded with underbrush with the exception of an agricultural nursery area in the southernmost portion of the property, a cleared dirt trail that runs along the eastern property edge and forms a loop in the northern portion of the property, and some additional areas on the property that have been previously cleared and are currently undergoing natural succession. There was no evidence of any existing or past structures on the subject property. **Appendix D** contains site photographs which depict typical views of the subject property. An aerial photograph depicting the existing conditions of the subject property is provided as **Figure 2**.

The area immediately surrounding the subject property is a mix of vacant land, agricultural and residential uses that are described in more detail in **Section 3.8**. An aerial photograph depicting the surrounding property uses is provided as **Figure 3**.

3.7 DESCRIPTION OF SITE CONDITIONS

Farming and construction debris and natural debris piles were observed in several areas along the cleared dirt path and previously cleared areas. Debris observed consisted of slate roof tiles, broken concrete fragments, planting containers, a rusted and dilapidated trailer, wooden crates, a rusted and dilapidated vehicle, pieces of machinery, plastic, tires, and piles of natural material including: wood chips, leaves, twigs and soil. The soil piles appeared to consist of dumped landscaping debris piles, possible composting piles, and native soil piles from past clearing.

A large amount of debris was observed in the northern portion of the subject property, in the vicinity of the previously cleared area and dirt path loop. The debris observed included several

55-gallon drums. The drums appeared to be empty and rusted, and were possibly utilized for recreational target practice. No staining was observed in the vicinity of any of the drums or debris. However, it was not possible to inspect some of the drums located within the debris piles. There was no evidence of any staining, storage tanks, discharge, areas of stressed vegetation, residue of oils or other toxic substances, pools of discharge, petroleum or chemical odors, or other such indicators noted during the site reconnaissance.

The subject property consists of an irregularly-shaped, undeveloped piece of land.

Construction - There was no evidence of any past or existing structures observed during the reconnaissance of the subject property.

Roads or Parking Areas - A cleared dirt trail runs along the eastern property edge and forms a loop in the northern portion of the property, and some additional areas on the property that have been previously cleared and are currently undergoing natural succession. There were no paved roads or parking areas observed during the reconnaissance of the subject property.

Hazardous Substances or Pools of Liquids - No hazardous substances were identified on the subject property.

Asbestos Containing Material (ACM) - No suspected asbestos containing materials were observed during the site reconnaissance. There are no structural improvements present on the subject property.

Storage Tanks - No storage tanks were observed on the subject property during the site reconnaissance.

Drum Storage - Several 55-gallon drums were observed in the vicinity of the cleared area in the northern portion of the subject property. The drums appeared to be empty and rusted, and were possibly utilized for recreational target practice. No staining was observed in the vicinity of any of the drums or debris. However, it was not possible to inspect some of the drums located within the debris piles.

Polychlorinated Biphenyls (PCBs) - No PCBs were noted on the subject property during the site reconnaissance.

Sanitary Disposal - No on-site sanitary systems were observed on the subject property since no building improvements were present.

Water Supply - The surrounding area is serviced by the Suffolk County Water Authority (SCWA) which maintains a distribution system in the area of the subject property.

Stormwater - No stormwater drainage features were observed during the reconnaissance of the subject property.

Wells - No wells were observed during the reconnaissance of the subject property.

3.8 Adjacent Land Use

Current land use at the subject property and surrounding area is described based on aerial photographs and visual observations. The area immediately surrounding the subject property is a mix of vacant land, residential, commercial and institutional uses. An aerial photograph depicting the surrounding property uses is provided as **Figure 3**.

North: An area presently undergoing development or sand mining, beyond which is Sunrise Highway.

South: Agricultural farmland, beyond which is Lewis Road.

East: Vacant, wooded land and a cemetery, beyond which are single-family residential homes.

West: Agricultural farmland, beyond which is Griffing Road.

Past uses in the vicinity of the subject property are described based on review of historic aerial photographs and the field reconnaissance. The area surrounding the subject property was primarily vacant wooded land prior to the construction of the existing developments surrounding the subject property.

3.9 NATURAL SETTING

3.9.1 Soils and Topography

The surficial geology of a site can often provide insight into the past activities on a given parcel of land. The Soil Survey of Suffolk County, conducted by the U.S. Department of Agriculture in 1975 is a useful source of soils information, which identifies soil types resulting from natural deposition and modification, as well as man-induced alterations associated with land use.

The subject property is comprised of soil types: CpC - Carver and Plymouth sands (3-15% slopes), CuB - Cut and fill land (gently sloping), PIA - Plymouth loamy sand (0-3% slopes), PIB - Plymouth loamy sand (3-8% slopes), RdA - Riverhead sandy loam (0-3% slopes), and RdB - Riverhead sandy loam (3-8% slopes). The characteristics of these soil types are identified as follows (**Warner et al., 1975**):

Carver and Plymouth Sands, 3-15% slopes (CpC) - These soils are mainly on rolling moraines; however, they are also on the side slopes of many drainage channels on the outwash plains. Individual areas of this mapping unit are large on the rolling topography of the Ronkonkoma moraine, and in these areas slopes are complex. On the outwash plain, this unit is in long, narrow strips parallel to drainageways. This unit can be made up entirely of Carver sand, entirely of Plymouth sand, or of a combination of the two soils. The hazard of erosion is slight to moderate on the soils in this unit. The soils are droughty, and natural fertility is low. In some places, slope is a limitation to use. These sandy soils severely limit installation and maintenance of lawns and landscaping shrubs. Almost all of these soils are in woodlands.

Cut and fill land, gently sloping (CuB) - This series is comprised of areas that have been cut and filled for nonfarm uses. The areas generally are large, but some areas are about five (5) acres in size. This soil type is comprised of moderately sloping areas that have been graded for building sites. Slopes range from 1 to 8 percent.

Plymouth loamy sand, 0-3% slopes (PIA) - Consists of deep, excessively drained, coarse-textured soils that form a mantle of loamy sand or sand over thick layers of stratified coarse sand and gravel. These soils are mainly on outwash plains south of the Ronkonkoma moraine. The areas are generally level, but undulate in some areas. The hazard of erosion is slight.

Plymouth loamy sand, 3-8% slopes (PIB) - Consists of deep, excessively drained, coarse-textured soils that formed in a mantle of loamy sand over thick layers of stratified coarse sand and gravel. This soil is on moraines and outwash plains. The erosion hazard is slight and soil tends to be droughty.

Riverhead Sandy Loam, 0-3% slopes (RdA) - Consists of deep, excessively drained, coarse-textured soils that formed in a mantle of sandy loam or fine sandy loam over thick layers of coarse sand and gravel. This soil is generally found on outwash plains, and the areas are large and uniform. The hazard of erosion is slight.

Riverhead sandy loam, 3-8% slopes (RdB) - This soil is on moraines and outwash plains. It generally is in areas along shallow, intermittent drainageways. Slopes generally are moderately short, but large areas on moraines are undulating. The hazard of erosion is moderate to slight on this Riverhead soil. The main concerns of management are controlling runoff and erosion and providing adequate moisture.

The nature of the surrounding area consists of vacant land, agricultural, and residential uses. The subject property contains moderately sloped topography, that trends from higher elevations in the northern portion of the property towards lower elevations in the southern portion of the property. Neither soils nor topography appear to pose a constraint to the current use of the subject property. Bedrock in the vicinity of the subject property is approximately 1,500 feet below grade. The soil types overlying the subject property are illustrated in **Figure 5**. The topography of the subject property is provided in **Figure 6**.

3.9.2 Groundwater Resources

Groundwater on Long Island is entirely derived from precipitation. Precipitation entering the soils in the form of recharge, passes through the unsaturated zone to a level below which all strata are saturated, referred to as the water table. The groundwater table is equal to sea level on the north and south shores of Long Island, and rises in elevation toward the center of the Island. The high point of the parabola is referred to as the groundwater divide. The changes in elevation of the water table create a hydraulic gradient which causes groundwater to flow, dependent upon potential.

The subject property is located to the south of the regional groundwater divide indicating that in the horizontal plane, flow is generally toward the south southeast. Groundwater will be discharged from the subsurface system into Weesuck Creek and Shinnecock Bay. The major water bearing units beneath the subject property include: the Upper Glacial aquifer, the Magothy aquifer, and the Lloyd aquifer (**Smolensky et al, 1989**).

The elevation of groundwater beneath the subject property is approximately fourteen (14) feet above msl, depending on meteorological conditions associated with the water year. The topographic elevation of the subject property ranges from approximately forty-two (42) feet in the southernmost portion of the property, to 116 feet in the northernmost portion of the property. Therefore, the depth to groundwater ranges from approximately 28 to 102 feet. The water table elevations and generalized direction of flow are illustrated in **Figure 7**.

The Suffolk County Comprehensive Water Resources Management Plan (SCCWRMP) provides information on water quality from 0 to 400 feet below the water table, based upon observation as well as public and private water supply and well monitoring. The general area in proximity to the subject property is depicted as having good water quality with respect to nitrate-nitrogen (0-6 mg/l) at between 0 and 100 feet. With regard to organic compounds, SCDHS water quality data presented in the Suffolk County Comprehensive Water Resources Management Plan indicates that Volatile Organic Compound levels at 0-100 feet below the water table are good (<60% of standard) and found not to exceed drinking water standards the majority of the time; however, there are several areas in proximity to the site that exceed drinking water standards for organic parameters.

The Suffolk County Department of Health Services (SCDHS) conducted an eighteen (18) month long study of the impact pesticides have had on the groundwater. The study obtained water quality information from across the full geographic area of both counties in order to identify if any pesticides and metabolites had leached into the groundwater. The data from the wells in Nassau County and the five (5) western Towns of Suffolk show that only 1.5 and 2.0%, respectively, exceeded the pesticide related drinking water MCL and 15.4% of the wells in the five (5) eastern Suffolk Towns exceeded the MCL. Private wells in the five (5) eastern towns are at the highest risk of pesticides contamination. Based on the maps provided in the appendix of the SCDHS report the subject property is not located in the vicinity of any public water supply wells with pesticide detections. Susceptibility to pesticides is rated as low to medium throughout most of the County, except on the North Fork, where community supply wells are highly or very highly susceptible to pesticide contamination due to agricultural land uses.

The nearest water supply well to the subject property is the Spinney Road Well Field and Pump Station. This well field is located on the southwest corner of Spinney Road and Serenity Place, approximately 300 feet east of the subject property.

3.9.3 Wetlands

The subject property was inspected to identify the possible presence of any wetland vegetation and/or water surfaces that would sustain wetland vegetation. The site reconnaissance revealed that there are no wetland species located on the subject property. Review of NYSDEC Freshwater Wetland Maps and National Wetland Inventory Maps verified that there are no wetlands located on the subject property. The NYSDEC Freshwater Wetland Map, **Figure 9**, revealed that a portion of Weesuck Creek, located approximately 0.6 miles southeast of the subject property, is the nearest Freshwater Wetland to the subject property and is designated Q-10. The National Wetlands Inventory Map, **Figure 10**, also identified this area and classified it as containing Freshwater Ponds, Freshwater Forested/Shrub Wetlands, and Estuarine and Marine Wetlands. In addition, the National Wetland Inventory Map identified several small Freshwater Ponds, Freshwater Forested/Shrub Wetlands, and Freshwater Emergent Wetlands within approximately 1,000 feet north and southwest of the subject property. This report is not a substitute for inspection of the site by a qualified biologist.

3.9.4 Coastal Barrier Improvements/Flood Plains

The subject property is not located in the vicinity of a coastal area; therefore, no coastal barrier improvements exist or are required. The subject property is located in Flood Zone X, an area of minimal flooding. The subject property is approximately 0.6 miles northwest of an area with a 0.2% chance annual flood hazard, which is located along Weesuck Creek. The portion of the Flood Insurance Rate Map that covers the subject property is provided in **Figure 11**.

3.9.5 Critical Habitat/Endangered Species

The NYSDEC Environmental Resource Mapper identified the subject property as being located within the vicinity of two (2) rare plants. The rare plants identified in the vicinity of the subject property included: the threatened Little-leaf Tick-trefoil and the endangered Golden Dock. This report is not a substitute for an endangered species survey.

4.0 USER PROVIDED INFORMATION AND INTERVIEWS

The purpose of this section as defined in Section 6 of the ASTM E1527-13 is to describe tasks to be performed by the user (the individual or entity for which this document has been prepared) that will help identify the possibility of recognized environmental conditions in connection with the subject property. This information does not require the technical expertise of an environmental professional and is generally not performed by environmental professionals who prepare Phase I Environmental Site Assessments. The information provided in this section is the sole responsibility of the user and has been included in this report if provided by the user.

4.1 Title Records

No Title Insurance Report was provided for review as part of this Phase I ESA.

4.2 Environmental Liens or Activity and Use Limitations

No environmental liens appear to have been imposed on the subject property. No other activity or use limitations have been imposed on the subject property to best of our knowledge.

4.3 Specialized Knowledge Obtained from Interviews

No specialized knowledge regarding the environmental quality of the subject property was obtained.

4.4 Commonly Known or Reasonably Ascertainable Information

No additional information, other than that previously noted was available or provided regarding the subject property.

4.5 Property Valuation Reduction for Environmental Issues

Based on the inspection of the property and review of available documentation, no reduction in the price of the land appears to be warranted due to the presence of past or existing hazardous or toxic materials, provided items discussed in Section 6.0 are addressed.

4.6 Owner, Property Manager and Occupant Information

The Suffolk County Tax Assessor records indicated that the property is presently owned by John D. Kracke.

4.7 Reason for Performing Phase I ESA

This Phase I ESA has been completed as part of the due diligence of purchasing the development rights of the subject property.

5.0 ENVIRONMENTAL RECORDS AND AGENCY DATA REVIEW

With the understanding of the facilities at the subject property, it is important to establish the environmental and regulatory conditions of the subject property and surrounding area, as related to public health and environmental issues. This section of the report includes a review of agency records, soils and groundwater resources and historical data review. The site inspection and the environmental and regulatory conditions form the basis for conclusions regarding the risks and liabilities associated with this site.

5.1 STANDARD ENVIRONMENTAL RECORD SOURCES

A search of Federal, State and Local databases was performed in order to provide a profile of the site and surrounding area with regard to published government agency records. The procedures employed adhere as closely as possible to ASTM standards.

Contact was made with the United States Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), the Suffolk County Department of Health Services (SCDHS), and local government regarding environmental and/or public health concerns associated with the subject property.

5.1.1 United States Environmental Protection Agency

The United States Environmental Protection Agency was contacted in order to obtain information regarding the National Priorities List (NPL), and sites documented on the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS). The NPL defines all known hazardous material waste sites, which are described by the Federal Government as needing immediate cleanup action. All hazardous material waste sites considered for addition to the NPL are listed in the CERCLIS list.

Review of the NPL Site List (search distance 1.0 mile), and the CERCLIS) lists (search distance 0.5 miles) finds the following with respect to the subject property and surrounding area:

1. Subject property did not appear on the NPL, Delisted NPL or CERCLIS lists.
2. There were no sites appearing on the NPL list located within one (1.0) mile of the subject property.
3. There were no sites appearing on the Delisted NPL list located within one half (0.5) mile of the subject property.
4. There were no sites appearing on the CERCLIS list located within one-half (0.5) mile of the subject property.
5. There were no sites appearing on the CERCLIS NFRAP list located within one-half (0.5) mile of the subject property.

The USEPA was also contacted in order to obtain information concerning RCRA TSD facilities (treatment, storage, and disposal of hazardous wastes, as defined and regulated by the Resource Conservation and Recovery Act, RCRA), and RCRA Generators (of hazardous wastes as defined and regulated by RCRA). RCRA TSD facilities are sites that treat, store or dispose of wastes that can be toxic, flammable, corrosive, explosive or otherwise hazardous; and, RCRA Generators are sites that generate or transport wastes of the above noted characteristics. The search also included review of the Emergency Response Notifications System (ERNS) list, which is a list of reported releases or spills in quantities greater than reportable quantities, Federal Permit Compliance System Toxic Wastewater Discharges (PCSTWD) which permits toxic wastewater discharges and Federal Civil Enforcement Docket (CED) which lists judiciary cases filed on behalf of the EPA by the Department of Justice.

Review of the RCRA TSD Facilities List (search distance 1.0 mile), the PCSTWD and CED facilities (search distance 0.25 mile), the RCRA Generator List (search distance, subject property and adjoining properties), and the ERNS List (search distance, subject property only) finds the following with respect to the subject property and surrounding area:

1. The subject property did not appear on the RCRA TSD Facilities List, or the ERNS List.
2. The subject property was not listed as a RCRA Generator.
3. The subject property was not listed as a Civil Enforcement Docket Facility.
4. The subject property was not listed for a Permit Compliance System Toxic Wastewater Discharge.
5. The subject property was not identified on the ERNS list.
6. There were no sites listed as a RCRA TSD facility identified within one (1.0) mile of the subject property.
7. There were no RCRA Generators listed within one-quarter (0.25) mile of the subject property.
8. There were no CED facilities within one-quarter (0.25) mile of the subject property.
9. There were no PCSTWD facilities located within one-quarter (0.25) mile of the subject property.

The RCRA Generator program is intended to track the origin and destination of hazardous waste, and there is no indication that listing on this inventory constitutes an environmental threat. In addition, the Federal Facilities Index that includes resources conservation and Recovery Corrective Action Sites (CORRACTS) were reviewed. No sites were identified in the vicinity of the subject property.

5.1.2 New York State Department of Environmental Conservation (NYSDEC)

The NYSDEC is charged with the responsibility of registering inactive hazardous waste disposal sites, and administering the investigation and cleanup of such sites. The NYSDEC inventory is contained in the publication, Inactive Hazardous Waste Disposal Sites in New York State. The inventory provides the location, extent of contamination and remediation status of each listed site in New York State. Accordingly, the registry of

the NYSDEC was consulted for information on Inactive Hazardous Waste Disposal Sites (IHWDS). The NYSDEC provides information regarding Hazardous Substance Waste Disposal Sites (HSWDS) that are sites contaminated with toxic substances but are not eligible for state cleanup funding programs. The NYSDEC provides information regarding Brownfield cleanup site - these are sites that are abandoned, idled or under-used industrial and/or commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination. Similarly, the NYSDEC is responsible for permitting Solid Waste Facilities (SWF) - these are facilities including landfills, incinerators, transfer stations and other solid waste management sites. The NYSDEC also registers Petroleum Bulk Storage (PBS) where the total storage capacity at the facility exceeds 1,100 gallons, Chemical Bulk Storage (CBS), Major Oil Storage Facilities (MOSF) and Toxic Release Inventory Sites (TRI). Finally, the NYSDEC regulates and monitors Air Discharges and NYS Toxic Spills which include Leaking Underground Storage Tanks (LUSTs).

Review of the IHWDS, Brownfield Sites and HSWDS Lists (search distance 1.0 mile), SWF, CBS and MOSF lists, and LUST Lists (search distance 0.5 miles), TRI and Air Discharge sites (search distance 0.25 miles) and the PBS List (search distance, subject property and adjoining properties) finds the following with respect to the subject property and surrounding area:

1. The subject property was not listed as an IHWDS Brownfields or HSWDS site.
2. The subject property was not listed on the SWF, CBS or MOSF Lists.
3. The subject property was not listed as a PBS facility.
4. The subject property was not listed on the NYS Toxic Spill site list.
5. The subject property was not listed as a TRI Site.
6. The subject property was not listed on the NYS Air Discharge list.
7. The subject property was not listed as having a LUST incident.
8. There were no IHWDS listings located within one (1.0) mile of the subject property.
9. There were no HSWDS facilities located within one (1.0) mile of the subject property.
10. There were no Brownfields Sites located within one (1.0) mile of the subject property.
11. There was one (1) SWF listing identified within one-half (0.5) mile of the subject property.
 - a. East Coast Mines (Facility ID# 52W36R), located 1,390 feet to the north-northwest on Lewis Road, was identified as a registered C&D Processing Facility of concrete and natural wood wastes. No additional information regarding the facility was provided.
12. There were five (5) PBS facilities within one-quarter (0.25) mile of the subject property.
 - a. John D Kracke (Facility ID# 12825), located 292 feet to the south on Lewis Road, utilizes four (4) outdoor above ground storage tanks including: an exempt 275 gallon #2 fuel oil storage tank that was installed in 1979, a non-complying 275 gallon diesel storage tank that was installed in 1991, a non-complying 550 gallon gasoline storage tank that was installed in 1991, and an exempt 275 gallon gasoline storage tank that was installed in 1991. The non-complying storage tanks were listed as requiring compliance as of 1985. In addition, the facility utilized a 550 gallon outdoor underground gasoline storage tank that was removed in 1991.

- b. Spinney Road Wellfield (Facility ID# 12764), located 431 feet to the southeast on Spinney Road, utilizes a 640 gallon indoor above ground lime slurry storage tank and a 275 gallon indoor above ground #2 fuel oil storage tank. Both storage tanks were listed as exempt.
 - c. Edward Wright Cesspool (Section 288) (Facility ID# 12813), located 683 feet to the south on Demasces Road, utilizes one an exempt 275 gallon outdoor above ground #2 fuel oil storage tank. The facility previously utilized a 275 gallon outdoor above ground waste oil storage tank and a 1,000 gallon outdoor above ground diesel storage tank that were removed in 2000, a 1,000 gallon outdoor underground diesel storage tank and a 275 gallon indoor above ground waste oil storage tank that were removed in 1990, and a 550 gallon outdoor underground gasoline storage tank that was removed in 1986.
 - d. Vacant Land (Facility ID# 9-0326), located 1,238 feet to the south on Damascus Road, listed a 10,000 gallon outdoor underground #2 fuel oil storage tank that was reportedly never installed.
 - e. East Coast Mines (Facility ID# 12872), located 1,269 feet to the north-northwest on Lewis Road, utilizes a 10,000 outdoor above ground diesel storage tank that had a permit issued in 1992, which expired in 1997. In addition, the facility previously utilized two (2) 4,000 gallon outdoor underground diesel storage tanks, a 1,000 gallon outdoor above ground diesel storage tank, and a 2,000 gallon outdoor above ground diesel storage tank that were removed in 1991 and 1992.
14. There were no State Registered MOSF facilities within one-half (0.5) mile of the subject property.
 15. There were no TRI sites within one-half (0.5) mile of the subject property.
 16. There were no Air Dischargers located within one-quarter (0.25) mile of the subject property.
 17. There were no active or closed LUST incidents identified within one half (0.5) mile of the subject property.

The NYSDEC also responds to incidents involving hazardous waste spills. The Department maintains a logbook and files on all reported and actual incidents at the NYSDEC offices at Stony Brook. This file was reviewed in conjunction with the subject property. Review of the file revealed that two (2) active and eight (8) closed spill incidents were identified within one-half (0.5) mile of the subject property. Each of the active spill incidents are located down-cross gradient and at a sufficient distance from the subject property and, therefore, are not expected to adversely affect the subsurface resources of the subject property. In addition, the closed spill incidents have been investigated and addressed to the satisfaction of the NYSDEC. Therefore, none of the spill incidents are expected to adversely affect the subject property. Information regarding all of the reported incidents is contained in **Appendix C**.

5.1.3 Suffolk County Department of Health Services (SCDHS)

The SCDHS performs many important functions in environmental resource protection. These include inspection of facilities that use or store significant quantities of toxic or hazardous material or generate waste. SCDHS records were not received prior to the

completion of this report; however, since the property has been vacant land with the exception of a few years when the former model homes existed, no files are expected to be maintained.

Also of interest with regard to Health Department functions is a study completed in conjunction with Cornell University, referred to as the CLEARs study (Cornell Laboratory for Environmental Applications of Remote Sensing). This research involves stereoscopic analysis and interpretation of historic aerial photographs for the purpose of identifying past and present hazardous waste disposal sites, solid waste disposal sites, disturbed areas, chemical storage, and other potential sources of contamination. The study has been ongoing since approximately 1986. The CLEARs study was consulted with regard to the area surrounding the subject property.

One (1) CLEARs study site was identified directly northwest of the subject property:

1. Site Reference: Quogue # M 1
Site Location: South of Sunrise Highway, north of Lewis Road
Site Description: Mined Area
1962 – Site is comprised of a large intensively mined sandpit; 2 small structures, handling equipment, mounded soil and ponded water are present. 150 acres of disturbed land are in association.
1978 – Intensive sand mining continuing; excavation has deepened with more than half showing ponded water at lowest levels, wetness in 2-3 other locations.
1984 - No change.

The CLEARs Study assists with an historical perspective of the site and surrounding area. Little interpretation can be made with regard to the findings of the CLEARs study. There is no confirmation of activities which may have caused environmental degradation with regard to any of the sites. The SCDHS contracted the CLEARs study and will continue to interpret the results and take remedial action as necessary. The subject property was not identified as a CLEARs study site.

5.1.4 Local Agencies

Freedom of Information requests were submitted to the Town of Southampton. Records have not been received at this time. No records are expected to be maintained, since the subject property has always consisted of vacant, undeveloped land. Any pertinent information received will be included as an addendum to this report. The Town of Southampton Zoning Map indicated that the subject property is zoned CR200 – Country Residence, and that the southern portion of the property is located within the Agricultural Overlay District. The zoning of the subject property and surrounding area is provided in **Figure 4**. The Town Tax Assessors records identified the subject property as being owned by John D. Kracke, LLC. Refer to **Appendix G** for information all of the data received from FOIL requests.

6.0 FINDINGS

NP&V has performed a Phase I Environmental Site Assessment for The Kracke Property, located on the north side of Lewis Road and the south side of Sunrise Highway, approximately 590 feet west of Spinney Road. This environmental inspection report, has been conducted in order to provide the prospective purchaser and/or lending institutions with accurate and complete information regarding the subject property, surrounding area, historic uses, agency records and regulations, and additional environmental considerations. Based upon this report, the limitations of this report and the methodology employed, the following statement is provided:

NP&V has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 and USEPA AAI for The Kracke Property. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report.

This assessment has identified the following with respect to recognized environmental conditions, historical recognized environmental conditions and de minimus conditions in connection with the subject property, subject to the methodology and limitations of this report.

Three (3) recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

1. Several soil and debris piles were observed along the cleared path on the eastern property edge and in the vicinity of the cleared area in the northern portion of the subject property. Some of these piles appeared to have been imported or dumped from outside sources. These piles should be sampled in order to ensure that they are not adversely affecting the subsurface resources of the subject property. Following sampling, all of the debris piles should be removed and properly disposed of, including piles containing native material.
2. A rusted and dilapidated vehicle and other pieces of machinery were observed during the reconnaissance of the subject property. Any metal debris associated with the vehicle and machinery should be removed and properly disposed of. Any engines encountered during removal should be inspected for evidence of staining and sampled beneath in order to ensure that they have not adversely affected the subsurface resources of the subject property.
3. Several 55-gallon drums were observed in the vicinity of the previously cleared area and dirt path loop. The drums appeared to be empty and rusted, and were possibly utilized for recreational target practice. No staining was observed in the vicinity of any of the drums or debris. However, it was not possible to inspect some of the drums located within the debris piles. The debris pile should be sampled in locations that drums are present and the drums should be more closely inspected. Any drums found to be sealed and containing liquid should be inspected for leakage and sampled in order to ensure that they have not adversely affected the subsurface resources of the subject property. Following inspection and sampling, all drums should be removed from the subject property and properly disposed of.

No controlled recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

Two (2) de minimus conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

1. The southernmost portion of the subject property is presently utilized as an agricultural nursery. In addition, historic aerial photographs revealed that a larger area along the existing dirt path in the southern portion of the subject property was previously cleared for agricultural use. If the property is to be used for residential or active recreation, it is recommended that a pesticide survey be conducted in order to ensure that the surface soils have not been impacted by previous agricultural operations.
2. Farming and construction debris and some piles of native natural material were observed along the cleared dirt path on the eastern property edge and throughout the previously cleared areas of the subject property. Debris observed consisted of slate roof tiles, broken concrete fragments, planting containers, a rusted and dilapidated trailer, wooden crates, plastic, tires, and some piles of native natural material. This debris is not expected to have adversely affected the subsurface resources of the subject property; however, the debris should be removed and properly disposed of.

No historic recognized environmental conditions were noted on the subject property based on the site reconnaissance, interviews and regulatory agency records review.

7.0 OPINIONS

It is the opinion of the environmental professional who completed this report that this assessment has revealed evidence of three (3) recognized environmental conditions and two (2) de minimus conditions in connection with the subject property. The following recommendations are offered for the property:

1. Any non-native soil and debris piles present on the subject property should be sampled in order to ensure that they are not adversely affecting the subsurface resources of the subject property. Following sampling, all of the debris piles should be removed and properly disposed of.
2. Any metal debris associated with the dilapidated vehicle and machinery should be removed and properly disposed of. Any engines encountered during removal should be inspected for evidence of staining and sampled beneath in order to ensure that they have not adversely affected the subsurface resources of the subject property.
3. The debris pile in the northern portion of the property should be sampled in locations that drums are present and the drums should be more closely inspected. Any drums found to be sealed and containing liquid should be inspected for leakage and sampled in order to ensure that they have not adversely affected the subsurface resources of the subject property. Following inspection and sampling, all drums should be removed from the subject property and properly disposed of.
4. If the property is to be used for residential or active recreation, it is recommended that a pesticide survey be conducted in order to ensure that the surface soils have not been impacted by previous agricultural operations.
5. The native debris piles and farming and construction debris they should be removed from the subject property and properly disposed of.

8.0 CONCLUSIONS

This assessment was performed at the Client's request using the methods and procedures consistent with good commercial or customary practice designed to conform with acceptable industry standards.

This report is expressly and exclusively for the sole use and benefit of the Client identified on the first page of this report and is not for the use or benefit of, nor may it be relied upon by, any other person or entity without the advance written consent of NP&V.

The independent conclusions represent NP&V's best professional judgment based on information and data available to the consultant during the course of this assignment. NP&V's evaluations, analyses and opinions are not representations regarding either the design integrity, structural soundness or actual value of the property. Factual information including operations, site conditions and available test data provided by the Client or their representative have been assumed to be correct and complete. The conclusions presented are based on the data provided, observations and conditions that existed on the date of the assessment.

9.0 DEVIATIONS & ADDITIONAL SERVICES

9.1 Deviations

This report was completed in accordance with the standards set forth in the ASTM E 1527-13 and the USEPA AAI. No deviations from these standards were undertaken during the completion of this report.

9.2 Additional Services

A Tier 1 Vapor Encroachment Condition (VEC) Assessment was conducted as part of this Phase I ESA, due to the proximity of several spill incidents. The assessment was conducted in accordance to the methods and procedures, outlined within ASTM E2600-10, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

For this assessment, under conditions where the direction of groundwater flow can be ascertained, critical search distances are used to determine if a VEC exists. Specifically, the following distances are applied to the Tier I Assessment:

Upgradient Sources

1,760 feet for Chemical of Concern (COC)
520 feet for petroleum hydrocarbons

Cross-gradient Sources

365 feet for COC
165 feet for petroleum hydrocarbon LNAPL sources & 95 feet dissolved petroleum hydrocarbon sources with plume considerations

Down-gradient Sources

100 feet for COC/petroleum hydrocarbon LNAPL sources
30 feet dissolved petroleum hydrocarbon sources

Review of the regulatory agency database report provided for the subject property revealed one (1) site that was identified as a PBS facility and a Solid Waste facility within the critical up-gradient distance. All of the storage tanks on the site appeared to be above ground storage tanks containing petroleum with the exception of two (2) underground tanks that were reportedly closed and removed several years ago. In addition, the site was identified as a registered C&D Processing Facility of concrete and natural wood wastes, which are not expected to adversely affect the subsurface resources of the subject property. The facility is permitted and regulated by state or federal agencies and is not expected to adversely affect the subject property. Therefore, the subject property is not expected to be adversely affected by a VEC. Based on the information reviewed, it is concluded that a VEC can be ruled out.

No additional services were included in this report.