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Interim Remedial Measures Work Plan

Amherst Central Park
772North Forest Road
Former BCP Site No. C915291
"P Order" (Index No. R9-20240227-28)

Prepared for:
Town of Amherst
and Erie County

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Acronym List

AA	Alternatives Analysis
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield cleanup Program
BGS	Below Ground Surface
CAMP	Community Air Monitoring Plan
CVOC	Chlorinated Volatile Organic Compound
DER	Department of Environmental Remediation
DUSR	Data Usability and Summary Report
EDD	Electronic Data Deliverable
ELAP	Environmental Laboratory Accreditation Program
ESA	Environmental Site Assessment
FER	Final Engineering Report
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
HFM	Historic Fill Material
ISMP	Interim Site Management Plan
IRM	Interim Remedial Measures
IRM WP	Interim Remedial Measures Work Plan
MS/MSD	Matrix Spike / Matrix Spike Duplicate
MSL	Mean Sea Level
DNAPL	Dense Non-Aqueous Phase Liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOL	New York State Department of Labor
PAH	Polycyclic Aromatic Hydrocarbons
PPM	Parts per Million

Acronym List

PCB	POLYCHLORINATED BIPHENYL
PID	PHOTO-IONIZATION DETECTOR
PCE	TETRACHLOROETHYLENE
PFAS	PER- AND POLYFLUOROALKYL SUBSTANCES
QA/QC	QUALITY ASSURANCE / QUALITY CONTROL
RAO	REMEDIAL ACTION OBJECTIVE
REC	RECOGNIZED ENVIRONMENTAL CONDITION
RI	REMEDIAL INVESTIGATION
RIWP	REMEDIAL INVESTIGATION WORK PLAN
RWP	REMEDIAL WORK PLAN
SCG	STANDARDS, CRITERIA, GUIDANCE
SCO	SOIL CLEANUP OBJECTIVE
SITE	954 AND 1000 MAIN STREET, BUFFALO, NEW YORK
SMP	SITE MANAGEMENT PLAN
SSDS	SUB-SLAB DEPRESSURIZATION SYSTEM
SVOC	SEMI VOLATILE ORGANIC COMPOUND
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
TAL	TARGET ANALYTE LIST
TCL	TARGET COMPOUND LIST
TCLP	TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TOGS	TECHNICAL AND OPERATIONAL GUIDANCE SERIES
$\mu G/M^3$	MICROGRAM PER CUBIC METER
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
USGS	UNITED STATES GEOLOGIC SERVICE
UST	UNDERGROUND STORAGE TANK
VOC	VOLATILE ORGANIC COMPOUND
VOV	VOLATILE ORGANIC VAPOR

1 INTRODUCTION

C&S Engineers, Inc. (C&S) has prepared this Interim Remedial Measure Work Plan (IRM WP) on behalf of Erie County and the Town of Amherst for the Amherst Central Park, P-Order Site Index No. R9-20240227-28, located at 772 North Forest Road, Amherst, Erie County, New York (the "Site"). The P-order for this Site controls the entire 170-acre parcel under the supervision of the New York State Department of Environmental Conservation (NYSDEC). This IRM WP addresses the work being done by Erie County on the larger, northern section of the Site. Future work will be completed by the Town of Amherst under a separate workplan, and letter notice with the NYSDEC on a smaller portion of the Site, at the southeast corner. **Figure 1** shows the location of the Site and **Figure 2** shows the Site boundaries of the County Project (Golf Course and Recreational Area), the Town Project, and pertinent site features.

This IRM WP utilizes environmental information summarized in the June 2025 Draft Site Characterization (SC) Report. The sampling conducted for the SC Report was generated during investigations completed while the Site was in the Brownfield Cleanup Program (2014 - 2017) and more recently when the Site was under a P-Order between NYSDEC and the Town. As such, the New York State Department of Environmental Conservation (NYSDEC) approved the work plans associated with the sampling programs.

The proposed future uses of the County's portion of the Site include the re-establishment of the former Westwood Country Club's Holes 10 through 18, with the remainder of the County's portion of the Site (former Holes 1 through 9) to be developed as a public park for passive recreation. As such, the analytical results for soil samples collected from the Site were compared to the Commercial Use (Passive Recreation) Soil Cleanup Objectives (SCOs) set forth in the previous revision of 6 NYCRR Part 375. Passive recreational uses include activities that limit the potential for contact with the soil.

At the time of this IRM submission, The County intends to use the public park as a passive recreation area for the enjoyment of the abundant nature and habitats which exist. Benches may be set up at scenic vistas for people to relax during their activities. Passive uses will be limited to activities that do not threaten the vegetative surfaces. Land grading which disrupts the existing turf will not take place, and active athletic fields such as baseball, football, or soccer fields will not be installed without a work plan, nor will designated picnic areas. If the county would like to designate parkland as an "Active Recreation Area," a workplan will be submitted to the NYSDEC for approval prior to the start of any activities. In addition to earthwork, The County anticipates conducting public outreach to decide how the former clubhouse will be used moving forward.

The analytes with concentrations in excess of the Commercial Use SCOs are generally associated with the historic use of pesticides, herbicides, and fungicides used to maintain a golf course. Although these metals are no longer commonly used in chemical

treatments, arsenic, cadmium, and mercury once formed the basis for these products. Contaminant concentrations are generally highest in the greens, followed by in the tee boxes due to the preferred aesthetics of a highly manicured golf course. Generally, the samples from the rough, fairways, and sediment contain significantly lower concentrations of metals. These contaminants were also detected in groundwater and surface water samples collected across the site, but did not exceed corresponding groundwater quality standards. Section 2.3 discusses the SC in further detail. **Figure 3** shows the locations of the samples collected during the SC.

This IRM WP was developed to describe well-defined areas of contamination at the County's portion of the Site as identified during the SC and discuss the proposed actions to address that contamination. The area associated with the Town's project was previously investigated and no contraventions of the Restricted Residential Use SCO were identified. Park development work in that area will proceed under a separate site workplan that will be presented to NYSDEC.

2 PROJECT BACKGROUND

Erie County intends to transform the former Westwood Country Club into the Willowdale Park), with the exception of the work being performed on the southeast corner of the property adjacent to hole 9 under a separate workplan. The County intends to split the use of the park between golf (on the former Holes 10 through 18) and passive recreational use (Holes 1 through 9).

For the golf area, with the exception of the 18th tee, the County will utilize the existing layout to recreate nine holes of golf, with tee, green, and fairway locations being unchanged. The 18th tee location will be remediated in accordance with the work plan, but the 18th tee may be reestablished on top of areas of the existent 17th or 18th fairway. No other uses are planned for the golf course area.

For the area planned to be used for passive recreation, the County is developing a master plan, as a component of its park plans. The intent is re-asphalting the existent paved cart paths, so they may be used as pathways. Benches will be located along the paths, and at select scenic vistas. The passive park area is not intended to be used for high intensity active recreation fields such as football or soccer or baseball fields, and no formal picnic areas will be developed on the passive park site. A frisbee golf course is being considered for the passive recreation area. Paths will primarily be comprised of asphalt-covered paths, and the County may create vegetated or other covered paths that lead to benches that are not directly on the asphalt paths, if any.

2.1 Site Description

The 170-acre Site is located at 772 North Forest Road in the south-central portion of the Town of Amherst, Erie County, New York. The Site is generally bounded by Sheridan Drive (State Route 324) on the south; Maple Road (County Road 192) on the north; North Forest Road (County Road 294) and Audubon Golf Course Par 3 on the east; and Frankhauser Road and Fairway Boulevard on the west. **Figure 1** shows the Site boundaries. From this 170-acre site, an approximately eight-acre portion along Sheridan Drive will remain with the Town of Amherst, while the remaining 162-acres will be addressed by Erie County. **Figure 2** shows these areas.

The golf course was shuttered approximately ten years ago, and the vegetation was allowed to grow naturally. As such, the Site is completely covered by lush grass in meadow areas and trees in forested areas. Topography remains gradually sloped with remnants of golf course features vaguely visible. A permanent chain-link fence was placed along the perimeter of the course to restrict access to the Site.

2.2 Geology and Hydrogeology

2.2.1 Geology

The Soil Survey of Erie County (U.S. Department of Agriculture, Soil Conservation Service www.websoilsurvey.nrcs.usda.gov) identifies soils on the Site as loamy fine sand, silt loam, and urban land. The observations made during the advancement of the soil investigation program indicate that the soil is generally clay, with the exceptions of the greens and majority of the tee boxes being sand, and the berm area which were a combination of clay, rock, and fill materials such as sand and asphalt. Soil samples collected during the investigations were collected and labeled based on their distance from the vegetative cover. In fairways and rough areas, this was native clay. On tee boxes and greens, this was primarily sand. In most cases, the soil investigations indicated the presence of surface topsoil and man-placed or disturbed indigenous soils above native soils, and consistent with topographic modifications associated with golf course construction.

Bedrock in the vicinity of the Site consists generally of gray, medium hard, sound, thinly bedded to bedded shale rock of the Camillus shale formation, with occasional partings, seams and layers of gypsum. The depth to bedrock on the Site ranges from approximately 13.5 to 62.5 feet as evidenced by refusal in soil borings conducted during the geotechnical analysis of the Site.

2.2.2 Hydrogeology

Based on a review of NYSDEC data, the Site is not underlain by any mapped principal or primary aquifers. Groundwater at and in the vicinity of the Site is not used for public drinking water supply.

Groundwater was investigated as part of a geotechnical evaluation of the Site. As part of its geotechnical analysis, two groundwater observation wells were installed. Results indicate that the water table is present at 17 to 22 feet beneath the surface, although perched water is present in the upper soils, in some instances within a few feet of the surface.

2.3 Summary of Site Characterization

Site Characterization efforts consisted of a number of sampling events over the past decade designed to assess contamination at the Site and consisted of:

- The visual characterization of soil in 311 locations and collection and analysis of 662 subsurface soil samples
- The collection and analysis of 18 sediment samples from the ponds and drainage areas on the course
- The installation of two groundwater monitoring wells and the performance of

groundwater sampling
- The collection of five surface water samples from the ponds and drainage features on the golf course

During these investigations, soil, sediment, surface water, and groundwater samples were analyzed for a combination of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), and metals. Once the contaminants of concern were identified (viz., arsenic, cadmium, and mercury), sampling conducted in 2023 to 2025 only focused on metals. **Figures 3A through 3H** show the sampling locations.

Recent sampling conducted at the three greens with the highest concentrations of metals included the analysis of total metals concentrations as well as Toxicity Characteristic Leaching Procedure (TCLP) concentrations. The total metals analyses confirmed the elevated concentrations while the TCLP analyses confirmed that concentrations were well below hazardous levels, confirming contamination is bound to the soil by the vegetative surfaces.

The analytes detected at concentrations in excess of the Commercial Use SCOs are generally associated with the historic use of pesticides, herbicides, and fungicides used to maintain a golf course. Although these metals are no longer commonly used in chemical treatments, arsenic, cadmium, and mercury once formed the basis for these products. Contaminant concentrations are generally highest in the greens, followed by in the tee boxes. Generally, the samples from the rough, fairways, and sediment contain significantly lower concentrations of metals. These contaminants were detected in groundwater and surface water samples collected at the Site at concentrations below corresponding groundwater quality standards. Analytical data can be seen on **Table 1** through **Table 9**.

3 FEASIBILITY ASSESSMENT

3.1 Objectives

The objectives of this portion of the document are to evaluate remedial alternatives to address the contamination presented above and select remedial actions to be implemented. As defined in NYSDEC DER-10 (Section 4.0), remedial alternatives will be evaluated based on the following criteria:

a. Overall Protection of Public Health and the Environment: This criterion evaluates exposure and residual risks to human health and the environment during or subsequent to implementation of the alternative.

b. Compliance with Standards, Criteria, and Guidance (SCGs): This criterion evaluates whether the remedial alternative will ultimately result in compliance with SCGs, to the extent practicable.

c. Long-Term Effectiveness and Permanence: This criterion evaluates if the remedy is effective in the long-term after implementation (e.g., potential rebound). In the event that residual impacts will remain as part of the alternative, then the risks and adequacy/reliability of the controls are also evaluated.

d. Reduction of Toxicity, Mobility, or Volume with Treatment: This criterion evaluates the reduction of contaminant toxicity, mobility, or volume as a result of the remedial alternative. In addition, the reversibility of contaminant destruction or treatment is evaluated.

e. Short-Term Effectives: This criterion evaluates if the remedial alternative protects the community, workers and the environment during implementation.

f. Implementability: This criterion evaluates the remedial alternative based on its suitability, implementability at the specific site, and availability of services and materials that will be required.

g. Cost: This criterion evaluates the capital, operation, maintenance, and monitoring costs for the remedial alternative. The estimated costs are presented on a present worth basis.

h. Community Acceptance: This criterion takes into account concerns of the community regarding the proposed remedy. Any public comments and overall public perception are addressed as part of the criterion.

i. Land Use: This criterion evaluates the proposed remedial approach against the

current, intended, and reasonably anticipated future use of the land and its surroundings.

3.2 Remedial Action Objectives

Remedial Action Objectives (RAOs) are medium-specific objectives for the protection of public health and the environment and are developed based on contaminant-specific standards, criteria, and guidance (SCGs) established by NYSDEC and / or NYSDOH. The site-specific RAOs are based on the anticipated use of the site for passive recreation.

Soil/Fill RAOs

The RAOs for fill used in this Feasibility Assessment are:

Soil

- RAOs for Public Health Protection:
  - Prevent ingestion/direct contact with contaminated soil.
- RAOs for Environmental Protection:
  - Prevent migration of contaminants that would result in groundwater or surface water contamination.

3.3 Future Use Evaluation

When evaluating remedial alternatives, reasonableness of the anticipated future land use should be considered. The Site is currently vacant but is planned to be redeveloped with a 9- hole golf course, and a passive recreation park. Therefore, the remedial alternatives assume the future use of the Site will be passive recreational use.

3.4 Development and Detailed Analysis of Alternatives

This section identifies potential remedial alternatives being considered to address the Site. The remedial alternatives evaluated are summarized below:

3.4.1 No Action

3.4.1.1 Description

The No Action Alternative is included as a procedural requirement and as a baseline to evaluate other alternatives. Under this alternative, no further remedial or monitoring activities would occur, and no environmental easement would be recorded. The fill / soils at the Site would remain virtually as is and change in use would not be limited except by existing land use controls such as zoning.

3.4.1.2 Assessment

Overall Protection of Public Health and the Environment

The No Action Alternative is not protective of public health and the environment because fill material would be present in the subsurface of the Site beneath the grass surface. Exposure pathways could exist if disturbed with unregulated development and no land use restrictions and no environmental easements placed on site.

Compliance with SCGs

The No Action Alternative is not consistent with the SCGs for soils because contaminants in the subsurface soils are present at concentrations above Commercial Use SCOs.

Short-term Impacts and Effectiveness

The No Action Alternative is not effective in the short-term because it would leave the Site without land use controls, and elevated concentrations of contaminants in fill and soils with no long-term monitoring or treatment. During future construction, this alternative would increase potential exposure to contamination by workers excavating the contaminated fill.

Long-term Effectiveness and Permanence

The No Action Alternative is not effective in the long-term or a permanent basis because it would leave the Site with elevated concentrations of contaminants in the exposed fill in perpetuity.

Reduction of Toxicity, Mobility and Volume

Four methodologies must be evaluated relative to reduction of toxicity, mobility and volume:

- Destruction, on / off-site
- Separation or treatment
- Solidification or chemical fixation
- Control or Isolation

The No Action Alternative would not employ any additional methodologies and will not reduce the toxicity, mobility or volume of contamination. Therefore, this alternative would not be in compliance with the RAOs for the fill materials and contaminated soil.

Implementability

The No Action Remedial Alternative can be implemented with no technical or cost concerns.

Cost Effectiveness

There are no costs associated with this alternative. A No Action Alternative would not take any steps to reduce contamination and therefore, would not incur future remedial costs for the Site.

Community Acceptance

The public will likely not accept this alternative, due to the Site's proposed use for passive recreational development. The public will likely not accept when invasive activities associated with site redevelopment begin, if no action is taken to reduce contamination exposure prior to development.

Land Use

The No Action Alternative would not facilitate the use of the Site for safe and prudent reuse.

3.4.1.3 Summary

The No Action Alternative would be the least expensive alternative. It would not limit the potential for direct human exposure to contamination in the subsurface soils or fill material if the site were ever returned to productive reuse. This alternative would leave the fill in place and potentially impact site workers and those in areas surrounding the Site during redevelopment. Therefore, the No Action Alternative is not the preferred alternative.

3.4.2 Contaminated Soil Removal

3.4.2.1 Description

Under this Alternative, grossly contaminated soil will be removed from the Site and disposed of off-site in accordance with applicable regulations. The total area of the Site is 170 acres. Based on current redevelopment plans for the Site, the total area includes:

- Volume of material to be disposed: 4300-5000 Cubic Yards (CY)
- Volume of material to be imported: Approximately 4300-5000 CY

In areas where soil was removed from tee boxes and greens, soil will be imported to restore pre-existing topography.

Institutional controls consisting of an environmental easement will be placed on the Site.

3.4.2.2 Assessment

Overall Protection of Human Health and the Environment

In general, the types and concentrations of contaminants in the soil across the remainder of the Site are typical of golf course with historic uses of pesticide, herbicide, and fungicide use, and the RAOs can be achieved by removing soil from heavily manicured areas such as tee boxes and greens. This alternative would be protective of human health and the environment.

Compliance with SCGs

The alternative is consistent with the SCGs, as on-site soil with contaminant concentrations grossly above the SCOs will be removed from the site.

Short-term Impacts and Effectiveness

This alternative increases the short-term risks for the community and the workers implementing the alternative (i.e., through the disturbance of impacted fill), because the Site will undergo removal of vegetative surfaces, and limited soil movement of contaminated soil. However, these risks would be minimized through the implementation of appropriate soil handling procedures, air monitoring, and dust suppression techniques.

Long-term Effectiveness and Permanence

This alternative would be a permanent remedy to address the contaminant concentrations in the soil throughout the Site. Periodic inspections and adherence to the Site Management Plan as required by the environmental easement will ensure that future exposure to the fill material does not occur.

Reduction of Toxicity, Mobility and Volume

This alternative would remove the grossly contaminated soil, eliminating volume, toxicity, and ability for any future movement of contamination.

Implementability

This alternative is implementable using existing construction methods and equipment. The expected duration is less than one construction season. This alternative would result in a Site suitable for redevelopment for passive recreation or commercial use.

Cost Effectiveness

The estimated cost of this alternative at $1,410,000 requires a greater investment than the No Action Alternative. However, the alternative eliminates exposure to the contaminants through the removal of most contaminated soil and prepares the Site for use.

Table 3-1: Summary of Remedial Action Costs

Category	***Recommended Remedy Estimated Cost***
Mobilization	$25,000
Clearing and Grubbing	$25,000
Grading	$35,000
Contaminated Soil Export	$325,000
Sand and Top Soil	$1,000,000
Total	**$1,410,000**

Community Acceptance

Based on the findings of the studies performed to date, it is anticipated that the results of this alternative would be acceptable to the community.

Land Use

This alternative would allow for the use of the parcel for passive recreation, commercial, or industrial purposes, which conforms to the Erie County's development plans for the area. Therefore, this alternative would allow for the highest and best use of the land.

3.4.2.3 Summary

The Soil Removal Alternative is an effective approach to eliminating exposure to contaminants in the fill material. The alternative is effective in the short- and long-term, is cost-effective, and allows for the reuse of the Site.

3.5 Comparative Evaluation of the Feasibility Assessment

This section of the report compares the remedial alternatives proposed for each of the impacted media and presents the recommended action for each media group.

3.5.1 No Action Alternative

The No Action Alternative will not be protective of human health and the environment and would likely not be acceptable to the community in the long term. In addition, development of the Site is anticipated to take place and, as such, impacts are likely to be encountered, which indicates a level of risk in relation to exposure to on-site workers and those working and living in the vicinity of the Site. Therefore, this alternative is not the recommended remedy for the Site.

3.5.2 Contaminated Soil Removal

The Soil Removal Alternative would be a long-term remedy and is anticipated to be acceptable to the community. This alternative reduces the toxicity, mobility, and volume of impacted media through the removal of grossly contaminated soil across the Site. This alternative was designed to:

- Remediate the Site to a reasonable level that protects human health and the environment
- Provide a cost effective effort that meets SCGs and the future land use of the Site
- Prepare the Site for redevelopment for passive recreational uses

3.6 Recommended Remedial Alternative

Based on the feasibility analysis evaluation, the Soil Removal Alternative is the recommended final remedial approach for the Site. This alternative is protective of public health and the environment; significantly less disruptive to the community; consistent with current and future land use; and satisfies the RAOs.

The recommended remedial alternative would involve:

- The removal of grossly impacted soil on tee boxes and greens.
- Backfilling with non-contaminated sands and soils.
- Implementation of the Health and Safety Plan (HASP) during site work involving the disturbance of contaminated soil.

- Institutional Controls:
    - Environmental Easement
    - Site Management Plan

4 INTERIM REMEDIAL MEASURES SCOPE

This section is the IRM scope for the Site. This IRM is based on the data collected during the SC and the recommended remedial approach for the Site.

The County of Erie Department of Public Works (DPW) is planning to implement the remedial efforts in the passive recreation areas described below. Faery Golf and Landscape will serve as the general contractor for the remedial efforts and architecture for the 9 holes of the golf course being restored in this IRM. C&S Engineers will provide environmental oversight and air monitoring during all remedial work and/or construction work within impacted areas of the site.

4.1 Introduction

In the areas that are excavated to address metal contamination from the former use of pesticides, herbicides, and fungicides, the remediation will be consistent with the Commercial Use SCOs in existence at the time was admitted into the P-Order program. Passive Recreational uses for this site include but are not limited to golf courses and paved walking and bike paths.

4.2 Site Control

Site control is an important aspect of this remedial program. In order to safeguard the health and safety of site workers and the general public, access to all remedial work areas will be restricted, until the IRM is implemented. To facilitate site control, perimeter fencing has been installed on the property line of the entire 170-acre parcel with the exception of the portion adjacent to Ellicott Creek. **Figure 2** shows the location of the property line.

Additionally, if necessary, temporary construction fencing may be erected around accessible excavations and staging areas to prevent unauthorized personnel from entering active areas.

4.3 Site Preparation

Site preparation activities will include:

- A freshwater wetlands permit will be submitted to the NYSDEC Division of Environmental Permits Office for approval prior to any intrusive activities planned in, or within a 100' buffer of a regulated wetland.
- If necessary, selective site clearing may be necessary to access certain portions of the Site. If so, DPW will implement the selective site clearing by excavator and/or

chainsaw, which may include the removal of debris, shrubs, and vegetation (including root masses).
    - A Community Air Monitoring Plan (CAMP) will be required for all ground intrusive activities. Removed woody vegetation my need to be sampled to determine if it is impacted by the soil contamination and handled accordingly.
- The DPW will investigate the presence of utilities and easements on the Site to determine whether existing utilities or easements will pose a risk or impediment to the planned work under this IRM Work Plan.

4.4 Excavation Work Plan

To reestablish the former nine-hole Willowdale Golf Course and create a passive public park from the remaining portions of the Site, excavation is required to remove contaminated soil from select tee boxes and greens. Tee boxes and greens were the two areas where contamination is seen to be the highest, posing the greatest threat to human health. In addition to tee boxes and greens, previous sampling on the Hole 6 and Hole 9 fairways indicates areas of contamination. The "hot spot" on the Hole 9 fairway was delineated in 2024 as a part of the Construction Soil Characterization Report (under review) and will be excavated and removed from the site.

Special consideration is being given to the fairway on Hole 6, with the current vegetative surfaces preserved, does not pose a significant route of exposure to humans and the environment. While the fairway is already covered with vegetation, the County intends to use the area as natural regeneration area with taller plant life. Due to the physical characteristics of the Site the County is currently evaluating options that will further strengthen the stability of the vegetative barrier to soils of concern, by limiting mowing of this area, and encouraging natural regeneration, to limit human passage to the asphalt cart path. Natural regeneration includes but is not limited to unrestricted growth of native grass and wildflowers to strengthen the vegetative mat, and discourage human movement in this area, while maintaining a natural aesthetic buffer separating the golf course from the passive use park. In addition to natural regeneration, a rope fence and signage will be placed along the perimeter of these areas to discourage human interaction.

Soil identified for removal in **Figure 5**, which is inconsistent with the Commercial Use SCOs, will be excavated, and transported off-site for disposal at a properly permitted facility. Contaminated soil excavated and removed from the Site will not be reused at other sites. Excavation locations, estimated quantities, and ultimate placement locations are shown in **Table 1-1**.

Since the Site has not operated at a golf course since 2014, boundaries for areas of excavation will be mapped on a figure using aerial imagery from no earlier than 2015.

Once mapped, these boundaries will be marked on site using GPS technology by a qualified environmental professional. Boundaries for areas of excavation can be seen on **Figure 5**.

Additionally, as part of the re-establishment of the golf course on Holes 10 through 18, the ten years of vegetative growth that is inconsistent with golf courses, including the approximate top six inches of soil from various tee boxes will need to be removed and replaced. This soil will be excavated, and transported off-site for disposal at a properly permitted facility. These additional soil removal quantities are also shown on **Table 1-2.**

The overall excavated area totals approximately 4 acres.

4.4.1 Good Housekeeping Practices

Good housekeeping practices will be followed during excavation activities to prevent leaving contaminated material on the ground surface (e.g., precautions will be taken to prevent impacts to the ground surface from the potential for materials to spill from the excavator bucket). To prevent cross contamination and limit decontamination, the following procedures will be abided to:

Soil Excavation

To limit decontamination and tracking of contaminated soil, crews will use plywood or plastic tiles to create a buffer between excavator treads and contaminated soil during excavation. Operators will work from this buffer pad to pull soil to a stockpiled point on the contaminated soil to prepare for loadout. Once all the contaminated soil is loaded onto the trailer being pulled by a tractor and the excavation is complete, the excavator will track off of the buffer and return to the uncontaminated grass. The buffer will then be loaded onto the trailer and moved to the next excavation area to repeat the process.

Contaminated Soil Export

Soil will be transported on site using a tractor with a trailer to prevent damage to the site. To prevent tracking contaminated soil in areas where there is no contamination, the tractor and trailer will remain on noncontaminated soil while loading. To limit destruction to the course, tractors will drive along the pre-existing cart path whenever possible to get to the soil export stockpiling area. The soil export stockpiling area will be located in the northern parking lot near the 18th green seen in **Figure 4**. Once the tractor gets to the soil export stockpile area, it will dump the soil on a 10mm polyurethane plastic sheet, and return to the excavation area.

To prevent contaminated soil from falling off the trailer during transport, tarps will be utilized to cover the trailer beds. Should the operator error and miss the trailer during excavation, that contaminated soil will immediately be removed from the non-contaminated soil and be returned to the contaminated soil area. If the error is excessive, the former non-contaminated soil will be removed and additional soil removal will be documented.

Once contaminated soil has reached the export stockpiling area, a second excavator will load the soil onto a dump truck for removal from the site. Tires will use a clear drive lane to avoid coming in contact with contaminated soils. Should the operator error and miss the dump truck during load out, the area will immediately be swept, and contaminated soil will be returned to the stockpile. Material transported by trucks exiting the site will be secured with either tight-fitting opaque covers that are secured on the sides and back, or opaque covers that are locked on all sides. Loose-fitting canvas/mesh type truck covers are prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Approved Soil Import

Once excavation is complete, approved soil will be used to backfill the greens and tee boxes. To do this, approved soil will be stockpiled in the south parking lot. Approved soil will then be loaded onto a non-contaminated tractor towing a trailer. To limit destruction to the course, tractors will drive along the pre-existing cart path whenever possible to get to the backfill area. Once reaching the backfill area, the tractor will back in and dump soil, remaining on the outside of the excavation area. After delivering the soil, the tractor will return to the approved soil stockpile to repeat the process.

Decontamination

Upon arrival to the site and prior to demobilization, all excavation and transportation equipment will undergo decontamination. Decontamination will occur in the decontamination area, just west of the contaminated soil export area on asphalt.

Decontamination will consist of the removal of bulk soil from the tires, excavation buckets, and trailers. Removed soil will be collected and stockpiled with soil to be removed from the park. Pressure washing the tires will be conducted on a temporary decontamination pad in the decontamination area. This area will be contained so water and soil can not reach surrounding soil. Soil and water recovered from the washing will be collected and disposed of in 55-gallon drums for disposal at a permitted facility.

4.4.2 Soil Screening Methods

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed during all excavations into known or potentially contaminated material (remaining contamination). A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will perform the screening. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development. Contaminants of concern expected to be encountered include metals, such as arsenic, cadmium, and mercury. Concentrations in some sampling results are inconsistent with the applicable Commercial Use SCOs and are generally the highest in the first 0-12" below the ground surface. Greens and tee boxes had substantially higher concentrations than fairways and rough areas likely due to the preferred aesthetics of a highly manicured golf course.

If at any point during excavation grossly impacted soils are observed, PID readings are above 10ppm, or petroleum impacted soils are observed, soil will be tested for the full suite of analytes. This includes New York State Department of Environmental Conservation Part 375 volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); polychlorinated biphenyls (PCBs); pesticides; herbicides; per- and polyfluoroalkyl substances (PFAS); and metals including hexavalent chromium and cyanide.

4.4.3 Materials Excavation and Load-Out

For soil in the IRM areas above Commercial Use SCOs, the following approach will be implemented:

- Excavated soil will be direct-loaded onto trailers being towed by tractors for transport to the Excavated Soil Stockpile Area seen in **Figure 4** where it will temporarily be stockpiled. Once the tractor gets to the soil export stockpile area, it will dump the soil on a 10mil polyurethane plastic sheet, and return to the excavation area. Soil will then be loaded onto trucks using an excavator, preventing truck tires from coming in contact impacted materials.

- A C&S scientist or engineer will observe and document the work during all excavation and load-out in areas known to be contaminated or potentially contaminated.

- The County DPW and Faery Golf will be responsible for safe execution of all invasive and other work performed under this IRM Work Plan.

- Loaded vehicles leaving the site will be appropriately covered, manifested, and/or placarded in accordance with appropriate federal, state, local, and NYSDOT requirements (and all other applicable transportation requirements). To the extent practicable, trucks will travel along routes that avoid residential areas.

- Locations where vehicles enter or exit the site will be inspected daily for evidence of off-site soil tracking. If a truck has noticeable contaminated soil on it's tires and needs to exit the site, a truck wash station will be operated on site. Vehicles in contact with contaminated materials will be decontaminated by:

    - Removal of bulk soil from the tires. Removed soil will be collected and stockpiled with soil to be removed from the park.

    - Pressure washing the tires. Pressure washing will be conducted on a temporary decontamination pad. Soil and water collected from the washing will be collected and disposed of in 55-gallon drums for disposal.

- The County DPW will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

4.4.4 Soil Staging Methods

- Temporary soil stockpiles will be continuously encircled with a berm and/or silt sock. Hay bales (or similar methods) will be used as needed near catch basins, surface waters, and other discharge points.

- Temporary stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be periodically inspected and any damaged tarp cover will be promptly replaced.

4.4.5 Fluids Management

- No water is expected to be encountered during the excavation process due to the shallow nature of the excavations.

- Excavation dewatering and decontamination fluids will be containerized until appropriate sampling or waste characterization is completed.

- If disposed offsite, excavation dewatering and decontamination waters will be handled, transported, and disposed of in accordance with applicable local, state, and federal regulations.

- Treatment will consist of the following:

    - If periodic discharge to the ground is warranted, C&S will obtain approval with NYSDEC Division of Environmental Remediation. Discharge

compliance will follow NYSDEC's Memorandum Generic Effluent Criteria for Groundwater Discharges dated August 28, 2013.

- Long term continuous discharge will be approved through the NYSDEC Division of Water's SPDES-equivalent permit.

- Discharge to the sanitary sewer system will be approved by the Buffalo Sewer Authority's Temporary Wastewater Discharge Permit process.

4.4.6 Materials Transported Off-Site

- All transportation of materials will be performed by licensed haulers in accordance with appropriate local, state, and federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

- Material transported by trucks exiting the site will be secured with either tight-fitting opaque covers that are secured on the sides and back, or opaque covers that are locked on all sides. Loose-fitting canvas/mesh type truck covers are prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

- Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during site remediation and development.

4.4.7 Materials Disposed Off-Site

- Contaminated and regulated material will be transported and disposed in accordance with all local, state (including 6 NYCRR Part 360) and federal regulations.

- Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

- All disposal receipts will be included in the Construction Completion Report.

4.5 Backfilling

Excavations at the Site will be backfilled with sand, clean soil, and/or crushed stone in order to restore the tee boxes and greens in the golf course area and create a reasonable walking surface in the passive recreation area.

For each source of backfill that is imported to the Site, one of the following will be completed prior to importing the backfill.

a. Documentation will be provided to NYSDEC as to the source of the material and

the consistency of the material in accordance with the exemption for no chemical testing listed in DER-10 Section 5.4(e)(5); **OR**

b. Chemical testing will be completed in accordance with the following table:

Table 4-1
DER-10 5.4(e)10

Recommended Number of Soil Samples for Soil Imported to or Exported from a Site			
Contaminant	**VOCs**	**SVOCs, Inorganics & PCBs/Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

Taken from DER-10 - Table 5.4(e)10

Imported fill will be tested for 1,4-dioxane and PFAS. 1,4-dioxane will be sampled as composite samples per the above table. PFAS will be sampled as composite samples per the table above.

For materials that must undergo laboratory analytical testing, the results for each new source of fill will meet the values provided in Appendix 5 of DER-10 for Unrestricted Use and will receive approval by the NYSDEC prior to being imported to the Site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace excavated soil and establish the designed grades at the Site, as necessary.

4.6 Air Monitoring

When intrusive subsurface work is being performed at the Site, the CAMP included in **Appendix B** will be implemented.

The action threshold for VOCs established in the CAMP is 5 ppm above background. If this value is exceeded for a 15-minute average, work will be halted and NYSDEC and

NYSDOH will be notified of the exceedance within 24 hours. Work may resume once instantaneous readings fall below 5 ppm. The action level for dust is 100 (µg/m^3) over background during a 15-minute average. If this limit is exceeded, dust suppression techniques will be employed, including using water to wet the area.

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

There are no structures within 20 feet of the proposed excavation work. If such work occurs, the following will be applied:

When work areas are within 20 feet of potentially exposed populations, occupied structures, backyards or public sidewalks, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring will occur within the occupied structure(s). Background readings in the occupied spaces will be taken prior to commencement of the planned work. Any unusual background readings will be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

If any air limits are exceeded during IRM excavation, work will halt and the NYSDEC and NYSDOH will be notified of the exceedance within 24-hours.

4.7 Erosion and Dust Controls

As part of the remedial actions to be performed at the Site, measures will be needed to limit erosion and dust generation. A Stormwater Pollution Protection Plan (SWPPP) will be developed and submitted to the NYSDEC for review and approval prior to any implementation of excavation and staging activities. The SWPPP will also address additional controls required to protect wetland areas, water features, and Ellicott Creek.

Dust suppression techniques will be employed as necessary to limit erosion and fugitive dust generated in disturbed areas during remediation and redevelopment activities. Such techniques may be employed even if the community air monitoring results indicate that particulate levels are below action levels. Techniques may include but are not limited to:

- Using silt fencing, hay bales, and / or mulching
- Applying water on haul roads and ingress / egress points
- Wetting equipment and excavation surfaces
- Hauling materials in properly tarped or watertight containers
- Limiting vehicle speed on the Site
- Limiting the size of excavations
- Covering excavated areas and materials following excavation

Wetting equipment will be on-site and ready for use prior to and during all excavation, staging, and transportation of soil. Effectiveness of the dust suppression measures will be evaluated based on the results of the air monitoring that will be conducted under the CAMP provided in **Appendix B.**

4.8 Confirmatory Sampling

The site characterization efforts determined the nature and extent of contamination on the Site, including confirmatory sampling, and sufficient data was generated to perform soil removal IRMs. Past sampling has shown that the concentrations at 12 to 18 inches below grade are dramatically lower than in the upper twelve inches, all are below Commercial Use SCOs (one is at the SCO). Characterization efforts at Holes 6, 9, and 15 included the analysis of a total 15 samples at the 12- to 18-inch intervals. All 15 sample results from 12 to 18 inches below grade were consistent with or below the Commercial Use SCOs, including those from Hole 6, which has consistently demonstrated the highest concentrations of metals throughout the Site in the 0- to 12-inch interval.

Confirmatory soil samples will be collected from the sidewalls and the bottom of each excavated contaminated area. Sidewall sampling will be completed at a spacing of approximately 1 sample for every 60 linear feet of perimeter excavation. For the bottom of each excavation, one sample will be collected for every 1,800 square feet of bottom area. Samples will be analyzed for only the metals in which they exceeded Passive Use SCOs in prior sampling events. Full list of sample locations, sample depths, and analytes list can be seen on **Table 2-1**.

Additionally, while implementing the remedy or performing future development work, if soil contamination is discovered that is similar to the contamination that was identified during the SC, confirmatory sampling may be considered in light of the requirements of DER-10, or in consultation with the Department. The location and depth may be changed

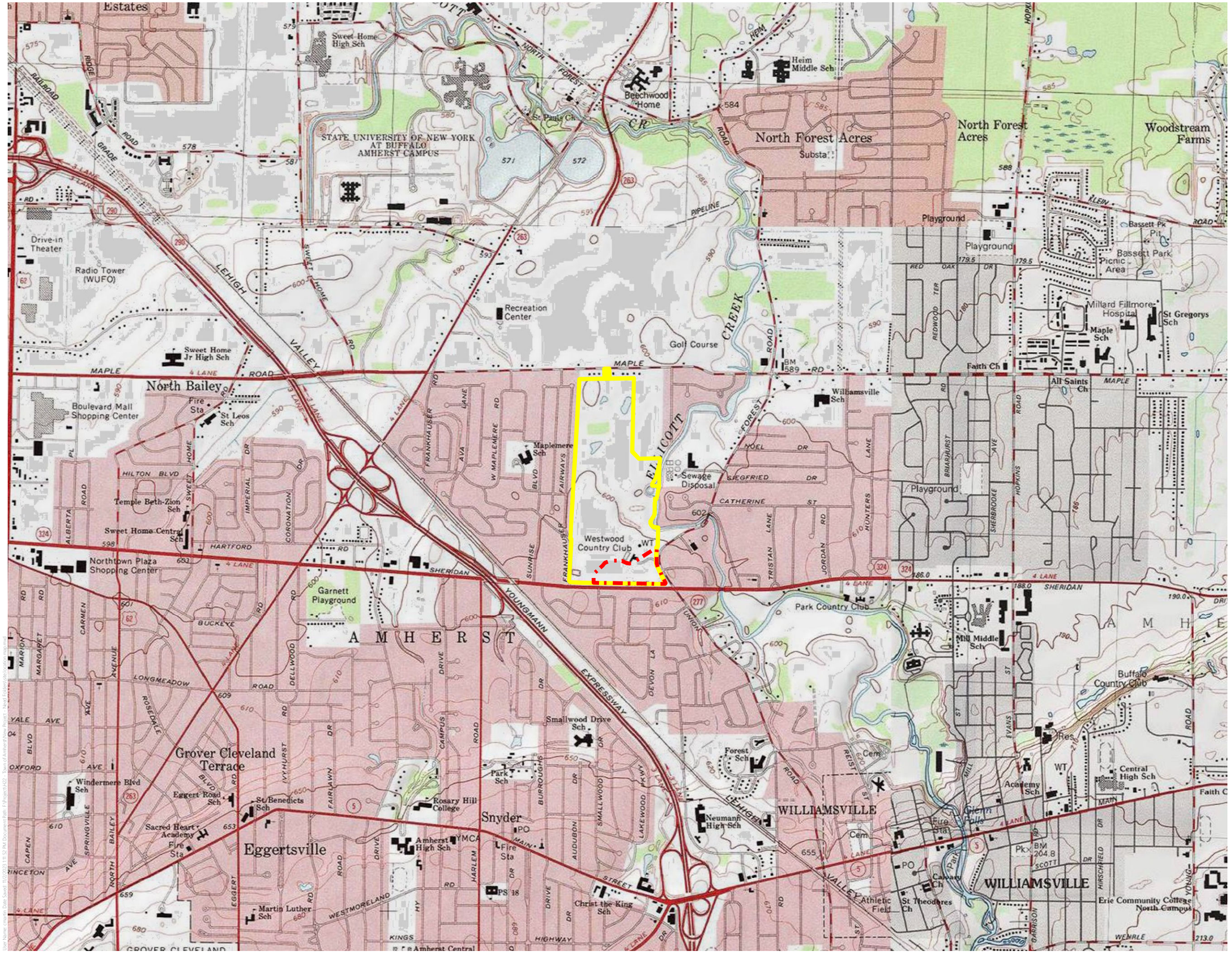
based on field findings. **Table 2-2** lists the number of samples required to complete the additional soil removal referenced in **Section 4.4**.

4.9 Construction Completion Report

Following the conclusion of the IRMs, C&S will prepare a report that summarizes the remedial activities and contain at a minimum:

- NYS PE Certified As-Built drawings
- Project photographs
- Confirmation sampling analytical results
- Daily logs
- Import / Excavated soil quantities
- Trucking and disposal tickets
- An engineering certification

Figures



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Figure 1

Site Location

Former Westwood Country Club Property

N

0 1,000 2,000 4,000 Feet

1 in. = 2,000 feet
When printed at 11 in. by 17 in.

Amherst Central Park South Phase 1 Construction Characterization

Sources: . Created by C&S Engineers, Inc.

Figure 2

Site Boundaries

Legend

- Passive Recreation Area
- Town Park
- Golf Course

N

0 200 400 800 Feet

1 inch equals 400 feet

When printed at 11 in. by 17 in.

Former Westwood Country Club

Sources: . Created by C&S Engineers, Inc.

User Name: cmartin



LEGEND

- SITE BOUNDARY

SOIL SAMPLING - SEPTEMBER 29, 2014

- SOIL SAMPLE LOCATION - ARSENIC CONCENTRATION BELOW UNRESTRICTED USE SCO
- SOIL SAMPLE LOCATION - ARSENIC CONCENTRATION ABOVE INDUSTRIAL USE SCO
- 15G-01 SOIL SAMPLE EXCEEDED NYSDEC SOIL CLEANUP OBJECTIVES FOR ARSENIC

SEDIMENT SAMPLING - OCTOBER 23, 2014

- SEDIMENT SAMPLE LOCATION FROM PONDS, ELLICOTT CREEK AND STORM WATER OUTFALL

200 100 0 200 400 Feet

NYSDEC Soil Cleanup Objectives						
	Date	Matrix	Unrestricted Use	Commercial Use	Arsenic (mg/kg)	Location
12F-06	9/29/2014	SO	13	16	9.1	Hole 12 Fairway
12G-02	9/29/2014	SO	13	16	66.3	Hole 12 Green
15G-01	9/29/2014	SO	13	16	23.6	Hole 15 Green
16F-05	9/29/2014	SO	13	16	7.4	Hole 16 Fairway
2F-02	9/29/2014	SO	13	16	7.4	Hole 2 Fairway
3F-03	9/29/2014	SO	13	16	18.2	Hole 3 Fairway
4F-04	9/29/2014	SO	13	16	9.9	Hole 4 Fairway
6G-04	9/29/2014	SO	13	16	26.8	Hole 6 Green
9F-01	9/29/2014	SO	13	16	2.4	Hole 9 Fairway
DF-01	9/29/2014	SO	13	16	3.3	Swale West of Hole 9
DF-02	9/29/2014	SO	13	16	6.7	Adjacent to 3 Hole Pond
DF-03	9/29/2014	SO	13	16	4.6	Adjacent to 15 Hole Pond
DF-04	9/29/2014	SO	13	16	3.1	Swale South of Ox Bow
SA-01	9/29/2014	SO	13	16	16.4	Storage Area
SA-02	9/29/2014	SO	13	16	2.2	Storage Area
Sediment Samples			Class A <10	Class B 10-33	Class C	
15PD-01	10/23/2014	SD	<10	10-33	>33	11.3	Hole 15 Pond
15PD-02	10/23/2014	SD	<10	10-33	>33	5	Hole 15 Pond
17PD-01	10/23/2014	SD	<10	10-33	>33	2.3	Hole 17 Pond
17PD-02	10/23/2014	SD	<10	10-33	>33	2.1	Hole 17 Pond
3PD-01	10/23/2014	SD	<10	10-33	>33	3.5	Hole 3 Pond
3PD-02	10/23/2014	SD	<10	10-33	>33	5.3	Hole 3 Pond
4PD-01	10/23/2014	SD	<10	10-33	>33	4.4	Hole 4 Pond
4PD-02	10/23/2014	SD	<10	10-33	>33	8.3	Hole 4 Pond
DO-01	10/23/2014	SD	<10	10-33	>33	3.1	Drainage Outfall
DO-02	10/23/2014	SD	<10	10-33	>33	3.2	Drainage Outfall
EC-01	10/23/2014	SD	<10	10-33	>33	1.5	Ellicott Creek
EC-02	10/23/2014	SD	<10	10-33	>33	1.3	Ellicott Creek

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N

WESTWOOD COUNTY CLUB
SOIL INVESTIGATION

WILLIAMSVILLE, NEW YORK

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	O63.001.001
DATE:	SEPT. 9, 2013
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	M. COLMERAUER

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

SOIL SAMPLING RESULTS

FIGURE 3A

Path: F:\Project\076 - Mensch Capital Partners\076001001 - Westwood Sampling\Planning Study\GIS\MAPS\WESTWOOD-SOIL-SAMPLE-PLAN.mxd



LEGEND

- PROPERTY LINE
- 10 — GOLF COURSE HOLE NUMBER
- PILOT STUDY AREA
- 50 x 50 FOOT SAMPLE GRID
- 200 x 200 FOOT SAMPLE GRID
- SOIL BORING LOCATION

0 50 100 200 400 FEET

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WESTWOOD COUNTRY CLUB
BROWNFIELD CLEANUP PROGRAM
HOLE #6 PILOT STUDY

AMHERST, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		

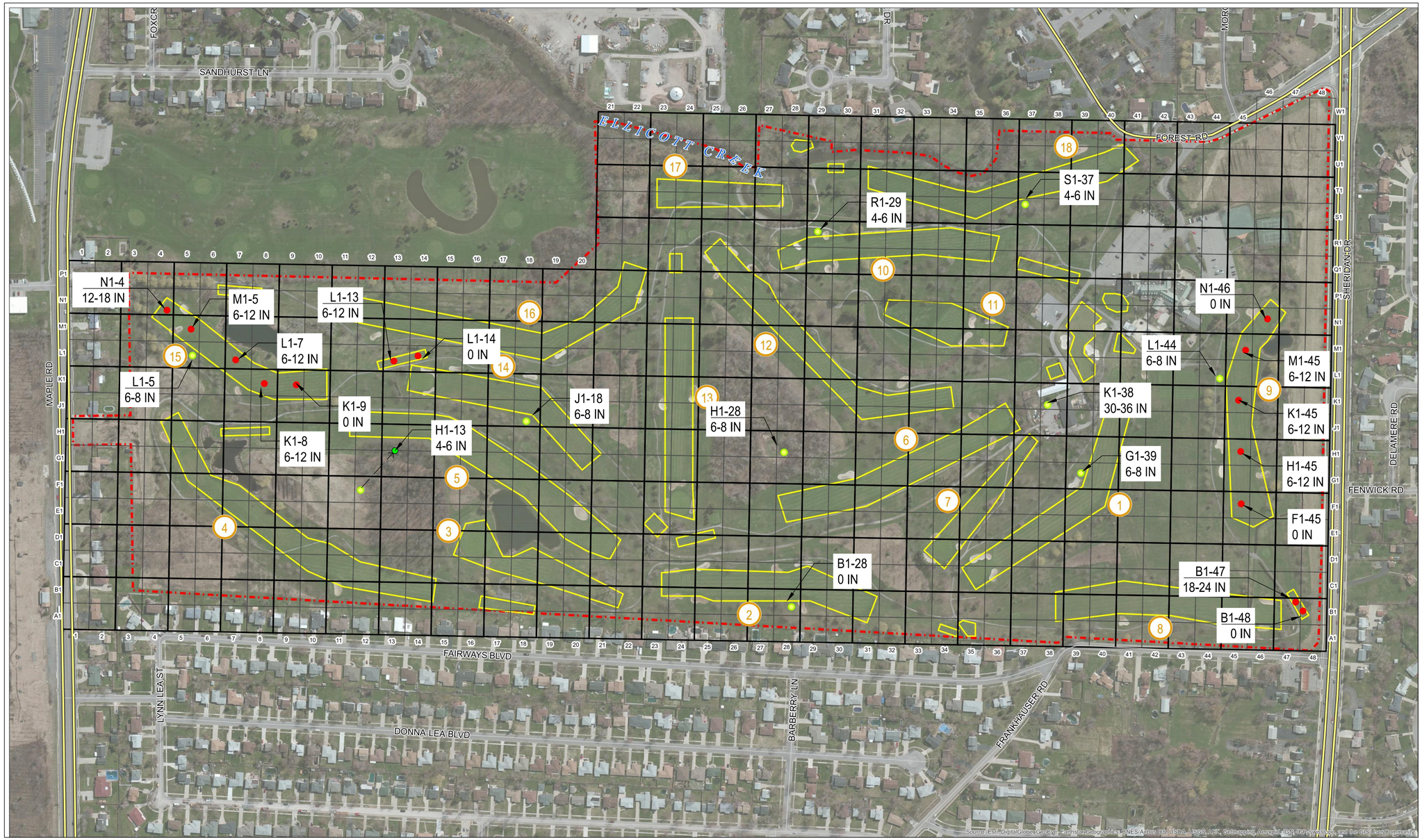
PROJECT NO:	O76.001.001
DATE:	JANUARY 14, 2016
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	M. COLMERAUER

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PILOT STUDY
SAMPLE LOCATIONS

FIGURE 3B

F:\Project\O76 - Mensch Capital Partners\O76001001 - Westwood Sampling\Planning-Study\CADD\Sheet Files\FIGURE 1 PILOT STUDY SAMPLE LOCATIONS.dwg



LEGEND

- BROWNFIELD CLEANUP PROGRAM ("BCP") BOUNDARY AND PROPERTY LINE
- (10) GOLF COURSE HOLE NUMBER
- SAMPLE LOCATION - GREEN, FAIRWAY AND TEE BOX
- SAMPLE LOCATION - ROUGH AREA

NOTES

1) BCP BOUNDARY CREATED FROM PROPERTY BOUNDARY. PROPERTY BOUNDARY PROVIDED IN "A.L.T.A. SURVEY FOR WESTWOOD COUNTRY CLUB," NUSSBAUMER & CLARK, INC., JULY 19, 2005.

2) ELEVATION CONTOURS OBTAINED FROM NEW YORK STATE, ERIE COUNTY LiDAR DATASET, 2008. VERTICAL COORDINATE SYSTEM: NORTH AMERICAN DATUM 1988 (GEOID 03). ORIGINAL DATASET IN METERS CONVERTED TO US SURVEY FEET.

0 50 100 200 400 FEET

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MENSCH Capital Partners, LLC
5477 Main Street
Williamsville NY 14221

WESTWOOD COUNTRY CLUB
BROWNFIELD CLEANUP PROGRAM
PRE-RI SOIL SAMPLING
AMHERST, NEW YORK

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	O76.001.001
DATE:	AUGUST 1, 2017
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

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SAMPLE LOCATION & DEPTH TO UNRESTRICTED USE SCO

FIGURE C

F:\Project\O76 - Mensch Capital Partners\O76001001 - Westwood Sampling\Planning-Study\CADD Sheet Files\FIGURE 1 SAMPLE RESULTS.dwg



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Figure 3D

Sample Locations

- 2024 Phase 1 Construction
- Sediment Sample Location
- Soil Sample Locations (Hand Auger)
- Soil Sample Locations (Drill Rig)
- Delineation Soil Sample Locations (Drill Rig)

N

0 30 60 120 Feet

1 in. = 75 feet

When printed at 24 in. by 36 in.

Amherst Central Park South Phase 1 Construction

Sources: . Created by C&S Engineers, Inc.

User Name: bwalkowski Date Saved: 2/29/2024 2:33:22 PM Document Path: \\cscos.com\cfile\Eng\Projects\402 - Town of Amherst\H2200600 - Amherst Central Park - South\Planning Study\GIS\Projects\Pre-Construction\sample location map.mxd



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Figure 3e

Sampling Locations

- Soil Sample Location
- Sediment Sample Location
- Area Previously Characterized
- Town Project Boundary

N

0 200 400 800 Feet

1 inch equals 400 feet

When printed at 11 in. by 17 in.

Former Westwood Country Club
Additional Characterization Sampling

Sources: . Created by C&S Engineers, Inc.

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Sample location	H8 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	29.7
Mercury	15.1

Sample location	H8 - T1
Sample depth	0-6"
Analyte	ppm
Arsenic	22.2

Sample location	H1 - G2
Sample depth	0-6"
Analyte	ppm
Mercury	13.9

Sample location	H2 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	121
Cadmium	12.3
Mercury	69

Sample location	H5 - G1
Sample depth	0-6"
Analyte	ppm
Mercury	18.9

Sample location	H3 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	25.6
Mercury	9.57

Sample location	H14 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	27.7
Mercury	31.2

Sample location	H8 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	38.4
Mercury	15.3

Sample location	H1 - T1
Sample depth	0-6"
Analyte	ppm
Mercury	15.9

Sample location	H1 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	19.1
Mercury	7.18

Sample location	H2 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	92.6
Cadmium	11
Mercury	53

Sample location	H5 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	41.4
Mercury	7.8

Sample location	H3 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	38.8
Mercury	18.2

Sample location	H14 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	58.3
Mercury	34.6

Sample location	H3 - T2
Sample depth	0-6"
Analyte	ppm
Cadmium	12.5

Sample location	H7 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	29.7
Mercury	14.9

Sample location	H7 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	32.1
Mercury	28.4

Sample location	H11 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	364
Cadmium	9.72
Mercury	75

Sample location	H11 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	260
Cadmium	19.4
Lead	1220
Mercury	127

Sample location	H18 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	155
Cadmium	10.5
Mercury	49.1

Sample location	H18 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	77
Cadmium	13.3
Mercury	69.9

Sample location	H10 - SS
Sample depth	0-6"
Analyte	ppm
Mercury	2.87

Sample location	H10 - T2
Sample depth	0-6"
Analyte	ppm
Cadmium	11.4

Sample location	H10 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	80.3
Mercury	70

Sample location	H12 - T2
Sample depth	0-6"
Analyte	ppm
Cadmium	14

Sample location	H10 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	73.9
Mercury	26.6

Sample location	H17 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	245
Cadmium	16.6
Mercury	76.8

Sample location	H17 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	89.5
Cadmium	11.7
Mercury	94.6

Sample location	H12 - F2
Sample depth	0-6"
Analyte	ppm
Cadmium	10.9

Sample location	H12 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	142
Mercury	54.7

Sample location	H13 - T2
Sample depth	0-6"
Analyte	ppm
Arsenic	31.8
Cadmium	9.98
Mercury	3.59

Sample location	H12 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	259
Cadmium	25.4
Mercury	85.3

Sample location	H13 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	116
Mercury	31.3

Sample location	H13 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	106
Cadmium	18.7
Mercury	65.8

Sample location	H16 - G1
Sample depth	0-6"
Analyte	ppm
Arsenic	75.5
Cadmium	12.4
Mercury	36.1

Sample location	H16 - G2
Sample depth	0-6"
Analyte	ppm
Arsenic	59.1
Mercury	30

Figure 3F

Summary of Sample Results - 0 to 6 Inches Below Grade

- Sample location with concentrations below CUSCOs
- Sample location with one or more analytes at concentrations above CUSCOs
- Sediment sample location with concentrations below CUSCOs
- Sediment sample location with one or more analytes at concentrations above CUSCOs
- Area Previously Characterized

Note:

Analytes in yellow text were detected at concentrations above the Commercial Use Soil Cleanup Objectives. All other results were below the CUSCOs.

N

0 200 400 800 Feet

1 inch equals 400 feet
When printed at 11 in. by 17 in.

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Additional Characterization Sampling

Sources: . Created by C&S Engineers, Inc.



Sample location	H8 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	21.8
Mercury	12.1

Sample location	H1 - G1
Sample depth	6-12"
Analyte	ppm
Mercury	2.91

Sample location	H2 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	48.5
Mercury	17.8

Sample location	H13 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	58.5
Mercury	10.5

Sample location	H14 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	34.4
Mercury	22

Sample location	H8 - G1
Sample depth	6-12"
Analyte	ppm
Mercury	5.19

Sample location	H1 - G2
Sample depth	6-12"
Analyte	
Mercury	3.68

Sample location	H2 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	140
Mercury	29.2

Sample location	H13 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	94.2
Mercury	54.9

Sample location	H14 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	25.3
Mercury	7.41

Sample location	H8 - T1
Sample depth	6-12"
Analyte	ppm
Arsenic	3.07

Sample location	H11 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	136
Mercury	35.7

Sample location	H11 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	107
Mercury	37.7

Sample location	H10 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	138
Mercury	44.4

Sample location	H17 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	148
Mercury	29.8

Sample location	H12 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	48.1
Mercury	32.9

Sample location	H13 - T2
Sample depth	6-12"
Analyte	ppm
Arsenic	22.5

Sample location	H16 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	171
Cadmium	11.5
Mercury	39.5

Sample location	H18 - G1
Sample depth	6-12"
Analyte	ppm
Arsenic	35
Mercury	3.95

Sample location	H10 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	151
Mercury	63.4

Sample location	H17 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	222
Mercury	152

Sample location	H12 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	102
Mercury	20.1

Sample location	H12 - T2
Sample depth	6-12"
Analyte	ppm
Cadmium	9.49

Sample location	H16 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	71.7
Mercury	29.3

Sample location	H18 - G2
Sample depth	6-12"
Analyte	ppm
Arsenic	113
Cadmium	13.5
Mercury	66.9

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Figure 3G

Summary of Sample Results - 6 to 12 Inches Below Grade

- Sample location with concentrations below CUSCOs
- Sample location with one or more analyte at concentrations above CUSCOs
- Area Previously Characterized

Note:

Analytes in yellow text were detected at concentrations above the Commercial Use Soil Cleanup Objectives. All other results were below CUSCOs.

N

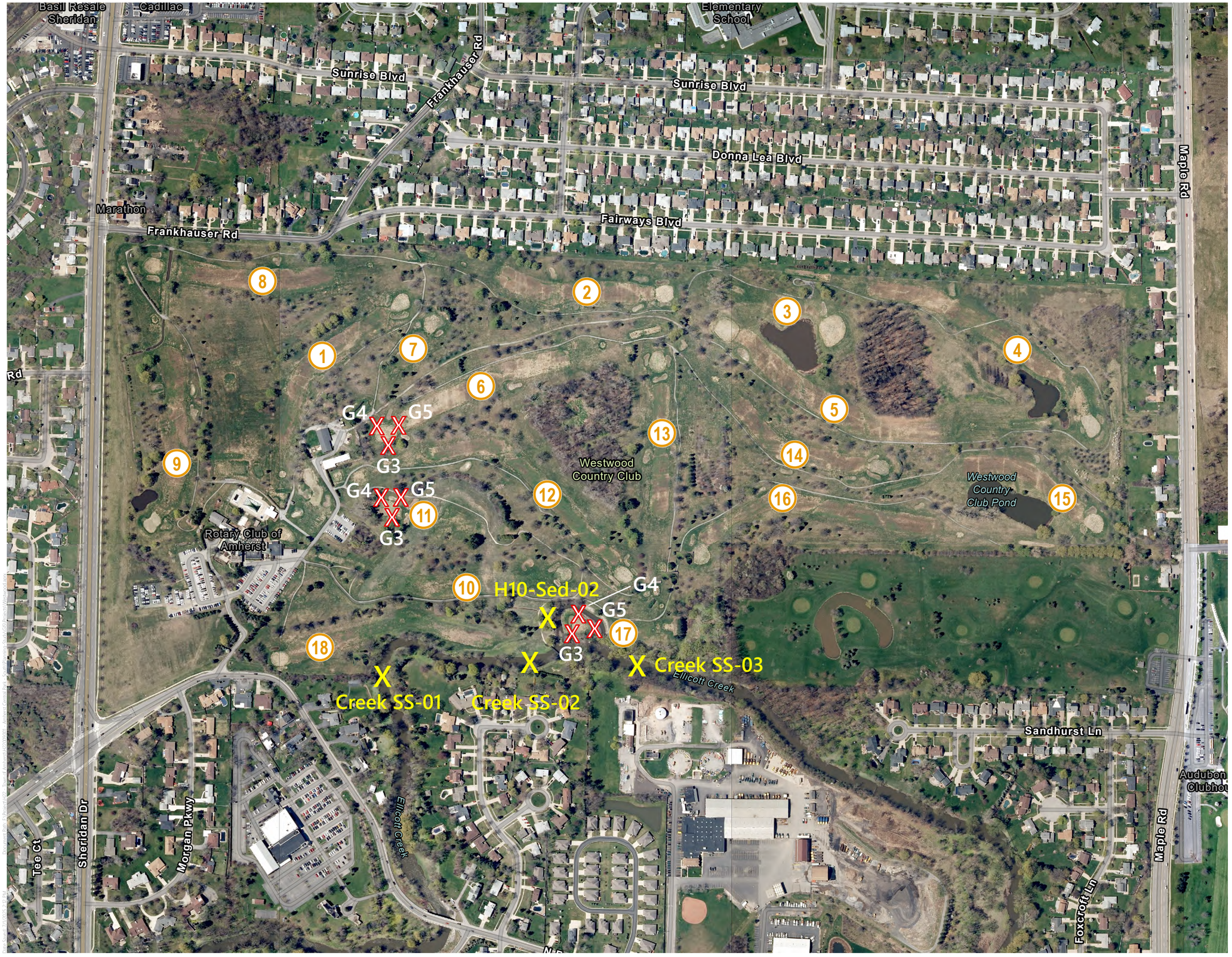
0 200 400 800 Feet

1 inch equals 400 feet

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Additional Characterization Sampling

Sources: . Created by C&S Engineers, Inc.



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Figure 3H

2025 Additional Characterization Sediment and TCLP Sampling Locations

Legend

X Sediment Sample Location

X 0-6" TCLP Sample Location

N

0 200 400 800 Feet

1 inch equals 400 feet

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Additional Characterization Sampling

Sources: . Created by C&S Engineers, Inc.

User Name: nobrien



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Figure 4

Legend

- Passive Recreation Area
- Town Park
- Golf Course
- Proposed Imported Soil Stockpile Area
- Clubhouse
- Pro Shop
- Excavated Soil Stockpile Area
- Golf Cart Path

N

0 200 400 800 Feet

1 inch equals 400 feet
When printed at 11 in. by 17 in.

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Sources: . Created by C&S Engineers, Inc.

User Name: mdimm

Figure 5

Wetland locations with 100' buffer Including Soil Removal Areas

- Natural Wetland Boundary
- 100' Buffer Area
- 6" Soil Removal
- 12" Soil Removal
- Man Made Ponds
- Natural Regeneration Zone
- Cart Path Restoration Areas

N

0 100 200 400 Feet

When printed at 22 in. by 34 in.

Sources: . Created by C&S Engineers, Inc.

User Name: cmartin
Date Saved: 3/20/2026 11:11 AM
Document Path: \\Graytek\Drive\Ph\Projects\422 - Town of Amherst\H22009000 - Amherst Central Park - South\Planning-Study\GIS\Projects\Wetlands stuff\Modified wetlands 11.13.25.aprx

Tables

Table 1-1

Amherst Central Park Contaminated Soil Removal						
Hole	Sample	Maximum Concentration Over Commercial Cleanup Standards			Quantity	
		Analyte	SCO	Result	Depth (ft)*	Est Vol (CY)
1	Green	Arsenic	16	19.1	1	212
		Mercury	2.8	13.9		
	Tee 1	Mercury	2.8	15.9	0.5	14
2	Green	Arsenic	16	140	1	215
		Cadmium	9.3	12.3		
		Mercury	2.8	69		
3	Green	Arsenic	16	38.8	0.5	244
		Mercury	2.8	18.2		
	Tee 1	Cadmium	9.3	12.5	0.5	91
5	Green	Arsenic	16	41.4	0.5	171
		Mercury	2.8	18.9		
6	Green	Arsenic	16	300	1	259
		Cadmium	9.3	24		
		Mercury	2.8	160		
	Tee 1	Arsenic	16	100	1	132
		Cadmium	9.3	15		
		Cyanide	27	190		
		Mercury	2.8	12		
7	Green	Arsenic	16	32.1	0.5	125
		Mercury	2.8	28.4		
8	Green	Arsenic	16	38.4	1	250
		Mercury	9.3	15.3		
	Tee 1	Arsenic	16	22.2	0.5	125
9	Fairway	Cadmium	9.3	19.5	0.5	54
10	Green	Arsenic	16	151	1	178
		Mercury	2.8	70		
	Tee 3	Cadmium	9.3	11.4	0.5	65
11	Green	Arsenic	16	364	1	174
		Cadmium	9.3	19.4		
		Lead	1000	1220		
		Mercury	2.8	127		
12	Green	Arsenic	16	259	1	209
		Cadmium	9.3	25.4		
		Mercury	2.8	85.3		
	Tee 1	Cadmium	9.3	14	1	76
13	Green	Arsenic	16	116	1	245
		Mercury	2.8	65.8		
		Cadmium	9.3	18.7		
	Tee 4	Arsenic	16	31.8	1	66
		Cadmium	9.3	9.98		
		Mercury	2.8	3.59		
14	Green	Arsenic	16	58.3	1	205
		Mercury	2.8	34.6		
	Tee	None		-	None	
15	Green	Arsenic	16	41.8	1	229
		Mercury	2.8	21		
16	Green	Arsenic	16	171	1	254
		Cadmium	9.3	12.4		
		Mercury	2.8	39.5		
17	Green	Arsenic	16	245	1	189
		Cadmium	9.3	16.6		
		Mercury	2.8	152		
18	Green	Arsenic	16	155	1	194
		Cadmium	9.3	13.5		
		Mercury	2.8	69.9		
					Totals	3976

Table 1-2

Amherst Central Park
Additional Soil Removal

Hole	Location	Surface Area (~Sqft)	Depth of Excavation Required (ft)	Cubic Yards (CY)	Approximate CY
Sod Farm		4,093	1	151.6	152
Short Game		7,465	1	276.4	276
Putting Green		5,216	1	193.18	193
10	Tee 1	754	0.5	13.96296	14
	Tee 2	757	0.5	14.01852	14
	Tee 3	1,407	0.5	26.05556	26
11	Tee 1	1,845	0.5	34.16667	34
	Tee 2	1,255	0.5	23.24074	23
12	Tee 2	2,507	0.5	46.42593	46
	Tee 3	557	0.5	10.31482	10
13	Tee 1	418	0.5	7.740741	8
	Tee 2	1,517	0.5	28.09259	28
	Tee 3	1,003	0.5	18.57407	19
14	Tee 1	2,982	0.5	55.22222	55
	Tee 2	673	0.5	12.46296	12
15	Tee 1	2,994	0.5	55.44444	55
16	Tee 1	3,168	0.5	58.66667	59
	Tee 2	817	0.5	15.12963	15
17	Tee 1	3,630	0.5	67.22222	67
	Tee 2	1,099	0.5	20.35185	20
18	Tee 1	2,589	0.5	47.94444	48
	Tee 2	610	0.5	11.2963	11
Totals		47,356		1187.513	1185

Table 2-1

Amherst Central Park Confirmatory Sampling Lists

Contaminated Soil Removal

Hole	Sample Location	Analytes	Excavation Depth (Inches)	Perimeter (ft)	Surface Area (sqft)	Sidewall Samples	Bottom Samples
1	Green	Arsenic Mercury	6	280	5721	5	4
	Tee 1	Mercury	6	101	758	2	1
2	Green	Arsenic Cadmium Mercury	12	281	5280	5	3
3	Green	Arsenic Mercury	6	424	13181	8	8
	Tee	Cadmium	6	372	4932	7	3
5	Green	Arsenic Mercury	6	353	9259	6	6
6	Green	Arsenic Cadmium Mercury	12	313	6984	6	4
	Tee (From Hole #6 Supplemental Study)	Arsenic Cadmium Cyanide Mercury	12	316	3565	6	2
7	Green	Arsenic Mercury	6	307	6771	6	4
8	Green	Arsenic Mercury	12	301	6732	6	4
	Tee 1	Arsenic	6	156	1673	3	1
9	Hot Spot	Cadmium	6	200	2400	4	2
10	Green	Arsenic Mercury	12	251	4794	5	3
	Tee 2	Cadmium	6	101	757	2	1
11	Green	Arsenic Cadmium Lead Mercury	12	259	4704	5	3
12	Green	Arsenic Cadmium Mercury	12	277	5636	5	4
	Tee 2	Cadmium	6	186	2507	4	2
13	Green	Arsenic Cadmium Mercury	12	301	6613	6	4
	Tee 2	Arsenic Cadmium Mercury	6	146	1517	3	1
14	Green	Arsenic Mercury	12	277	5539	5	4
15	Green	Arsenic Mercury	12	286	6170	5	4
16	Green	Arsenic Cadmium Mercury	12	306	6859	6	4
17	Green	Arsenic Cadmium Mercury	12	279	5645	5	4
18	Green	Arsenic Cadmium Mercury	12	265	5247	5	3
					Totals	120	79

Table 2-2

Confirmatory Samples
Additional Soil Removal Areas

Hole	Location	Perimeter (ft)	Surface Area (sqft)	Excavation Depth (ft)	Sidewall Samples	Bottom Samples
10	T1	102	754	0.5	2	1
	T2	101	757	0.5	2	1
	T4	139	1407	0.5	3	1
11	T1	160	1845	0.5	3	2
12	T2	186	2507	0.5	4	2
	T3	88	557	0.5	2	1
13	T2	146	1517	0.5	3	1
	T3	117	1003	0.5	2	1
	T4	157	1774	0.5	3	1
14	T2	96	673	0.5	2	1
18	T1	189	2590	0.5	4	2
Sod Farm		236	4093	1	4	3
Short Game		421	7465	1	8	5
Putting Green		280	5216		5	3
Total			32158		47	25

141 Elm Street

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Table 3

Soil/Sediment Sample Log

Project Name: WESTWOOD COUNTRY CLUB SOIL/SEDIMENT SAMPLING

Location: AMHERST, NEW YORK

Client: MENSCH CAPITAL PARTNERS

Date: Monday, October 27, 2014 **Contractor:**

Sample ID	Sample Date	Collection Time	Analysis	Sample Location	Start Depth	End Depth	Depth Unit	COC No.	Description	Color	Remarks
12F-06	9/29/2014	12:00 PM	8151A, 8081B, 6010 - ARSENIC ONLY	12 HOLE FAIRWAY	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	MOIST
12G-02	9/29/2014	12:20 PM	8151A, 8081B, 6010 - ARSENIC ONLY	12 HOLE GREEN	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	MOIST; TRACE SAND
15G-01	9/29/2014	11:00 AM	8151A, 8081B, 6010 - ARSENIC ONLY	15 HOLE GREEN	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	TRACE SAND
16F-06	9/29/2014	11:40 AM	8151A, 8081B, 6010 - ARSENIC ONLY	16 HOLE FAIRWAY	0	14	INCH	480-68232	SILTY CLAY LOAM	BLACK/BROWN	WET
2F-02	9/29/2014	9:20 AM	8151A, 8081B, 6010 - ARSENIC ONLY	2 HOLE FAIRWAY	0	16	INCH	480-68232	SILTY CLAY LOAM	BROWN	DENSE SITY CLAY
3F-03	9/29/2014	9:50 AM	8151A, 8081B, 6010 - ARSENIC ONLY	3 HOLE FAIRWAY	0	16	INCH	480-68232	SILTY CLAY LOAM	BROWN	
4F-04	9/29/2014	10:30 AM	8151A, 8081B, 6010 - ARSENIC ONLY	4 HOLE FAIRWAY	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	WET
6G-04	9/29/2014	12:50 PM	8151A, 8081B, 6010 - ARSENIC ONLY	6 HOLE GREEN	0	5	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	TRACE SAND
9F-01	9/29/2014	8:30 AM	8151A, 8081B, 6010 - ARSENIC ONLY	9 HOLE FAIRWAY	0	14	INCH	480-68232	SILTY SAND	BROWN	MOIST; 50% SILT
DF-01	9/29/2014	9:00 AM	8151A, 8081B, 6010 - ARSENIC ONLY	SWALE WEST OF 9 HOLE	0	14	INCH	480-68232	SILT WITH ORGANIC MATERIAL	BLACK/BROWN	
DF-02	9/29/2014	10:10 AM	8151A, 8081B, 6010 - ARSENIC ONLY	AJACENT TO 3 HOLE POND	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	DENSE TAN SITY CLAY AT 10"-12"
DF-03	9/29/2014	11:20 AM	8151A, 8081B, 6010 - ARSENIC ONLY	ADJACENT TO 15 HOLE POND	0	14	INCH	480-68232	SILTY CLAY	BROWN	DRY 20% SILT
DF-04	9/29/2014	12:30 PM	8151A, 8081B, 6010 - ARSENIC ONLY	SWALE SOUTH OF OX BOW	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	DRY TRACE FINE SAND
SA-01	9/29/2014	7:30 AM	8151A, 8081B, 6010 - ARSENIC ONLY	STORAGE AREA	0	14	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	TRACE SILT ; 10%-20% CLAY
SA-02	9/29/2014	8:15 AM	8151A, 8081B, 6010 - ARSENIC ONLY	STORAGE AREA	0	7	INCH	480-68232	SILTY CLAY LOAM	DARK BROWN	TRACE SILT ; 10%-20% CLAY
15PD-01	10/23/2014	11:45 AM	6010 - ARSENIC ONLY	15 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
15PD-02	10/23/2014	11:35 AM	6010 - ARSENIC ONLY	15 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
17PD-01	10/23/2014	12:20 PM	6010 - ARSENIC ONLY	17 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
17PD-02	10/23/2014	12:18 PM	6010 - ARSENIC ONLY	17 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
3PD-01	10/23/2014	10:50 AM	6010 - ARSENIC ONLY	3 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
3PD-02	10/23/2014	11:00 AM	6010 - ARSENIC ONLY	3 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
4PD-01	10/23/2014	11:10 AM	6010 - ARSENIC ONLY	4 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
4PD-02	10/23/2014	11:15 AM	6010 - ARSENIC ONLY	4 HOLE POND	0	3	INCH	480-69993	SILTY CLAY WITH ORGANIC MATERIAL	BLACK/BROWN	
DO-01	10/23/2014	12:10 PM	6010 - ARSENIC ONLY	DRAINAGE OUTFALL	0	3	INCH	480-69993	CORASE SAND AND SILTY CLAY	BROWN	
DO-02	10/23/2014	12:00 PM	6010 - ARSENIC ONLY	DRAINAGE OUTFALL	0	3	INCH	480-69993	CORASE SAND AND SILTY CLAY	BROWN	
EC-01	10/23/2014	12:38 PM	6010 - ARSENIC ONLY	ELLICOTT CREEK	0	3	INCH	480-69993	CORASE SAND AND SILTY CLAY	BROWN	
EC-02	10/23/2014	12:40 PM	6010 - ARSENIC ONLY	ELLICOTT CREEK	0	3	INCH	480-69993	CORASE SAND AND SILTY CLAY	BROWN	

TABLE 3: SOIL & SEDIMENT SAMPLING RESULTS
WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

Sample ID	Date	Matrix	NYSDEC Soil Cleanup Objectives: Unrestricted*	NYSDEC Soil Cleanup Objectives: Residential / Restricted-Residential / Commercial & Industrial*	Sediment Screening Citeria - Class A Range	Sediment Screening Citeria - Class B Range	Arsenic (mg/kg)	Location
12F-06	9/29/2014	SO	13	16	NA	NA	9.1	Hole 12 Fairway
12G-02	9/29/2014	SO	13	16	NA	NA	**66.3**	Hole 12 Green
15G-01	9/29/2014	SO	13	16	NA	NA	**23.6**	Hole 15 Green
16F-05	9/29/2014	SO	13	16	NA	NA	7.4	Hole 16 Fairway
2F-02	9/29/2014	SO	13	16	NA	NA	7.4	Hole 2 Fairway
3F-03	9/29/2014	SO	13	16	NA	NA	**18.2**	Hole 3 Fairway
4F-04	9/29/2014	SO	13	16	NA	NA	9.9	Hole 4 Fairway
6G-04	9/29/2014	SO	13	16	NA	NA	**26.8**	Hole 6 Green
9F-01	9/29/2014	SO	13	16	NA	NA	2.4	Hole 9 Fairway
DF-01	9/29/2014	SO	13	16	NA	NA	3.3	Swale West Of 9 Hole
DF-02	9/29/2014	SO	13	16	NA	NA	6.7	Ajacent To 3 Hole Pond
DF-03	9/29/2014	SO	13	16	NA	NA	4.6	Adjacent To 15 Hole Pond
DF-04	9/29/2014	SO	13	16	NA	NA	3.1	Swale South Of Ox Bow
SA-01	9/29/2014	SO	13	16	NA	NA	**16.4**	Storage Area
SA-02	9/29/2014	SO	13	16	NA	NA	2.2	Storage Area
15PD-01	10/23/2014	SD	13	16	**<10**	10 - 33	11.3	Hole 15 Pond
15PD-02	10/23/2014	SD	13	16	<10	10 - 33	5.0	Hole 15 Pond
17PD-01	10/23/2014	SD	13	16	<10	10 - 33	2.3	Hole 17 Pond
17PD-02	10/23/2014	SD	13	16	<10	10 - 33	2.1	Hole 17 Pond
3PD-01	10/23/2014	SD	13	16	<10	10 - 33	3.5	Hole 3 Pond
3PD-02	10/23/2014	SD	13	16	<10	10 - 33	5.3	Hole 3 Pond
4PD-01	10/23/2014	SD	13	16	<10	10 - 33	4.4	Hole 4 Pond
4PD-02	10/23/2014	SD	13	16	<10	10 - 33	8.3	Hole 4 Pond
DO-01	10/23/2014	SD	13	16	<10	10 - 33	3.1	Drainage Outfall
DO-02	10/23/2014	SD	13	16	<10	10 - 33	3.2	Drainage Outfall
EC-01	10/23/2014	SD	13	16	<10	10 - 33	1.5	Ellicott Creek
EC-02	10/23/2014	SD	13	16	<10	10 - 33	1.3	Ellicott Creek

Notes:

SO = Soil

SD = Sediment

* Unrestricted Use SCO and Protection of Ecological Resources SCO are both 13 mg/kg. Residential, Restricted Residential, Commercial and Industrial Use SCOs are all 16 mg/kg.

TABLE 4: SOIL SAMPLE RESULTS - ARSENIC
WESTWOOD PILOT STUDY
772 NORTH FOREST ROAD
AMHERST, NEW YORK

	Arsenic
NYSDEC Soil Cleanup Objective	
Industrial	**16.0 mg/kg**
Commercial	**16.0 mg/kg**
Restricted Residential	**16.0 mg/kg**
Residential	**16.0 mg/kg**
Unrestricted	**13.0 mg/kg**

Field Sample ID	Sample Depth	Sample Matrix	Date Sampled	Units		
		Green				
SO-S1-71-0-2in	0 - 2	SO	10/19/2015	mg/kg	**2.3**	**J**
SO-S1-71-2-6in	2 - 6	SO	10/19/2015	mg/kg	**105**	
SO-S1-71-6-12in	6 - 12	SO	10/19/2015	mg/kg	**16.4**	
SO-S1-71-12-18in	12 - 18	SO	10/19/2015	mg/kg	**3.9**	
SO-S1-72-0-2in	0 - 2	SO	10/19/2015	mg/kg	**5.2**	
SO-S1-72-2-6in	2 - 6	SO	10/19/2015	mg/kg	**209**	
SO-S1-72-6-12in	6 - 12	SO	10/19/2015	mg/kg	**151**	
SO-S1-72-12-18in	12 - 18	SO	10/19/2015	mg/kg	**6.7**	
SO-T1-71-0-2in	0 - 2	SO	10/19/2015	mg/kg	**9.8**	
SO-T1-71-2-6in	2 - 6	SO	10/19/2015	mg/kg	**251**	
SO-T1-71-6-12in	6 - 12	SO	10/19/2015	mg/kg	**70.9**	
SO-T1-71-12-18in	12 - 18	SO	10/19/2015	mg/kg	**3.7**	
SO-T1-72-0-2in	0 - 2	SO	10/19/2015	mg/kg	**5.1**	
SO-T1-72-2-6in	2 - 6	SO	10/19/2015	mg/kg	**229**	
SO-T1-72-6-12in	6 - 12	SO	10/19/2015	mg/kg	**20.4**	
SO-T1-72-12-18in	12 - 18	SO	10/19/2015	mg/kg	**5.7**	
		Fairway				
SO-K1-56-0-2in	0 - 2	SO	10/20/2015	mg/kg	**5**	
SO-K1-56-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7**	
SO-K1-57-0-2in	0 - 2	SO	10/20/2015	mg/kg	**7.6**	
SO-K1-57-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.3**	
SO-L1-56-0-2in	0 - 2	SO	10/20/2015	mg/kg	**5.7**	
SO-L1-56-2-6in	2 - 6	SO	10/20/2015	mg/kg	**3.8**	
SO-L1-57-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.1**	
SO-L1-57-2-6in	2 - 6	SO	10/20/2015	mg/kg	**5.5**	
SO-L1-58-0-2in	0 - 2	SO	10/20/2015	mg/kg	**9.5**	
SO-L1-58-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.4**	
SO-L1-59-0-2in	0 - 2	SO	10/20/2015	mg/kg	**7.3**	
SO-L1-59-2-6in	2 - 6	SO	10/20/2015	mg/kg	**4.8**	
SO-L1-60-0-2in	0 - 2	SO	10/20/2015	mg/kg	**5.3**	
SO-L1-60-2-6in	2 - 6	SO	10/20/2015	mg/kg	**12.7**	
SO-L1-61-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.7**	
SO-L1-61-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.1**	
SO-M1-57-0-2in	0 - 2	SO	10/20/2015	mg/kg	**11.7**	
SO-M1-57-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.8**	
SO-M1-58-0-2in	0 - 2	SO	10/20/2015	mg/kg	**5.6**	
SO-M1-58-2-6in	2 - 6	SO	10/20/2015	mg/kg	**3.9**	
SO-M1-59-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.6**	
SO-M1-59-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6**	
SO-M1-60-0-2in	0 - 2	SO	10/20/2015	mg/kg	**4.4**	**J**
SO-M1-60-2-6in	2 - 6	SO	10/20/2015	mg/kg	**12**	
SO-M1-61-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.6**	
SO-M1-61-2-6in	2 - 6	SO	10/19/2015	mg/kg	**6.5**	
SO-M1-62-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.4**	
SO-M1-62-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7**	
SO-M1-63-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.1**	
SO-M1-63-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.9**	
SO-N1-61-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.4**	
SO-N1-61-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.6**	
SO-N1-62-0-2in	0 - 2	SO	10/20/2015	mg/kg	**11.1**	
SO-N1-62-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.4**	
SO-N1-63-0-2in	0 - 2	SO	10/20/2015	mg/kg	**9.7**	
SO-N1-63-2-6in	2 - 6	SO	10/20/2015	mg/kg	**5.5**	
SO-N1-64-0-2in	0 - 2	SO	10/19/2015	mg/kg	**9.6**	
SO-N1-64-2-6in	2 - 6	SO	10/19/2015	mg/kg	**6.5**	
SO-N1-65-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.6**	
SO-N1-65-2-6in	2 - 6	SO	10/19/2015	mg/kg	**2.5**	
SO-P1-63-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.4**	
SO-P1-63-2-6in	2 - 6	SO	10/19/2015	mg/kg	**5.4**	
SO-P1-64-0-2in	0 - 2	SO	10/19/2015	mg/kg	**12.6**	
SO-P1-64-2-6in	2 - 6	SO	10/19/2015	mg/kg	**13.1**	
SO-P1-65-0-2in	0 - 2	SO	10/19/2015	mg/kg	**7.8**	
SO-P1-65-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.4**	

TABLE 4: SOIL SAMPLE RESULTS - ARSENIC
WESTWOOD PILOT STUDY
772 NORTH FOREST ROAD
AMHERST, NEW YORK

NYSDEC Soil Cleanup Objective	Arsenic
Industrial	16.0 mg/kg
Commercial	16.0 mg/kg
Restricted Residential	16.0 mg/kg
Residential	16.0 mg/kg
Unrestricted	13.0 mg/kg

Field Sample ID	Sample Depth	Sample Matrix	Date Sampled	Units		
SO-P1-65-6-12in	6 - 12	SO	10/19/2015	mg/kg	**3.1**	**J**
SO-P1-66-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.9**	
SO-P1-66-2-6in	2 - 6	SO	10/19/2015	mg/kg	**6.4**	
SO-P1-67-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.6**	
SO-P1-67-2-6in	2 - 6	SO	10/19/2015	mg/kg	**8**	
SO-Q1-65-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.2**	
SO-Q1-65-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.3**	
SO-Q1-66-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8**	
SO-Q1-66-2-6in	2 - 6	SO	10/19/2015	mg/kg	**5**	
SO-Q1-67-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.5**	
SO-Q1-67-2-6in	2 - 6	SO	10/19/2015	mg/kg	**8**	
SO-Q1-68-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.8**	
SO-Q1-68-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.1**	
SO-Q1-69-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.5**	
SO-Q1-69-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.3**	
SO-R1-67-0-2in	0 - 2	SO	10/19/2015	mg/kg	**6.6**	
SO-R1-67-2-6in	2 - 6	SO	10/19/2015	mg/kg	**8.5**	
SO-R1-68-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.8**	
SO-R1-68-2-6in	2 - 6	SO	10/19/2015	mg/kg	**8.1**	
SO-R1-69-0-2in	0 - 2	SO	10/19/2015	mg/kg	**3.1**	**J**
SO-R1-69-2-6in	2 - 6	SO	10/19/2015	mg/kg	**5.9**	
SO-R1-70-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.6**	
SO-R1-70-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7.7**	
SO-S1-69-0-2in	0 - 2	SO	10/19/2015	mg/kg	**8.8**	
SO-S1-69-2-6in	2 - 6	SO	10/19/2015	mg/kg	**7**	
SO-S1-70-0-2in	0 - 2	SO	10/19/2015	mg/kg	**14.1**	
SO-S1-70-2-6in	2 - 6	SO	10/19/2015	mg/kg	**6.8**	
		Rough				
SO-G1-46-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.4**	
SO-G1-46-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6**	
SO-K1-54-0-2in	0 - 2	SO	10/20/2015	mg/kg	**10.4**	
SO-K1-54-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.4**	
SO-K1-59-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.5**	
SO-K1-59-2-6in	2 - 6	SO	10/20/2015	mg/kg	**4.5**	
SO-K1-62-0-2in	0 - 2	SO	10/20/2015	mg/kg	**8.1**	
SO-K1-62-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.6**	
SO-K1-67-0-2in	0 - 2	SO	10/20/2015	mg/kg	**8.5**	
SO-K1-67-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.9**	
SO-L1-51-0-2in	0 - 2	SO	10/20/2015	mg/kg	**5.4**	
SO-L1-51-2-6in	2 - 6	SO	10/20/2015	mg/kg	**4.8**	
SO-P1-69-0-2in	0 - 2	SO	10/20/2015	mg/kg	**4.2**	
SO-P1-69-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.1**	
SO-Q1-58-0-2in	0 - 2	SO	10/20/2015	mg/kg	**3.6**	
SO-Q1-58-2-6in	2 - 6	SO	10/20/2015	mg/kg	**2.5**	**J**
SO-Q1-62-0-2in	0 - 2	SO	10/20/2015	mg/kg	**6.3**	
SO-Q1-62-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.1**	
SO-R1-66-0-2in	0 - 2	SO	10/20/2015	mg/kg	**7.1**	
SO-R1-66-2-6in	2 - 6	SO	10/20/2015	mg/kg	**8.7**	
SO-T1-66-0-2in	0 - 2	SO	10/20/2015	mg/kg	**7.3**	
SO-T1-66-2-6in	2 - 6	SO	10/20/2015	mg/kg	**6.1**	
SO-U1-70-0-2in	0 - 2	SO	10/20/2015	mg/kg	**7.5**	
SO-U1-70-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.8**	
SO-U1-75-0-2in	0 - 2	SO	10/20/2015	mg/kg	**3.8**	
SO-U1-75-2-6in	2 - 6	SO	10/20/2015	mg/kg	**1.1**	**J**
		Tee Box				
SO-H1-47-0-2in	0 - 2	SO	10/20/2015	mg/kg	**92.1**	
SO-H1-47-2-6in	2 - 6	SO	10/20/2015	mg/kg	**78.1**	
SO-H1-47-6-12in	6 - 12	SO	10/20/2015	mg/kg	**27.1**	
SO-H1-47-12-18in	12 - 18	SO	10/20/2015	mg/kg	**20.2**	
SO-H1-47-18-24in	18 - 24	SO	10/20/2015	mg/kg	**8.9**	
SO-H1-48-0-2in	0 - 2	SO	10/20/2015	mg/kg	**8.5**	
SO-H1-48-2-6in	2 - 6	SO	10/20/2015	mg/kg	**7.4**	
SO-H1-49-0-2in	0 - 2	SO	10/20/2015	mg/kg	**8.2**	
SO-H1-49-2-6in	2 - 6	SO	10/20/2015	mg/kg	**5.3**	

TABLE 4: SOIL SAMPLE RESULTS - COMPLETE LIST
WESTWOOD PILOT STUDY
772 NORTH FOREST ROAD
AMHERST, NEW YORK

						Tee Box																					
					Field Sample ID	SO-H1-48-0-2in		SO-H1-48-2-6in		SO-H1-48-6-12in		SO-H1-48-12-18in		SO-P1-65-0-2in		SO-P1-65-2-6in		SO-P1-65-6-12in		SO-K1-62-0-2in		SO-K1-62-2-6in		SO-T1-71-0-2in		SO-T1-71-2-6in	
					Sample Depth	0 - 2		2 - 6		6 - 12		12 - 18		0 - 2		2 - 6		6 - 12		0 - 2		2 - 6		0 - 2		2 - 6	
					Date Sampled	10/20/2015		10/20/2015		10/20/2015		10/20/2015		10/19/2015		10/19/2015		10/19/2015		10/20/2015		10/20/2015		10/19/2015		10/19/2015	
					Sample Matrix	SO		SO		SO		SO		SO		SO		SO		SO		SO		SO		SO	
					Units	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
	NYSDEC Soil Cleanup Objective																										
Parameter	**Unrestricted**	**Residential**	**Restricted Residential**	**Commercial**	**Industrial**																						
Metals																											
Arsenic	13.0 mg/kg	16.0 mg/kg	16.0 mg/kg	16.0 mg/kg	16.0 mg/kg	**8.5**		**7.4**						**7.8**		**7.4**		**3.1**	**J**	**8.1**		**6.6**		**9.8**		**251**	
Barium	350.0 mg/kg	350.0 mg/kg	400.0 mg/kg	400.0 mg/kg	10000.0 mg/kg	**61.9**								**79.5**				**80.4**		**83.9**				**18.7**	**J**		
Beryllium	7.2 mg/kg	14.0 mg/kg	72.0 mg/kg	590.0 mg/kg	2700.0 mg/kg	**0.43**	**J**							**0.55**	**J**			**0.51**		**0.75**				ND< 0.31	U		
Cadmium	2.5 mg/kg	2.5 mg/kg	4.3 mg/kg	9.3 mg/kg	60.0 mg/kg	**9.2**								**16.5**		**0.65**	**J**	ND< 0.53	U	ND< 0.48	U			**2.5**			
Chromium, Hexavalent	1.0 mg/kg	22.0 mg/kg	110.0 mg/kg	400.0 mg/kg	800.0 mg/kg	ND< 1.3	U,F							ND< 1.4	U					ND< 1.1	U			ND< 1.1	U		
Chromium, Total	30.0 mg/kg	36.0 mg/kg	180.0 mg/kg	1500.0 mg/kg	6800.0 mg/kg	**74.4**	**F1**	**63.2**		**13.4**				**195**		**38.4**		**21.4**		**32.6**		**27.7**		**27.6**			
Copper	50.0 mg/kg	270.0 mg/kg	270.0 mg/kg	270.0 mg/kg	10000.0 mg/kg	**23.2**								**27.6**				**3.7**	**J**	**18.9**				**76.4**			
Cyanide	27.0 mg/kg	27.0 mg/kg	27.0 mg/kg	27.0 mg/kg	10000.0 mg/kg	**0.34**								**0.82**						**0.27**				**0.18**			
Lead	63.0 mg/kg	400.0 mg/kg	400.0 mg/kg	1000.0 mg/kg	3900.0 mg/kg	**51.6**								**65.3**		**24.4**		**12.3**		**38.7**				**49**			
Manganese	1600.0 mg/kg	2000.0 mg/kg	2000.0 mg/kg	10000.0 mg/kg	10000.0 mg/kg	**406**								**267**				**284**		**209**				**671**			
Mercury	0.18 mg/kg	0.81 mg/kg	0.81 mg/kg	2.8 mg/kg	5.7 mg/kg	**2.3**		**2.1**		**0.36**	**H**	**0.15**	**H**	**0.48**						**0.18**				**44.9**			
Nickel	30.0 mg/kg	140.0 mg/kg	310.0 mg/kg	310.0 mg/kg	10000.0 mg/kg	**16.7**								**19.4**				**11**		**21.3**				**3.4**	**J**		
Selenium	3.9 mg/kg	36.0 mg/kg	180.0 mg/kg	1500.0 mg/kg	6800.0 mg/kg	ND< 1.7	U							**2.7**	**J**			ND< 1.8	U	ND< 1.6	U			ND< 1.3	U		
Silver	2.0 mg/kg	36.0 mg/kg	180.0 mg/kg	1500.0 mg/kg	6800.0 mg/kg	**0.59**	**J**							**1.8**	**J**			ND< 0.45	U	ND< 0.41	U			**0.33**	**J**		
Zinc	109.0 mg/kg	2200.0 mg/kg	10000.0 mg/kg	10000.0 mg/kg	10000.0 mg/kg	**102**								**126**				**66.7**		**98.1**				**73.4**			
PCBs / Pesticides																											
Semi-volatile Organic Compounds																											
Benzo(A)Anthracene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.1**								**0.054**	**J**					**0.046**	**J**			ND< 0.0360	U		
Benzo(A)Pyrene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	1.1 mg/kg	**0.11**								**0.059**						**0.046**	**J**			**0.025**	**J**		
Benzo(B)Fluoranthene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.16**								ND< 0.0220	U					**0.067**				ND< 0.0170	U		
Benzo(G,H,I)Perylene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.12**	**J**							**0.062**	**J**					**0.042**	**J**			**0.033**	**J**		
Benzo(K)Fluoranthene	0.8 mg/kg	1.0 mg/kg	3.9 mg/kg	56.0 mg/kg	110.0 mg/kg	**0.064**	**F1**							ND< 0.0250	U					ND< 0.0210	U			ND< 0.0190	U		
Chrysene	1.0 mg/kg	1.0 mg/kg	3.9 mg/kg	56.0 mg/kg	110.0 mg/kg	**0.13**	**J**							**0.076**	**J**					**0.054**	**J**			**0.03**	**J**		
Fluoranthene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.22**	**J**							**0.1**	**J,***					**0.076**	**J**			**0.042**	**J,***		
Indeno(1,2,3-C,D)Pyrene	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.12**								ND< 0.0380	U					**0.044**	**J**			**0.035**	**J**		
Phenanthrene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.097**	**J**							**0.051**	**J**					**0.035**	**J**			**0.015**	**J**		
Pyrene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.14**	**J**							**0.081**	**J**					**0.078**	**J**			**0.027**	**J**		
Volatile Organic Compounds																											
Acetone	0.05 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND< 0.00700	U,F							**0.027**						**0.015**	**J**			ND< 0.00120	U		
Chloroform	0.37 mg/kg	10.0 mg/kg	49.0 mg/kg	350.0 mg/kg	700.0 mg/kg	ND< 0.000510	U							**0.00043**	**J**					ND< 0.000580	U			ND< 0.000240	U		
Hexachlorobenzene	0.33 mg/kg	0.41 mg/kg	1.2 mg/kg	6.0 mg/kg	12.0 mg/kg	ND< 0.0210	U,F							ND< 0.0230	U					ND< 0.0190	U			**0.028**	**J**		
Methylene Chloride	0.05 mg/kg	51.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND< 0.00380	U							ND< 0.000540	U					**0.018**				ND< 0.000370	U		
Tetrachloroethylene (PCE)	1.3 mg/kg	5.5 mg/kg	19.0 mg/kg	150.0 mg/kg	300.0 mg/kg	**0.0027**	**J,B**							ND< 0.000470	U					**0.0039**	**J,B**			ND< 0.000320	U		

						Fairway								Rough Area				Green									
					Field Sample ID	SO-T1-71-6-12in		SO-T1-71-12-18in		SO-T1-71-18-24in																	
					Sample Depth	6 - 12		12 - 18		18 - 24																	
					Date Sampled	10/19/2015		10/19/2015		10/19/2015																	
					Sample Matrix	SO		SO		SO																	
					Units	mg/kg		mg/kg		mg/kg																	
Parameter																											
Metals																											
Arsenic						**70.9**		**3.7**																			
Barium																											
Beryllium																											
Cadmium						**1.5**																					
Chromium, Hexavalent																											
Chromium, Total																											
Copper																											
Cyanide																											
Lead																											
Manganese																											
Mercury						**21.9**		**0.22**	**H**	**0.058**	**H**																
Nickel																											
Selenium																											
Silver																											
Zinc																											
PCBs / Pesticides																											
Semi-volatile Organic Compounds																											
Benzo(A)Anthracene																											
Benzo(A)Pyrene																											
Benzo(B)Fluoranthene																											
Benzo(G,H,I)Perylene																											
Benzo(K)Fluoranthene																											
Chrysene																											
Fluoranthene																											
Indeno(1,2,3-C,D)Pyrene																											
Phenanthrene																											
Pyrene																											
Volatile Organic Compounds																											
Acetone																											
Chloroform																											
Hexachlorobenzene																											
Methylene Chloride																											
Tetrachloroethylene (PCE)																											

NOTES:

Only analytes detected in at least one sample are shown.

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
TEE BOX SOIL SAMPLE RESULTS

						Sample Location	H1-47				H1-48		H1-49		
						Field Sample ID	H1-47-0-2IN	H1-47-2-6IN	H1-47-6-12IN	H1-47-12-18IN	H1-48-2-6IN	H1-48-6-12IN	H1-49-2-6IN	H1-49-6-12IN	H1-49-12-18IN
						Sample Depth	0 - 2	2 - 6	6 - 12	12 - 18	2 - 6	6 - 12	2 - 6	6 - 12	12 - 18
						Date Sampled	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
						NYSDEC Soil Cleanup Objective									
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16		56	51	71	8.8	100	3.8	9.6	4.6	5.4
Barium	350	350	400	400	10000		56	51	64	74	190	55	45	50	76
Beryllium	7.2	14	72	590	2700		0.27 J	0.31 J	0.44 J	0.58	0.36 J	0.27 J	0.28	0.18 J	0.35 J
Cadmium	2.5	2.5	4.3	9.3	60		11	11	3.4	0.35 J	15	0.35 J	2.3	0.70 J	0.36 J
Chromium, Total	30	36	180	1500	6800		140	130	85	22	60	26	19	16	17
Copper	50	270	270	270	10000		29	26	20	11	26	16	21	18	21
Cyanide	27	27	27	27	10000		190						ND		
Lead	63	400	400	1000	3900		330	170	180	23	54	16	21	25	21
Manganese	1600	2000	2000	10000	10000		3.1	300	400	430	4600	520	460	320	670
Mercury	0.18	0.81	0.81	2.8	5.7		12	3.3	4.9	0.15	2.2	0.12	0.97	0.21	0.10
Nickel	30	140	310	310	10000		ND	12	15	14	17	11	10	9.2	12
Selenium	3.9	36	180	1500	6800		0.97 J	0.61 J	0.54 J	ND	ND	ND	ND	0.30 J	ND
Silver	2	36	180	1500	6800		82	0.89 J	0.48 J	ND	0.27 J	ND	ND	ND	ND
Zinc	109	2200	10000	10000	10000		7100	84	80	50	96	70	51	56	59
Metals with No SCOs															
Aluminum							ND	7500	11000	12000	9800	8700		7400	9100
Antimony							5.1	ND	ND	ND	ND	ND		ND	ND
Cobalt							14000	5.1	7.3	11	41	4.8		3.8	6.2
Iron							3700	14000	19000	21000	20000	14000		11000	14000
Calcium							1800	3800	3300	2600	30000	40000		93000	31000
Magnesium							570	1900	2400	2800	16000	15000		4400	7800
Potassium							32 J	530	660	620	700	820		500	560
Sodium							ND	41 J	58 J	65 J	100 J	94 J		84 J	79 J
Thallium							16	ND	ND	ND	ND	ND		ND	ND
Vanadium								16	23	29	20	16		14	19

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
GREEN SOIL SAMPLE RESULTS

					Sample Location	S1-71				S1-72				
					Field Sample ID	S1-71-2-6IN	S1-71-6-12IN	S1-71-12-18IN	S1-71-18-24IN	S1-72-0-2IN	S1-72-2-6IN	S1-72-6-12IN	S1-72-12-18IN	S1-72-18-24IN
					Sample Depth	2 - 6	6 - 12	12 - 18	18 - 24	0 - 2	2 - 6	6 - 12	12 - 18	18 - 24
					Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	9/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
					NYSDEC Soil Cleanup Objective									
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial									
Metals With SCOs														
Arsenic	13	16	16	16	16	300	16	5.7		68	160	210	7.2	
Barium	350	350	400	400	10000	87	77	92		48	60	94	110	
Beryllium	7.2	14	72	590	2700	0.60	0.61	0.38 J		0.23 J	0.35 J	0.70	0.50	
Cadmium	2.5	2.5	4.3	9.3	60	13	0.21 J	ND		32	20	1.1	ND	
Chromium, Total	30	36	180	1500	6800	66	16	14		540	420	26	19	
Copper	50	270	270	270	10000	31	9.6	15		69	70	17	24	
Cyanide	27	27	27	27	10000					750	0.36 J			
Lead	63	400	400	1000	3900	690	37	9.9		120	860	180	12	
Manganese	1600	2000	2000	10000	10000	360	620	270		19	280	700	380	
Mercury	0.18	0.81	0.81	2.8	5.7	77	4.8	1.1	0.04 J	14	120	47	0.10	0.03 J
Nickel	30	140	310	310	10000	14	11	14		0.72 J	15	12	24	
Selenium	3.9	36	180	1500	6800	0.44 J	0.28 J	ND		4.3	0.77 J	ND	ND	
Silver	2	36	180	1500	6800	ND	ND	ND		170	3.4	ND	ND	
Zinc	109	2200	10000	10000	10000	86	52	52		4800	150	67	68	
Metals with No SCOs														
Aluminum						12000	12000	12000		ND	5800	13000	13000	
Antimony						1.0 J	ND	ND		2.8	ND	0.90 J	ND	
Cobalt						5.0	8.0	4.9		8300	3.6	7.4	9.3	
Iron						15000	19000	15000		5200	12000	22000	22000	
Calcium						10000	3900	45000		1200	6000	7800	3400	
Magnesium						5000	2600	25000		420	2000	3900	5000	
Potassium						800	590	750		37 J	650	970	970	
Sodium						70 J	78 J	120 J		ND	35 J	48 J	76 J	
Thallium						ND	ND	ND		9.8	ND	ND	ND	
Vanadium						18	22	19			11	22	24	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
GREEN SOIL SAMPLE RESULTS

						Sample Location	T1-71			T1-72					
						Field Sample ID	T1-71-2-6IN	T1-71-6-12IN	T1-71-12-18IN	T1-72-0-2IN	T1-72-2-6IN	T1-72-6-12IN	T1-72-12-18IN	T1-72-18-24IN
						Sample Depth	2 - 6	6 - 12	12 - 18	0 - 2	2 - 6	6 - 12	12 - 18	18 - 24
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	9/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
				NYSDEC Soil Cleanup Objective										
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial									
Metals With SCOs														
Arsenic	13	16	16	16	16		280	56	6.0	110	230	180	5.6	
Barium	350	350	400	400	10000		83	77	100	50	81	85	70	
Beryllium	7.2	14	72	590	2700		0.61	0.56	0.53	0.17 J	0.51	0.60	0.47	
Cadmium	2.5	2.5	4.3	9.3	60		13	0.30 J	0.14 J	24	22	1.6	0.19 J	
Chromium, Total	30	36	180	1500	6800		120	16	17	290	240	45	13	
Copper	50	270	270	270	10000		48	13	19	57	80	20	9.6	
Cyanide	27	27	27	27	10000					460				
Lead	63	400	400	1000	3900		870	40	11	180	970	320	16	
Manganese	1600	2000	2000	10000	10000		280	840	410	180	400	400	520	
Mercury	0.18	0.81	0.81	2.8	5.7		110	4.8	0.05 J	13	160	78	2.8	0.07 J
Nickel	30	140	310	310	10000		14	16	20	0.51 J	19	12	10	
Selenium	3.9	36	180	1500	6800		0.38 J	ND U	ND	2.5	0.62 J	ND	ND	
Silver	2	36	180	1500	6800		0.65 J	ND U	ND	140	1.5	ND	ND	
Zinc	109	2200	10000	10000	10000		89	52	62	4300	150	70	48	
Metals with No SCOs														
Aluminum							9800	11000	13000	ND	9300	12000	11000	
Antimony							1.0 J	0.78 J	ND	3.4	ND	ND	ND	
Cobalt							4.6	8.1	7.7	10000	5.1	5.5	6.0	
Iron							14000	19000	20000	4000	15000	16000	17000	
Calcium							9700	3000	3000	1300	10000	7300	9300	
Magnesium							4900	2800	3800	280	4700	4000	5200	
Potassium							650	530	730	27 J	580	660	430	
Sodium							70 J	56 J	75 J	ND	54 J	66 J	79 J	
Thallium							ND U	ND U	ND	9.3	ND	ND	ND	
Vanadium							18	21	23		16	19	22	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	K1-56			K1-57			L1-56			
						Field Sample ID	K1-56-0-2IN	K1-56-2-6IN	K1-56-6-12IN	K1-57-2-6IN	K1-57-6-12IN	K1-57-12-18IN	L1-56-2-6IN	L1-56-6-12IN	L1-56-12-18IN	
						Sample Depth	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	12 - 18	2 - 6	6 - 12	12 - 18	
						Date Sampled	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	
NYSDEC Soil Cleanup Objective																
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial											
Metals With SCOs																
Arsenic	13	16	16	16	16		17	9.7	3.7	8.2	4.1	7.9	5.2	4.4	6.8	
Barium	350	350	400	400	10000		74	78	150	62	110	110	76	160	120	
Beryllium	7.2	14	72	590	2700		0.39 J	0.51 J	0.48 J	0.56	0.86	0.53	0.39 J	0.62	0.54	
Cadmium	2.5	2.5	4.3	9.3	60		20	4.8	ND	3.7	0.12 J	0.20 J	5.4	1.2	0.42 J	
Chromium, Total	30	36	180	1500	6800		230	92	23	44	22	16	66	17	19	
Copper	50	270	270	270	10000		33	20	6.3	15	20	22	16	14	21	
Cyanide	27	27	27	27	10000		78									
Lead	63	400	400	1000	3900		130	41	11	31	15	17	27	12	13	
Manganese	1600	2000	2000	10000	10000		2.2	240	74	590	1100	1100	160	1600	570	
Mercury	0.18	0.81	0.81	2.8	5.7		16	0.36	0.06 J	0.16	0.04 J	0.04 J	0.13	0.03 J	0.03 J	
Nickel	30	140	310	310	10000		0.88 J	14	9.5	12	21	28	12	28	26	
Selenium	3.9	36	180	1500	6800		1.8	0.60 J	ND	ND	ND	ND	0.27 J	ND	ND	
Silver	2	36	180	1500	6800		120	0.63 J	ND	ND	ND	ND	0.36 J	ND	ND	
Zinc	109	2200	10000	10000	10000		9500	90	49	62	62	52	69	50	59	
Metals with No SCOs																
Aluminum							ND	14000	19000	14000	19000	11000	11000	12000	13000	
Antimony							4.1	ND	ND	ND	ND	ND	ND	ND	ND	
Cobalt							17000	4.7	3.2	8.8	55	14	3.8	14	12	
Iron							5500	22000	24000	36000	25000	21000	15000	20000	21000	
Calcium							2000	5000	3200	3800	2500	2500	3700	2100	3500	
Magnesium							660	2400	2300	2700	3500	3400	2100	2400	4600	
Potassium							77 J	820	990	570	1000	640	760	720	750	
Sodium							ND	120 J	170 J	82 J	100 J	73 J	58 J	54 J	76 J	
Thallium							20	ND	ND	ND	ND	ND	ND	ND	ND	
Vanadium								28	30	38	29	26	19	23	26	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	L1-57	L1-58		L1-59			L1-60		L1-61	
						Field Sample ID	L1-57-2-6IN	L1-58-2-6IN	L1-58-6-12IN	L1-59-0-2IN	L1-59-2-6IN	L1-59-6-12IN	L1-60-2-6IN	L1-60-6-12IN	L1-61-2-6IN	L1-61-6-12IN
						Sample Depth	2 - 6	2 - 6	6 - 12	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
				NYSDEC Soil Cleanup Objective												
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial											
Metals With SCOs																
Arsenic	13	16	16	16	16		3.6	8.1	6.2	11	7.1	5.2	9.5	6.9	6.8	4.0
Barium	350	350	400	400	10000		99	68	93	69	65	130	78	79	66	86
Beryllium	7.2	14	72	590	2700		0.52	0.57	1.1	0.46 J	0.53	0.76	0.64	0.66	0.51	0.38 J
Cadmium	2.5	2.5	4.3	9.3	60		0.29 J	12	0.33 J	7.2	4.2	0.17 J	3.8	1.9	1.6	0.31 J
Chromium, Total	30	36	180	1500	6800		19	100	23	91	55	21	85	33	43	20
Copper	50	270	270	270	10000		5.8	22	18	18	16	19	20	14	18	17
Cyanide	27	27	27	27	10000					53						
Lead	63	400	400	1000	3900		11	39	14	200	31	12	46	27	36	19
Manganese	1600	2000	2000	10000	10000		430	250	380	0.30	240	400	340	640	300	380
Mercury	0.18	0.81	0.81	2.8	5.7		0.04 J	0.44	0.05 J	16	0.09 J	0.03 J	0.33	0.13	0.19	0.04 J
Nickel	30	140	310	310	10000		10	18	22	0.41 J	13	25	18	17	12	14
Selenium	3.9	36	180	1500	6800		0.37 J	ND	ND	0.61 J	ND	ND	ND	ND	ND	ND
Silver	2	36	180	1500	6800		ND	0.54 J	ND	83	ND	ND	0.39 J	ND	ND	ND
Zinc	109	2200	10000	10000	10000		50	86	61	10000	64	61	86	66	75	74
Metals with No SCOs																
Aluminum							15000	11000	15000	ND	10000	15000	12000	12000	11000	13000
Antimony							ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND
Cobalt							8.8	6.3	11	18000	5.5	9.0	7.8	19	7.7	6.2
Iron							25000	19000	24000	3600	18000	23000	21000	22000	17000	17000
Calcium							2300	3300	2400	2500	3500	3400	3300	2600	4400	3300
Magnesium							2600	2900	3500	650	2400	5300	3200	3000	3200	3300
Potassium							640	760	800	46 J	520	920	800	740	600	740
Sodium							100 J	50 J	63 J	ND	66 J	100 J	58 J	61 J	73 J	100 J
Thallium							ND	ND	ND	23	ND	ND	ND	ND	ND	ND
Vanadium							30	24	32		24	28	26	28	24	20

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	M1-57		M1-58				M1-59		
						Field Sample ID	M1-57-2-6IN	M1-57-6-12IN	M1-58-2-6IN	M1-58-6-12IN	M1-58-12-18IN	M1-58-18-24IN	M1-59-0-2IN	M1-59-2-6IN	M1-59-6-12IN
						Sample Depth	2 - 6	6 - 12	2 - 6	6 - 12	12 - 18	18 - 24	0 - 2	2 - 6	6 - 12
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	09/28/2016	10/10/2016	10/10/2016
	NYSDEC Soil Cleanup Objective														
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16		10	6.3	7.7	4.7	9.1		8.6	7.3	6.2
Barium	350	350	400	400	10000		83	84	67	98	100		57	69	110
Beryllium	7.2	14	72	590	2700		0.58	0.73	0.42 J	0.33 J	0.74		0.38 J	0.54	0.72
Cadmium	2.5	2.5	4.3	9.3	60		2.1	0.69 J	4.2	1.4	0.42 J		7.6	9.4	0.67 J
Chromium, Total	30	36	180	1500	6800		64	23	45	33	20		79	90	23
Copper	50	270	270	270	10000		17	11	18	11	25		17	20	19
Cyanide	27	27	27	27	10000								40		
Lead	63	400	400	1000	3900		39	16	30	16	19		220	37	14
Manganese	1600	2000	2000	10000	10000		610	770	760	170	1100		0.31	230	780
Mercury	0.18	0.81	0.81	2.8	5.7		0.16	0.04 J	2.7	0.27	0.32	0.03 J	13	0.23	0.05 J
Nickel	30	140	310	310	10000		16	16	17	9.6	24		0.37 J	16	28
Selenium	3.9	36	180	1500	6800		0.63 J	0.36 J	0.27 J	ND	ND		0.47 J	ND	ND
Silver	2	36	180	1500	6800		0.36 J	ND	ND	ND	ND		72	0.47 J	ND
Zinc	109	2200	10000	10000	10000		70	54	58	52	62		9700	76	60
Metals with No SCOs															
Aluminum							14000	14000	12000	12000	14000		ND	11000	14000
Antimony							ND	ND	ND	ND	ND		5.6	ND	ND
Cobalt							9.0	12	13	4.2	17		18000	5.9	12
Iron							24000	26000	19000	17000	24000		2700	19000	22000
Calcium							3600	2300	4800	2900	2600		2000	3200	2900
Magnesium							2800	3300	3700	2300	3800		490	2500	3900
Potassium							700	800	610	480	710		38 J	610	820
Sodium							91 J	95 J	95 J	70 J	50 J		ND	46 J	75 J
Thallium							ND	ND	ND	ND	ND		23	ND	ND
Vanadium							27	30	24	24	29			25	27

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	**M1-60**		**M1-61**		**M1-62**			
						Field Sample ID	**M1-60-2-6IN**	**M1-60-6-12IN**	**M1-61-0-2IN**	**M1-61-12-18IN**	**M1-62-2-6IN**	**M1-62-6-12IN**	**M1-62-12-18IN**	**M1-62-18-24IN**
						Sample Depth	**2 - 6**	**6 - 12**	**0 - 2**	**12 - 18**	**2 - 6**	**6 - 12**	**12 - 18**	**18 - 24**
						Date Sampled	**10/10/2016**	**10/10/2016**	**09/28/2016**	**10/10/2016**	**10/10/2016**	**10/10/2016**	**10/10/2016**	**10/10/2016**
			NYSDEC Soil Cleanup Objective											
Parameter	**Unrestricted**	**Residential**	**Restricted Residential**	**Commercial**	**Industrial**									
Metals With SCOs														
Arsenic	13	16	16	16	16		**5.3**	**5.5**	**7.3**	**6.4**	**7.6**	**4.1**	**6.3**	**5.3**
Barium	350	350	400	400	10000		**78**	**140**	**58**	**100**	**60**	**51**	**100**	**45**
Beryllium	7.2	14	72	590	2700		**0.63**	**0.93**	**0.35 J**	**0.53**	**0.39 J**	**0.38 J**	**0.51**	**0.20 J**
Cadmium	2.5	2.5	4.3	9.3	60		**0.56 J**	ND	**9.6**	**0.52 J**	**11**	**0.57 J**	ND	ND
Chromium, Total	30	36	180	1500	6800		**25**	**25**	**97**	**20**	**100**	**14**	**20**	**10**
Copper	50	270	270	270	10000		**13**	**22**	**20**	**23**	**20**	**7.8**	**22**	**18**
Cyanide	27	27	27	27	10000				**40**					
Lead	63	400	400	1000	3900		**19**	**12**	**220**	**14**	**43**	**13**	**14**	**9.9**
Manganese	1600	2000	2000	10000	10000		**240**	**260**	**0.34**	**450**	**160**	**130**	**440**	**420**
Mercury	0.18	0.81	0.81	2.8	5.7		**0.05 J**	**0.04 J**	**14**	**0.05 J**	**0.42**	**0.06 J**	**0.06 J**	**0.03 J**
Nickel	30	140	310	310	10000		**16**	**27**	ND	**24**	**17**	**11**	**25**	**15**
Selenium	3.9	36	180	1500	6800		ND	ND	**0.64 J**	ND	**0.34 J**	ND	ND	ND
Silver	2	36	180	1500	6800		ND	ND	**82**	ND	**0.56 J**	ND	ND	ND
Zinc	109	2200	10000	10000	10000		**60**	**59**	**9500**	**59**	**82**	**46**	**68**	**42**
Metals with No SCOs														
Aluminum							**13000**	**17000**	ND	**13000**	**10000**	**10000**	**14000**	**7200**
Antimony							ND	ND	**5.8**	ND	ND	ND	ND	ND
Cobalt							**7.0**	**10**	**16000**	**11**	**5.3**	**6.1**	**10**	**7.4**
Iron							**21000**	**27000**	**3200**	**21000**	**16000**	**16000**	**23000**	**15000**
Calcium							**2800**	**3500**	**2200**	**31000**	**3500**	**1800**	**3000**	**50000**
Magnesium							**3100**	**6800**	**700**	**10000**	**2300**	**2200**	**5100**	**19000**
Potassium							**710**	**1300**	**38 J**	**1100**	**600**	**410**	**960**	**620**
Sodium							**76 J**	**100 J**	ND	**100 J**	**52 J**	**70 J**	**88 J**	**110 J**
Thallium							ND	ND	**20**	ND	ND	ND	ND	ND
Vanadium							**28**	**34**		**26**	**21**	**20**	**25**	**16**

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

					Sample Location	M1-63					NI-62				
					Field Sample ID	M1-63-0-2IN	M1-63-2-6IN	M1-63-6-12IN	M1-63-12-18IN	M1-63-18-24IN	NI-62-12-18IN	NI-62-2-6IN	NI-62-6-12IN	NI-62-18-24IN	
					Sample Depth	0 - 2	2 - 6	6 - 12	12 - 18	18 - 24	12 - 18	2 - 6	6 - 12	18 - 24	
					Date Sampled	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	
	NYSDEC Soil Cleanup Objective														
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16	6.9	9.7	3.1	2.8	8.0	4.3	5.8	4.6	4.6	
Barium	350	350	400	400	10000	70	67	98	110	140	120	62	52	35	
Beryllium	7.2	14	72	590	2700	0.40 J	0.38 J	0.43 J	0.60	0.76	0.40 J	0.38 J	0.47 J	0.15 J	
Cadmium	2.5	2.5	4.3	9.3	60	15	17	0.84 J	ND	ND	ND	0.52 J	ND	0.09 J	
Chromium, Total	30	36	180	1500	6800	110	140	18	14	18	16	16	13	9.2	
Copper	50	270	270	270	10000	22	25	8.6	10	24	15	11	10	14	
Cyanide	27	27	27	27	10000	50									
Lead	63	400	400	1000	3900	130	69	18	9.3	12	9.0	21	14	8.9	
Manganese	1600	2000	2000	10000	10000	0.48	120	970	91	200	190	250	130	560	
Mercury	0.18	0.81	0.81	2.8	5.7	14	0.63	0.10	0.04 J	0.02 J	0.05 J	0.078 J	0.04 J	0.02 J	
Nickel	30	140	310	310	10000	0.35 J	12	9.9	14	24	16	12	12	14	
Selenium	3.9	36	180	1500	6800	0.74 J	1.0 J	0.33 J	ND	ND	ND	ND	ND	ND	
Silver	2	36	180	1500	6800	89	1.0 J	ND	ND	ND	ND	ND	ND	ND	
Zinc	109	2200	10000	10000	10000	8800	90	42	42	50	50	54	46	41	
Metals with No SCOs															
Aluminum						ND	7900	10000	11000	14000	13000	10000	12000	6000	
Antimony						4.3	ND	ND	ND	ND	ND	ND	ND	ND	
Cobalt						14000	3.3	7.9	5.8	11	6.0	5.9	4.8	6.3	
Iron						4200	11000	11000	15000	31000	17000	17000	18000	13000	
Calcium						1800	5200	3400	2500	3500	2800	3000	2400	34000	
Magnesium						660	1600	1800	2600	5000	3200	2200	2400	17000	
Potassium						43 J	560	530	540	840	670	520	520	500	
Sodium						ND	56 J	100 J	96 J	110 J	110 J	85 J	110 J	110 J	
Thallium						18	ND	ND	ND	ND	ND	ND	ND	ND	
Vanadium							14	14	22	31	20	21	22	14	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

					Sample Location	N1-63				N1-64				N1-65	
					Field Sample ID	N1-63-2-6IN	N1-63-6-12IN	N1-63-12-18IN	N1-63-18-24IN	N1-64-2-6IN	N1-64-6-12IN	N1-64-12-18IN	N1-64-18-24IN	N1-65-2-6IN	N1-65-6-12IN
					Sample Depth	2 - 6	6 - 12	12 - 18	18 - 24	2 - 6	6 - 12	12 - 18	18 - 24	2 - 6	6 - 12
					Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
NYSDEC Soil Cleanup Objective															
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16	7.8	5.2	5.1	4.6	7.1	6.2	6.1	4.3	8.3	5.1
Barium	350	350	400	400	10000	68	100	140	120	81	130	100	83	72	88
Beryllium	7.2	14	72	590	2700	0.50 J	0.88	0.85	0.60	0.62	0.69	0.51	0.43 J	0.54	0.61
Cadmium	2.5	2.5	4.3	9.3	60	3.0	0.16 J	ND	ND	0.24 J	0.13 J	ND	ND	5.4	0.66 J
Chromium, Total	30	36	180	1500	6800	47	21	26	20	24	23	17	16	63	22
Copper	50	270	270	270	10000	15	20	28	21	10	12	17	16	17	10
Cyanide	27	27	27	27	10000										
Lead	63	400	400	1000	3900	30	12	11	9.0	24	18	13	8.8	34	15
Manganese	1600	2000	2000	10000	10000	370	430	1000	530	920	3100	180	180	450	900
Mercury	0.18	0.81	0.81	2.8	5.7	0.34	0.07 J	0.02 J	0.02 J	0.12	0.06 J	0.04 J	0.04 J	0.33	0.08
Nickel	30	140	310	310	10000	15	23	37	26	12	20	20	18	13	13
Selenium	3.9	36	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	2	36	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	0.23 J	ND
Zinc	109	2200	10000	10000	10000	64	64	59	49	59	77	64	54	67	49
Metals with No SCOs															
Aluminum						11000	16000	19000	15000	12000	16000	13000	12000	9400	11000
Antimony						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt						11	12	18	12	9.5	42	8.4	6.5	6.2	9.1
Iron						22000	24000	30000	24000	34000	37000	19000	21000	18000	22000
Calcium						5900	2600	7400	36000	4400	2700	2400	2600	3200	2400
Magnesium						2800	4300	11000	11000	2400	4000	3700	4200	2200	2400
Potassium						670	990	1500	1300	740	1000	830	810	550	530
Sodium						73 J	100 J	180 J	180 J	120 J	130 J	110 J	110 J	50 J	57 J
Thallium						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium						26	28	33	27	37	32	24	21	23	25

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

					Sample Location	P1-64			P1-65		P1-66			P1-67	
					Field Sample ID	P1-64-0-2IN	P1-64-2-6IN	P1-64-6-12IN	P1-65-2-6IN	P1-65-6-12IN	P1-66-0-2IN	P1-66-2-6IN	P1-66-6-12IN	P1-67-2-6IN	P1-67-6-12IN
					Sample Depth	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12
					Date Sampled	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
					NYSDEC Soil Cleanup Objective										
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16	9.5	7.4	5.6	5.8	6.4	7.3	6.0	4.8	7.8	5.9
Barium	350	350	400	400	10000	84	80	76	67	100	59	76	74	82	100
Beryllium	7.2	14	72	590	2700	0.56 J	0.60	0.64	0.67	0.72	0.39 J	0.45 J	0.43 J	0.42 J	0.48
Cadmium	2.5	2.5	4.3	9.3	60	26	4.0	0.27 J	0.24 J	0.29 J	12	2.0	0.54 J	4.5	1.4
Chromium, Total	30	36	180	1500	6800	220	46	21	19	15	120	38	36	80	28
Copper	50	270	270	270	10000	36	17	9.2	8.8	15	21	14	14	18	15
Cyanide	27	27	27	27	10000	84			0.55 J		46				
Lead	63	400	400	1000	3900	180	32	21	21	13	240	22	15	38	20
Manganese	1600	2000	2000	10000	10000	0.56	610	890	1300	880	0.49	640	310	520	770
Mercury	0.18	0.81	0.81	2.8	5.7	20	0.19	0.09	0.07 J	0.04 J	15	0.20	0.10	0.29	0.12
Nickel	30	140	310	310	10000	0.84 J	14	11	11	23	0.46 J	13	16	14	15
Selenium	3.9	36	180	1500	6800	1.5	ND	ND	ND	ND	0.83 J	ND	ND	0.37 J	ND
Silver	2	36	180	1500	6800	130	ND	ND	ND	ND	90	ND	ND	0.40 J	ND
Zinc	109	2200	10000	10000	10000	11000	74	51	49	48	8600	58	52	72	56
Metals with No SCOs															
Aluminum						ND	11000	12000	11000	10000	ND	10000	12000	9800	11000
Antimony						6.8	ND	ND	ND	ND	5.2	ND	ND	ND	ND
Cobalt						17000	7.3	10	15	14	15000	8.4	6.2	7.5	8.8
Iron						4600	23000	29000	33000	20000	4300	18000	18000	18000	20000
Calcium						2600	3800	3200	3400	2200	2200	3900	3500	2600	2500
Magnesium						840	2100	2200	2600	2800	680	3000	3500	2200	2600
Potassium						68 J	690	690	480	550	47 J	580	680	630	670
Sodium						ND	48 J	69 J	65 J	64 J	ND	60 J	78 J	34 J	39 J
Thallium						27	ND	ND	ND	ND	19	ND	ND	ND	ND
Vanadium							29	33	27	25		21	21	22	26

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	Q1-65		Q1-66		Q1-67			Q1-68			
						Field Sample ID	Q1-65-2-6IN	Q1-65-6-12IN	Q1-66-2-6IN	Q1-66-6-12IN	Q1-67-2-6IN	Q1-67-6-12IN	Q1-67-12-18IN	Q1-68-0-2IN	Q1-68-2-6IN	Q1-68-6-12IN	
						Sample Depth	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12	12 - 18	0 - 2	2 - 6	6 - 12	
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	09/28/2016	10/10/2016	10/10/2016	
			NYSDEC Soil Cleanup Objective														
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial												
Metals With SCOs																	
Arsenic	13	16	16	16	16		5.2	5.2	4.9	4.5	8.7	8.4	7.7	8.5	5.7	3.3	
Barium	350	350	400	400	10000		59	81	69	70	82	89	100	68	66	63	
Beryllium	7.2	14	72	590	2700		0.51	0.68	0.39 J	0.40 J	0.56	0.62	0.50	0.40 J	0.33 J	0.36 J	
Cadmium	2.5	2.5	4.3	9.3	60		1.4	ND	1.6	0.70 J	6.2	3.0	0.41 J	12	3.3	0.18 J	
Chromium, Total	30	36	180	1500	6800		24	17	22	18	91	59	19	130	45	14	
Copper	50	270	270	270	10000		9.2	18	13	12	21	16	26	24	14	7.8	
Cyanide	27	27	27	27	10000									51			
Lead	63	400	400	1000	3900		18	10	16	12	39	31	15	290	26	11	
Manganese	1600	2000	2000	10000	10000		500	210	450	330	460	700	540	0.50	500	320	
Mercury	0.18	0.81	0.81	2.8	5.7		0.11	0.05 J	0.21	0.07 J	0.27	0.20	0.04 J	15	0.18	0.04 J	
Nickel	30	140	310	310	10000		10	19	14	14	16	15	27	0.58 J	12	11	
Selenium	3.9	36	180	1500	6800		ND	ND	ND	ND	0.73 J	0.44 J	ND	0.86 J	ND	ND	
Silver	2	36	180	1500	6800		ND	ND	ND	ND	0.59 J	0.41 J	ND	97	0.22 J	ND	
Zinc	109	2200	10000	10000	10000		47	56	51	44	87	77	70	9000	59	40	
Metals with No SCOs																	
Aluminum							9600	11000	9700	9800	11000	12000	13000	ND	8500	9600	
Antimony							ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND	
Cobalt							6.9	7.1	7.6	6.1	6.3	8.1	11	16000	6.2	5.5	
Iron							21000	20000	16000	16000	19000	21000	21000	3900	14000	15000	
Calcium							2400	2200	2100	1900	3700	3900	20000	2200	7600	2000	
Magnesium							2000	3400	2400	2400	2500	2600	14000	590	3600	2300	
Potassium							440	670	610	580	650	650	870	52 J	440	420	
Sodium							64 J	75 J	35 J	42 J	56 J	68 J	98 J	ND	84 J	58 J	
Thallium							ND	ND	ND	ND	ND	ND	ND	19	ND	ND	
Vanadium							24	23	21	21	22	24	24		19	20	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

						Sample Location	Q1-69			R1-67			R1-68		R1-69					
						Field Sample ID	Q1-69-2-6IN	Q1-69-6-12IN	Q1-69-12-18IN	R1-67-0-2IN	R1-67-2-6IN	R1-67-6-12IN	R1-68-2-6IN	R1-68-6-12IN	R1-69-2-6IN	R1-69-6-12IN				
						Sample Depth	2 - 6	6 - 12	12 - 18	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12				
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016				
					NYSDEC Soil Cleanup Objective															
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial															
Metals With SCOs																				
Arsenic	13	16	16	16	16		8.2	7.3	7.0	7.3	5.2	4.9	8.4	5.5	6.3	4.9				
Barium	350	350	400	400	10000		62	70	83	59	74	84	75	78	79	89				
Beryllium	7.2	14	72	590	2700		0.46 J	0.56	0.46	0.35 J	0.55	0.79	0.39 J	0.44 J	0.52	0.60				
Cadmium	2.5	2.5	4.3	9.3	60		11	3.2	0.30 J	10	2.6	0.94	7.4	0.15 J	4.1	ND				
Chromium, Total	30	36	180	1500	6800		87	38	15	88	47	29	66	19	60	16				
Copper	50	270	270	270	10000		17	13	20	16	13	18	18	16	16	8.5				
Cyanide	27	27	27	27	10000					41										
Lead	63	400	400	1000	3900		39	26	15	330	22	14	33	13	27	13				
Manganese	1600	2000	2000	10000	10000		390	880	850	0.34	480	570	450	200	820	740				
Mercury	0.18	0.81	0.81	2.8	5.7		0.41	0.16	0.03 J	13	0.14	0.09	0.55	0.07 J	0.33	0.12				
Nickel	30	140	310	310	10000		12	12	24	0.44 J	14	19	14	16	14	13				
Selenium	3.9	36	180	1500	6800		0.68 J	0.44 J	ND	0.57 J	ND	ND	ND	ND	ND	ND				
Silver	2	36	180	1500	6800		0.47 J	0.24 J	ND	77	ND	ND	0.34 J	ND	ND	ND				
Zinc	109	2200	10000	10000	10000		78	61	54	8600	62	71	72	52	66	50				
Metals with No SCOs																				
Aluminum							9200	10000	10000	ND	11000	14000	9000	11000	9500	12000				
Antimony							ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND				
Cobalt							5.0	13	15	15000	6.3	9.8	6.1	6.5	8.1	8.3				
Iron							15000	18000	19000	2800	20000	22000	16000	18000	18000	21000				
Calcium							3000	2700	3600	1800	2600	2400	3600	2100	3000	2400				
Magnesium							2000	2200	4000	560	2400	3500	2200	3000	2200	2700				
Potassium							490	460	650	35 J	530	750	470	650	620	580				
Sodium							42 J	50 J	63 J	ND	58 J	84 J	51 J	58 J	42 J	60 J				
Thallium							ND	ND	ND	19	ND	ND	ND	ND	ND	ND				
Vanadium							19	21	22		25	26	21	23	19	23				

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
FAIRWAY SOIL SAMPLE RESULTS

					Sample Location	R1-70			S1-69		S1-70		
					Field Sample ID	R1-70-0-2IN	R1-70-2-6IN	R1-70-6-12IN	S1-69-2-6IN	S1-69-6-12IN	S1-70-2-6IN	S1-70-6-12IN	
					Sample Depth	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12	
					Date Sampled	09/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	
NYSDEC Soil Cleanup Objective													
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial								
Metals With SCOs													
Arsenic	13	16	16	16	16	7.8	9.4	6.4	6.5	7.6	34	5.4	
Barium	350	350	400	400	10000	62	74	90	80	93	74	110	
Beryllium	7.2	14	72	590	2700	0.34 J	0.54	0.63	0.58	0.62	0.52	0.55	
Cadmium	2.5	2.5	4.3	9.3	60	15	12	0.78 J	2.8	0.99	2.2	0.20 J	
Chromium, Total	30	36	180	1500	6800	100	97	24	39	18	42	21	
Copper	50	270	270	270	10000	20	21	16	13	20	17	18	
Cyanide	27	27	27	27	10000	44							
Lead	63	400	400	1000	3900	280	44	17	23	12	45	12	
Manganese	1600	2000	2000	10000	10000	0.60	320	580	780	830	470	440	
Mercury	0.18	0.81	0.81	2.8	5.7	13	0.76	0.12	0.30	0.05 J	2.7	0.07 J	
Nickel	30	140	310	310	10000	0.46 J	16	18	13	27	14	17	
Selenium	3.9	36	180	1500	6800	0.73 J	0.69 J	ND	0.54 J	ND	0.26 J	ND	
Silver	2	36	180	1500	6800	82	0.66 J	ND	0.24 J	ND	ND	ND	
Zinc	109	2200	10000	10000	10000	7800	92	65	62	65	76	59	
Metals with No SCOs													
Aluminum						ND	10000	12000	10000	12000	10000	13000	
Antimony						4.7	ND	ND	ND	ND	ND	ND	
Cobalt						13000	5.8	8.6	9.7	12	6.4	9.2	
Iron						3900	17000	20000	19000	22000	18000	25000	
Calcium						1900	3600	7600	2700	2600	3200	2300	
Magnesium						410	2600	5700	2300	3600	2300	3100	
Potassium						55 J	710	850	580	760	720	810	
Sodium						ND	59 J	71 J	44 J	53 J	44 J	73 J	
Thallium						16	ND	ND	ND	ND	ND	ND	
Vanadium							20	23	21	24	22	28	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
ROUGH SOIL SAMPLE RESULTS

						Sample Location	G1-46		K1-54			K1-59		K1-62	
						Field Sample ID	G1-46-2-6IN	G1-46-6-12IN	K1-54-0-2IN	K1-54-2-6IN	K1-54-6-12IN	K1-59-2-6IN	K1-59-6-12IN	K1-62-2-6IN	K1-62-6-12IN
						Sample Depth	2 - 6	6 - 12	0 - 2	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12
						Date Sampled	10/10/2016	10/10/2016	9/28/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
NYSDEC Soil Cleanup Objective															
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial										
Metals With SCOs															
Arsenic	13	16	16	16	16		7.3	5.0	7.4	8.9	3.8	6.4	4.6	15	8.5
Barium	350	350	400	400	10000		64	140	95	88	86	100	120	57	64
Beryllium	7.2	14	72	590	2700		0.46 J	0.84	0.54	0.51	0.48 J	0.68	0.80	0.42 J	0.51
Cadmium	2.5	2.5	4.3	9.3	60		0.67 J	ND	8.6	8.0	0.19 J	0.76 J	0.32 J	0.21 J	ND
Chromium, Total	30	36	180	1500	6800		33	22	63	94	21	46	24	21	17
Copper	50	270	270	270	10000		14	18	23	20	6.5	15	12	13	14
Cyanide	27	27	27	27	10000				26					ND	
Lead	63	400	400	1000	3900		34	10	410	44	15	32	15	22	16
Manganese	1600	2000	2000	10000	10000		230	360	0.46	290	130	780	1100	180	230
Mercury	0.18	0.81	0.81	2.8	5.7		0.58	0.03 J	22	0.46	0.06 J	0.19	0.04 J	0.20	0.08
Nickel	30	140	310	310	10000		14	25	ND	16	9.2	15	20	14	15
Selenium	3.9	36	180	1500	6800		0.40 J	ND	0.26 J	0.51 J	0.45 J	ND	ND	ND	ND
Silver	2	36	180	1500	6800		ND	ND	72	0.55 J	ND	ND	ND	ND	ND
Zinc	109	2200	10000	10000	10000		66	51	13000	79	39	75	60	59	53
Metals with No SCOs															
Aluminum							11000	18000	ND	14000	18000	14000	16000	12000	13000
Antimony							ND	ND	9.6	ND	ND	ND	ND	ND	ND
Cobalt							5.6	14	22000	5.6	3.3	18	12	6.0	7.1
Iron							18000	30000	5300	22000	33000	26000	24000	17000	20000
Calcium							3900	2900	4100	4700	2500	4600	3400	2400	2200
Magnesium							2600	5700	1000	2300	2100	2900	3900	2700	3100
Potassium							730	1100	75 J	830	1000	890	1000	590	630
Sodium							48	78 J	ND	99	100 J	100	140 J	34	41 J
Thallium							ND	ND	26	ND	ND	ND	ND	ND	ND
Vanadium							23	31		26	24	27	29	23	25

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
772 NORTH FOREST ROAD
AMHERST, NEW YORK

TABLE 5
ROUGH SOIL SAMPLE RESULTS

						Sample Location	L1-51		P1-69		Q1-58		Q1-62				
						Field Sample ID	L1-51-2-6IN	L1-51-6-12IN	P1-69-2-6IN	P1-69-6-12IN	Q1-58-2-6IN	Q1-58-6-12IN	Q1-62-0-2IN		Q1-62-2-6IN		Q1-62-6-12IN	
						Sample Depth	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12	0 - 2		2 - 6		6 - 12	
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	9/28/2016		10/10/2016		10/10/2016	
					NYSDEC Soil Cleanup Objective													
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial													
Metals With SCOs																		
Arsenic	13	16	16	16	16		4.1	5.1	11	6.4	3.8	4.9	6.4		7.4		4.8	
Barium	350	350	400	400	10000		61	84	150	140	91	74	45		47		88	
Beryllium	7.2	14	72	590	2700		0.44 J	0.68	0.77	0.78	0.67	0.51	0.34	J	0.39	J	0.74	
Cadmium	2.5	2.5	4.3	9.3	60		0.06 J	ND	1.7	0.94	0.18 J	ND	0.60	J	0.94		0.32	J
Chromium, Total	30	36	180	1500	6800		13	21	26	17	18	15	18		18		16	
Copper	50	270	270	270	10000		6.6	13	13	15	15	14	12		12		13	
Cyanide	27	27	27	27	10000								39					
Lead	63	400	400	1000	3900		16	8.5	40	11	14	44	99		35		12	
Manganese	1600	2000	2000	10000	10000		150	130	3700	880	460	160	0.16		180		680	
Mercury	0.18	0.81	0.81	2.8	5.7		0.06 J	0.04 J	0.29	0.065 J	0.08	0.12	12		0.10		0.04	J
Nickel	30	140	310	310	10000		7.5	14	13	20	22	14	0.48	J	11		18	
Selenium	3.9	36	180	1500	6800		0.31 J	ND	0.38 J	ND	ND	0.34 J	ND		0.42	J	ND	
Silver	2	36	180	1500	6800		ND	ND	0.45 J	ND	ND	ND	71		ND		ND	
Zinc	109	2200	10000	10000	10000		38	47	67	62	50	53	9200		66		57	
Metals with No SCOs																		
Aluminum							11000	17000	11000	14000	13000	12000	ND		10000		13000	
Antimony							ND	ND	ND	ND	ND	ND	4.6		ND		ND	
Cobalt							3.2	5.1	26	9.2	9.0	4.3	15000		4.9		9.8	
Iron							19000	28000	28000	21000	20000	16000	1800		17000		21000	
Calcium							1200	1000	2700	2300	2200	2400	1700		2100		1400	
Magnesium							1700	3000	2300	3300	3400	2100	460		1800		2900	
Potassium							460	680	440	700	960	730	42	J	510		740	
Sodium							44	62 J	57	64 J	41	48 J	ND		48		57	J
Thallium							ND	ND	ND	ND	ND	ND	20		ND		ND	
Vanadium							23	36	24	23	23	23			21		24	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

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TABLE 5
ROUGH SOIL SAMPLE RESULTS

						Sample Location	R1-66		TI-66		U1-75			
						Field Sample ID	R1-66-2-6IN	R1-66-6-12IN	TI-66-2-6IN	TI-66-6-12IN	U1-75-2-6IN	U1-75-6-12IN	U1-75-12-18IN	U1-75-18-24IN
						Sample Depth	2 - 6	6 - 12	2 - 6	6 - 12	2 - 6	6 - 12	12 - 18	18 - 24
						Date Sampled	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016	10/10/2016
			NYSDEC Soil Cleanup Objective											
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial									
Metals With SCOs														
Arsenic	13	16	16	16	16		6.0	4.1	6.5	3.8	4.6	6.0	5.5	
Barium	350	350	400	400	10000		89	76	76	66	19	30	19	
Beryllium	7.2	14	72	590	2700		0.72	0.59	0.43 J	0.44 J	ND U	ND	0.05 J	
Cadmium	2.5	2.5	4.3	9.3	60		0.47 J	ND	0.86 J	ND	3.0	66	8.3	ND
Chromium, Total	30	36	180	1500	6800		19	18	24	14	18	31	7.5	
Copper	50	270	270	270	10000		18	18	13	8.9	16	24	14	
Cyanide	27	27	27	27	10000									
Lead	63	400	400	1000	3900		15	9.2	22	10	36	210	18	
Manganese	1600	2000	2000	10000	10000		760	220	690	370	230	140	240	
Mercury	0.18	0.81	0.81	2.8	5.7		0.04 J	0.04 J	0.20	0.03 J	0.39	2.0	0.82	1.4
Nickel	30	140	310	310	10000		22	20	13	12	5.7	8.1	11	
Selenium	3.9	36	180	1500	6800		ND	ND	ND	ND	0.26 J	0.32 J	ND	
Silver	2	36	180	1500	6800		ND	ND	ND	ND	ND	ND	ND	
Zinc	109	2200	10000	10000	10000		61	62	60	45	55	99	48	
Metals with No SCOs														
Aluminum							12000	12000	10000	11000	2400	3100	3300	
Antimony							ND	ND	ND	ND	ND	ND	ND	
Cobalt							11	6.7	10	6.2	2.2	2.3	2.9	
Iron							22000	20000	20000	19000	6500	7600	6200	
Calcium							2200	5800	8000	2700	170000	140000	240000	
Magnesium							3300	5400	5000	2800	12000	6000	8000	
Potassium							740	750	670	610	330	330	440	
Sodium							63	94 J	80	94 J	85	63	85	
Thallium							ND	ND	ND	ND	ND	ND	ND	
Vanadium							26	22	23	23	5.8	6.9	7.3	

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

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TABLE 5
ROUGH SOIL SAMPLE RESULTS

					Sample Location	U1-70		
					Field Sample ID	U1-70-2-6IN	U1-70-6-12IN	U1-70-12-18IN
					Sample Depth	2 - 6	6 - 12	12 - 18
					Date Sampled	10/10/2016	10/10/2016	10/10/2016
					NYSDEC Soil Cleanup Objective			
Parameter	**Unrestricted**	**Residential**	**Restricted Residential**	**Commercial**	**Industrial**			
Metals With SCOs								
Arsenic	13	16	16	16	16	**8.0**	**6.0**	**5.5**
Barium	350	350	400	400	10000	**71**	**120**	**84**
Beryllium	7.2	14	72	590	2700	**0.39 J**	**0.47**	**0.43 J**
Cadmium	2.5	2.5	4.3	9.3	60	**1.8**	**0.38 J**	ND
Chromium, Total	30	36	180	1500	6800	**66**	**18**	**17**
Copper	50	270	270	270	10000	**19**	**24**	**19**
Cyanide	27	27	27	27	10000			
Lead	63	400	400	1000	3900	**34**	**13**	**11**
Manganese	1600	2000	2000	10000	10000	**480**	**1600**	**240**
Mercury	0.18	0.81	0.81	2.8	5.7	**0.61**	**0.04 J**	**0.03 J**
Nickel	30	140	310	310	10000	**15**	**30**	**20**
Selenium	3.9	36	180	1500	6800	ND	ND	ND
Silver	2	36	180	1500	6800	**0.35 J**	ND	ND
Zinc	109	2200	10000	10000	10000	**82**	**58**	**63**
Metals with No SCOs								
Aluminum						**9700**	**11000**	**12000**
Antimony						ND	ND	ND
Cobalt						**5.9**	**12**	**7.5**
Iron						**17000**	**22000**	**17000**
Calcium						**3300**	**2000**	**9900**
Magnesium						**2200**	**3600**	**8600**
Potassium						**900**	**1100**	**870**
Sodium						**57**	**54**	**74 J**
Thallium						ND	ND	ND
Vanadium						**20**	**23**	**20**

Notes:
All concentrations in mg/kg.
Concentrations above the SCOs shown in the respective color

WESTWOOD COUNTY CLUB
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AMHERST, NEW YORK

TABLE 5
COMPLETE LIST SOIL SAMPLE RESULTS

					Sample Location	TEE		FAIRWAY		ROUGH		GREEN	
					Field Sample ID	H1-49-2-6IN		P1-65-2-6IN		K1-62-2-6IN		S1-72-2-6IN	
					Sample Depth	2 - 6		2 - 6		2 - 6		2 - 6	
					Date Sampled	10/10/2016		10/10/2016		10/10/2016		10/10/2016	
					Sample Matrix	SO		SO		SO		SO	
					Units	mg/kg		mg/kg		mg/kg		mg/kg	
	NYSDEC Soil Cleanup Objective												
Parameter	Unrestricted	Residential	Restricted Residential	Commercial	Industrial								
Pesticides													
Silvex (2,4,5-TP)	3.8 mg/kg	58.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
P,P'-DDE	0.0033 mg/kg	1.8 mg/kg	8.9 mg/kg	62.0 mg/kg	120.0 mg/kg	**0.101**		**0.00313**		ND		ND	
P,P'-DDT	0.0033 mg/kg	1.7 mg/kg	7.9 mg/kg	47.0 mg/kg	94.0 mg/kg	**0.0150**	**P**	**0.0243**	**P**	ND		ND	
P,P'-DDD	0.0033 mg/kg	2.6 mg/kg	13.0 mg/kg	92.0 mg/kg	180.0 mg/kg	**0.00364**		ND		ND		ND	
Aldrin	0.005 mg/kg	0.019 mg/kg	0.097 mg/kg	0.68 mg/kg	1.4 mg/kg	ND		ND		ND		ND	
Alpha Bhc (Alpha Hexachlorocyclohexane)	0.02 mg/kg	0.097 mg/kg	0.48 mg/kg	3.4 mg/kg	6.8 mg/kg	ND		ND		ND		ND	
Beta Bhc (Beta Hexachlorocyclohexane)	0.036 mg/kg	0.072 mg/kg	0.36 mg/kg	3.0 mg/kg	14.0 mg/kg	ND		ND		ND		ND	
cis-Chlordane	0.094 mg/kg	0.91 mg/kg	4.2 mg/kg	24.0 mg/kg	47.0 mg/kg	ND		**0.00130**	**JPI**	ND		ND	
Delta BHC (Delta Hexachlorocyclohexane)	0.04 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		**0.0138**		ND	
Dibenzofuran	7.0 mg/kg	14.0 mg/kg	59.0 mg/kg	350.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Dieldrin	0.005 mg/kg	0.039 mg/kg	0.2 mg/kg	1.4 mg/kg	2.8 mg/kg	ND		ND		ND		ND	
Alpha Endosulfan	2.4 mg/kg	4.8 mg/kg	24.0 mg/kg	200.0 mg/kg	920.0 mg/kg	ND		ND		ND		ND	
Beta Endosulfan	2.4 mg/kg	4.8 mg/kg	24.0 mg/kg	200.0 mg/kg	920.0 mg/kg	ND		ND		ND		ND	
Endosulfan Sulfate	2.4 mg/kg	4.8 mg/kg	24.0 mg/kg	200.0 mg/kg	920.0 mg/kg	ND		ND		ND		ND	
Endrin	0.014 mg/kg	2.2 mg/kg	11.0 mg/kg	89.0 mg/kg	410.0 mg/kg	ND		ND		ND		ND	
Heptachlor	0.042 mg/kg	0.42 mg/kg	2.1 mg/kg	15.0 mg/kg	29.0 mg/kg	ND		ND		ND		ND	
Gamma Bhc (Lindane)	0.1 mg/kg	0.28 mg/kg	1.3 mg/kg	9.2 mg/kg	23.0 mg/kg	ND		ND		ND		ND	
PCB													
PCB-1016 (Aroclor 1016)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1221 (Aroclor 1221)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1232 (Aroclor 1232)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1242 (Aroclor 1242)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1248 (Aroclor 1248)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1254 (Aroclor 1254)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		**0.122**		ND		**0.292**	**P**
PCB-1260 (Aroclor 1260)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		**0.0534**		ND		**0.0597**	
PCB-1262 (Aroclor 1262)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
PCB-1268 (Aroclor 1268)	0.1 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	25.0 mg/kg	ND		ND		ND		ND	
Semi-volatile Organic Compounds													
Acenaphthene	20.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Acenaphthylene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Anthracene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Benzo(A)Anthracene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.11**	**J**	**0.053**	**J**	**0.032**	**J**	**0.081**	**J**
Benzo(A)Pyrene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	1.1 mg/kg	**0.13**	**J**	**0.056**	**J**	ND		**0.088**	**J**
Benzo(B)Fluoranthene	1.0 mg/kg	1.0 mg/kg	1.0 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.18**		**0.077**	**J**	**0.059**	**J**	**0.13**	

WESTWOOD COUNTY CLUB
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AMHERST, NEW YORK

TABLE 5
COMPLETE LIST SOIL SAMPLE RESULTS

					Sample Location	**TEE**		**FAIRWAY**		**ROUGH**		**GREEN**	
					Field Sample ID	**H1-49-2-6IN**		**P1-65-2-6IN**		**K1-62-2-6IN**		**S1-72-2-6IN**	
					Sample Depth	**2 - 6**		**2 - 6**		**2 - 6**		**2 - 6**	
					Date Sampled	**10/10/2016**		**10/10/2016**		**10/10/2016**		**10/10/2016**	
					Sample Matrix	**SO**		**SO**		**SO**		**SO**	
					Units	**mg/kg**		**mg/kg**		**mg/kg**		**mg/kg**	
	NYSDEC Soil Cleanup Objective												
Parameter	**Unrestricted**	**Residential**	**Restricted Residential**	**Commercial**	**Industrial**								
Benzo(G,H,I)Perylene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.081**	**J**	**0.041**	**J**	**0.03**	**J**	**0.072**	**J**
Benzo(K)Fluoranthene	0.8 mg/kg	1.0 mg/kg	3.9 mg/kg	56.0 mg/kg	110.0 mg/kg	**0.067**	**J**	ND		ND		**0.046**	**J**
Chrysene	1.0 mg/kg	1.0 mg/kg	3.9 mg/kg	56.0 mg/kg	110.0 mg/kg	**0.13**		**0.059**	**J**	**0.042**	**J**	**0.1**	**J**
Dibenz(A,H)Anthracene	0.33 mg/kg	0.33 mg/kg	0.33 mg/kg	0.56 mg/kg	1.1 mg/kg	ND		ND		ND		ND	
Fluoranthene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.3**		**0.13**		**0.079**	**J**	**0.18**	
Fluorene	30.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Indeno(1,2,3-C,D)Pyrene	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	5.6 mg/kg	11.0 mg/kg	**0.09**	**J**	**0.042**	**J**	**0.03**	**J**	**0.071**	**J**
Naphthalene	12.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
2-Methylphenol (O-Cresol)	0.33 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Pentachlorophenol	0.8 mg/kg	2.4 mg/kg	6.7 mg/kg	6.7 mg/kg	55.0 mg/kg	ND		ND		ND		ND	
Phenanthrene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.14**		**0.053**	**J**	**0.031**	**J**	**0.094**	**J**
Phenol	0.33 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Pyrene	100.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	**0.24**		**0.1**	**J**	**0.065**	**J**	**0.15**	
1,1,1-Trichloroethane	0.68 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
1,1-Dichloroethane	0.27 mg/kg	19.0 mg/kg	26.0 mg/kg	240.0 mg/kg	480.0 mg/kg	ND		ND		ND		ND	
1,1-Dichloroethene	0.33 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
1,2-Dichlorobenzene	1.1 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
1,2-Dichloroethane	0.02 mg/kg	2.3 mg/kg	3.1 mg/kg	30.0 mg/kg	60.0 mg/kg	ND		ND		ND		ND	
Cis-1,2-Dichloroethylene	0.25 mg/kg	59.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Trans-1,2-Dichloroethene	0.19 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
1,3-Dichlorobenzene	2.4 mg/kg	17.0 mg/kg	49.0 mg/kg	280.0 mg/kg	560.0 mg/kg	ND		ND		ND		ND	
1,4-Dichlorobenzene	1.8 mg/kg	9.8 mg/kg	13.0 mg/kg	130.0 mg/kg	250.0 mg/kg	ND		ND		ND		ND	
1,4-Dioxane (P-Dioxane)	0.1 mg/kg	9.8 mg/kg	13.0 mg/kg	130.0 mg/kg	250.0 mg/kg	ND		ND		ND		ND	
Volatile Organic Compounds													
Acetone	0.05 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Benzene	0.06 mg/kg	2.9 mg/kg	4.8 mg/kg	44.0 mg/kg	89.0 mg/kg	ND		ND		ND		ND	
N-Butylbenzene	12.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Carbon Tetrachloride	0.76 mg/kg	1.4 mg/kg	2.4 mg/kg	22.0 mg/kg	44.0 mg/kg	ND		ND		ND		ND	
Chlorobenzene	1.1 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Chloroform	0.37 mg/kg	10.0 mg/kg	49.0 mg/kg	350.0 mg/kg	700.0 mg/kg	ND		ND		ND		ND	
Ethylbenzene	1.0 mg/kg	30.0 mg/kg	41.0 mg/kg	390.0 mg/kg	780.0 mg/kg	ND		ND		ND		ND	
Hexachlorobenzene	0.33 mg/kg	0.41 mg/kg	1.2 mg/kg	6.0 mg/kg	12.0 mg/kg	ND		ND		ND		ND	
Tert-Butyl Methyl Ether	0.93 mg/kg	62.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Methylene Chloride	0.05 mg/kg	51.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
N-Propylbenzene	3.9 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	
Sec-Butylbenzene	11.0 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND		ND		ND		ND	

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TABLE 5
COMPLETE LIST SOIL SAMPLE RESULTS

						Sample Location	**TEE**	**FAIRWAY**	**ROUGH**	**GREEN**
						Field Sample ID	**H1-49-2-6IN**	**P1-65-2-6IN**	**K1-62-2-6IN**	**S1-72-2-6IN**
						Sample Depth	**2 - 6**	**2 - 6**	**2 - 6**	**2 - 6**
						Date Sampled	**10/10/2016**	**10/10/2016**	**10/10/2016**	**10/10/2016**
						Sample Matrix	**SO**	**SO**	**SO**	**SO**
						Units	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
						NYSDEC Soil Cleanup Objective				
Parameter		**Unrestricted**	**Residential**	**Restricted Residential**	**Commercial**	**Industrial**				
Tetrachloroethylene (PCE)		1.3 mg/kg	5.5 mg/kg	19.0 mg/kg	150.0 mg/kg	300.0 mg/kg	ND	ND	ND	ND
Toluene		0.7 mg/kg	100.0 mg/kg	100.0 mg/kg	500.0 mg/kg	1000.0 mg/kg	ND	ND	ND	ND
Trichloroethylene (TCE)		0.47 mg/kg	10.0 mg/kg	21.0 mg/kg	200.0 mg/kg	400.0 mg/kg	ND	ND	ND	ND
1,3,5-Trimethylbenzene (Mesitylene)		8.4 mg/kg	47.0 mg/kg	52.0 mg/kg	190.0 mg/kg	380.0 mg/kg	ND	ND	ND	ND
Vinyl Chloride		0.02 mg/kg	0.21 mg/kg	0.9 mg/kg	13.0 mg/kg	27.0 mg/kg	ND	ND	ND	ND
Xylenes, Total		0.02 mg/kg	0.21 mg/kg	0.9 mg/kg	13.0 mg/kg	27.0 mg/kg	ND	ND	ND	ND

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TABLE 5
GROUNDWATER SAMPLE RESULTS

	Field Sample ID	SJB-MW-3-102716		U1-70-112116	
	Date Sampled	10/27/2016		11/21/2016	
	Sample Matrix	WG		WG	
	Units	ug/L		ug/L	
	NYSDEC T.O.G.S GROUNDWATER STANDARDS				
Dissolved Metals					
Aluminum, Dissolved	2000	7	J	-	-
Antimony, Dissolved	6	0.8	J	-	-
Arsenic, Dissolved	50	3.3		-	-
Barium, Dissolved	2000	47.5		-	-
Beryllium, Dissolved	3	0.5	U	-	-
Cadmium, Dissolved	10	0.2	U	-	-
Calcium, Dissolved	NS	315000		-	-
Chromium, Dissolved	100	1.5		-	-
Cobalt, Dissolved	NS	0.6		-	-
Copper, Dissolved	1000	1.7		-	-
Iron, Dissolved	600	26	J	-	-
Lead, Dissolved	50	1	U	-	-
Magnesium, Dissolved	35000	227000		-	-
Manganese, Dissolved	600	101.8		-	-
Mercury, Dissolved	1.4	0.2	U	-	-
Nickel, Dissolved	200	3		-	-
Potassium, Dissolved	NS	7310		-	-
Selenium, Dissolved	20	5	U	-	-
Silver, Dissolved	100	0.4	U	-	-
Sodium, Dissolved	NS	51000		-	-
Thallium, Dissolved	0.5	0.5	U	-	-
Vanadium, Dissolved	NS	5	U	-	-
Zinc, Dissolved	5000	10	U	-	-
Total Metals					
Aluminum, Total	2000	1830		398	
Antimony, Total	6	4	U	4	U
Arsenic, Total	50	7.2		3.8	
Barium, Total	2000	67.8		13.1	
Beryllium, Total	3	0.5	U	0.5	U
Cadmium, Total	10	0.2	U	0.2	U
Calcium, Total	NS	309000		125000	
Chromium, Total	100	3.3		1.1	
Cobalt, Total	NS	2		1	
Copper, Total	1000	4.7		1	
Iron, Total	600	3260		858	
Lead, Total	50	3		0.6	J
Magnesium, Total	35000	222000		114000	
Manganese, Total	600	204.4		173.4	
Mercury, Total	1.4	0.2	U	0.2	U
Nickel, Total	200	5.4		2.4	
Potassium, Total	NS	7140		2810	
Selenium, Total	20	5	U	5	U
Silver, Total	100	0.4	U	0.4	U
Sodium, Total	NS	52800		56700	
Thallium, Total	0.5	0.5	U	0.5	U
Vanadium, Total	NS	3.8	J	5	U
Zinc, Total	5000	12.8		4.5	J

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TABLE 5
WASTE CHARACTERIZATION
SAMPLE RESULTS

		Sample Location		**GREEN**		**TEE**
		Field Sample ID		**T1-71-WC**		**H1-47-WC**
		Sample Depth (inches)		**0 - 24**		**0 - 24**
		Date Sampled		**10/10/2016**		**10/10/2016**
		Sample Matrix		**SO**		**SO**
EPA Toxicity Characteristic Leaching Procedure						
Parameter	**Standards**	**Units**				
General Chemistry						
Solids, Total		%		86.3		79.7
pH (H)		SU		7.5		7.2
Cyanide, Reactive		mg/kg		ND		ND
Sulfide, Reactive		mg/kg		ND		ND
Ignitability of Solids						
Ignitability				NI		NI
Polychlorinated Biphenyls						
Aroclor 1016		ug/kg		ND		ND
Aroclor 1221		ug/kg		ND		ND
Aroclor 1232		ug/kg		ND		ND
Aroclor 1242		ug/kg		ND		ND
Aroclor 1248		ug/kg		ND		ND
Aroclor 1254		ug/kg		ND		ND
Aroclor 1260		ug/kg		14.1	J	ND
Aroclor 1262		ug/kg		ND		ND
Aroclor 1268		ug/kg		ND		ND
PCBs, Total		ug/kg		14.1	J	ND
TCLP Metals						
Arsenic, TCLP	5	mg/l		0.05	J	0.06 J
Barium, TCLP	100	mg/l		0.28	J	0.16 J
Cadmium, TCLP	1	mg/l		ND		ND
Chromium, TCLP	5	mg/l		ND		ND
Lead, TCLP	5	mg/l		ND		ND
Mercury, TCLP	0.2	mg/l		ND		ND
Selenium, TCLP	1	mg/l		ND		ND
Silver, TCLP	5	mg/l		ND		ND
TCLP Semi-volatile Organic Compounds						
Hexachlorobenzene	130	ug/l		ND		ND
2,4-Dinitrotoluene	130	ug/l		ND		ND
Hexachlorobutadiene	500	ug/l		ND		ND
Hexachloroethane	3,000	ug/l		ND		ND
Nitrobenzene	2,000	ug/l		ND		ND
2,4,6-Trichlorophenol	2,000	ug/l		ND		ND
Pentachlorophenol	100,000	ug/l		ND		ND
2-Methylphenol	200,000	ug/l		ND		ND
3-Methylphenol/4-Methylphenol	200,000	ug/l		ND		ND
2,4,5-Trichlorophenol	400,000	ug/l		ND		ND
Pyridine	5,000	ug/l		ND		ND
TCLP Volatile Organic Compound						
Chloroform	6,000	ug/l		ND		ND
Carbon tetrachloride	500	ug/l		ND		ND
Tetrachloroethene	700	ug/l		ND		ND
Chlorobenzene	100,000	ug/l		ND		ND
1,2-Dichloroethane	500	ug/l		ND		ND
Benzene	500	ug/l		ND		ND
Vinyl chloride	200	ug/l		ND		ND
1,1-Dichloroethene	700	ug/l		ND		ND
Trichloroethene	500	ug/l		ND		ND
1,4-Dichlorobenzene	7,500	ug/l		ND		ND
2-Butanone	200,000	ug/l		ND		ND

Notes:

ND = Not Detected

TABLE 6 - SUMMARY OF SOIL SAMPLING RESULTS

						Hole 15 - Green			Hole 15 - Fairway		Hole 15 - Fairway		Hole 15 - Fairway		Hole 15 - Fairway		Hole 15 - Tee Box		Hole 15 - Tee Box		Hole 9 - Green		Hole 9 - Fairway		Hole 9 - Fairway	
					Location ID	N1-4	N1-4	N1-4	M1-5	M1-5	L1-7	L1-7	K1-8	K1-8	K1-9	K1-9	L1-13	L1-13	L1-14	L1-14	N1-46	N1-46	M1-45	M1-45	K1-45	K1-45
					Sample Depth (inch)	0 - 6	6 - 12	12 - 18	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12
					Date Sampled	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017
					Sample Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
					Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use																					
Arsenic	13	16	16	16	16	41.8	17.5	0.827	17.2	6.32	8.20	6.20	6.94	3.39	6.05	5.84	6.77	5.35	6.14	5.56	0.583	0.527	3.11	2.49	4.52	3.24
Barium	350	350	400	400	10000	66.2	71.0		154	79.6	94.6	101	60.5	88.0	67.8	91.9	90.8	103	95.8	70.8	13.5	22.7	32.2	21.8	46.2	37.9
Beryllium	7.2	14	72	590	2700	0.458	0.568		1.13	0.570	0.616	0.659	0.417	0.580	0.524	0.630	0.550	0.549	0.487	0.412	0.073 J	0.056 J	0.225	0.208	0.329	0.414
Cadmium	2.5	2.5	4.3	9.3	60	4.8	1.91		1.37	0.066 J	4.41	0.307 J	0.484	ND	2.44	ND	1.66	0.208 J	0.759	0.055 J	1.58	0.081 J	6.73	0.250 J	3.31	1.23
Chromium, Total	30	36	180	1500	6800	87.9	38.4	6.22	39.9	18.9	21.6	23.9	33.8	19.3	20.4	24.4	26.8	19.9	29.6	14.7	2.64	2.78	19.1	7.59	24.7	8.52
Copper	50	270	270	270	10000	22.4	14.7		29.9	12.3	15.3	15.2	13.4	14.5	12.5	19.9	23.2	21.4	17.8	18.7	13.6	6.65	18.2	8.36	11.2	6.70
Cyanide	27	27	27	27	10000	ND	ND		1.3 J	ND	0.34 J	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	63	400	400	1000	3900	125	49.3		53.0	11.7	22.4	12.5	16.1	10.8	21.4	9.12	14.5	11.7	15.8	9.93	0.921 J	0.829 J	14.9	7.75	18.7	10.3
Manganese	1600	2000	2000	10000	10000	419	743		827	309	584	690	167	130	241	120	968	408	695	400	103	46.9	214	302	86.4	114
Mercury	0.18	0.81	0.81	2.8	5.7	21	10	0.02 J	0.16 J	0.04 J	0.11	0.06 J	0.07 J	0.04 J	0.082 J	0.06 J	0.18	0.04 J	0.05 J	0.04 J	ND	ND	1.2	0.10	0.10	0.05 J
Nickel	30	140	310	310	10000	12.4	13.2		29.9	15.2	14.6	19.0	12.6	17.0	13.1	16.2	21.9	21.3	19.4	19.0	3.47	2.12	7.67	5.63	7.74	5.87
Selenium	3.9	36	180	1500	6800	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.203 J	ND	ND	ND
Silver	2	36	180	1500	6800	0.634	0.209 J		ND	ND	ND	ND	0.153 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.181 J	ND	ND	ND
Zinc	109	2200	10000	10000	10000	73.0	67.3		135	50.8	89.0	58.4	47.1	45.0	66.5	55.4	50.7	88.9	55.9	47.5	18.8	9.75	42.8	36.8	45.7	28.5

						Hole 9 - Fairway		Hole 9 - Fairway		Hole 9 - Tee Box				Hole 9 Tee Box		Former U1-75		Rough Areas				Rough Areas				Rough Areas	
					Location ID	H1-45	H1-45	F1-45	F1-45	B1-47	B1-47	B1-47	B1-47	B1-48	B1-48	K1-38	K1-38	L1-5	L1-5	L1-5	L1-5	H1-13	H1-13	H1-13	B1-28	B1-28
					Sample Depth (inch)	0 - 6	6 - 12	0 - 6	6 - 12	0 - 6	6 - 12	12 - 18	18 - 24	0 - 6	6 - 12	24 - 30	30 - 36	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	0 - 2	2 - 4
					Date Sampled	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/14/2017	06/15/2017	06/15/2017	06/15/2017	06/14/2017	06/14/2017
					Sample Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
					Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use																					
Arsenic	13	16	16	16	16	6.44	3.13	4.26	3.42	4.55	4.73			4.31	6.36	5.73	3.49	5.23	4.40			6.24	7.90		4.33	4.31
Barium	350	350	400	400	10000	76.6	163	71.0	69.3	63.2	54.3			19.4	40.3	60.0	72.4	52.8	51.1			45.4	56.8		66.1	67.4
Beryllium	7.2	14	72	590	2700	0.540	0.750	0.554	0.594	0.221	0.274			0.133 J	0.295	0.344	0.461	0.411	0.293			0.255	0.329		0.451	0.473
Cadmium	2.5	2.5	4.3	9.3	60	3.92	0.063 J	0.200 J	ND	6.81	3.71	0.570		0.666	1.05	0.275 J	0.226 J	0.510	0.789			1.74	1.91		0.182 J	0.203 J
Chromium, Total	30	36	180	1500	6800	53.9	21.8	16.1	16.0	106	88.5	44.2	24.6	4.63	15.3	9.48	10.0	26.9	18.4			32.7	36.4	8.89	13.8	14.2
Copper	50	270	270	270	10000	17.6	22.1	16.3	16.5	20.8	23.2			7.17	12.6	14.0	6.94	13.0	17.4			14.5	16.2		10.9	11.5
Cyanide	27	27	27	27	10000	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND	0.27 J	0.27 J			ND	ND		ND	ND
Lead	63	400	400	1000	3900	25.1	8.46	13.9	9.84	35.4	43.3			6.59	26.5	46.2	36.9	29.7	29.5			58.4	69.1	27.6	21.7	21.8
Manganese	1600	2000	2000	10000	10000	421	542	281	270	310	243			161	196	203	1300	325	271			144	126		242	238
Mercury	0.18	0.81	0.81	2.8	5.7	0.17	0.05 J	0.05 J	0.03 J	0.53	0.17			0.04 J	0.10	0.34	0.10	0.18	0.21	0.18	0.06 J	1.8	2.2	0.14	0.07 J	0.07 J
Nickel	30	140	310	310	10000	12.8	27.8	16.4	18.6	8.75	10.6			4.62	9.67	10.6	8.23	10.5	13.6			10.2	12.0		11.0	11.3
Selenium	3.9	36	180	1500	6800	ND	ND	ND	ND	0.145 J	0.209 J			0.138 J	ND	0.182 J	ND	ND	0.469 J			0.476 J	0.380 J		ND	ND
Silver	2	36	180	1500	6800	0.272 J	ND	ND	ND	0.822	0.701			ND	ND	ND	ND	ND	ND			0.231 J	0.255 J		ND	ND
Zinc	109	2200	10000	10000	10000	59.5	54.0	50.4	47.1	82.9	86.1			18.3	50.1	63.7	38.6	56.0	78.5			59.5	70.2		54.7	55.6

						Rough Areas				Rough Areas				Rough Areas			Rough Areas			Rough Areas				Rough Areas			
					Location ID	J1-18	J1-18	J1-18	J1-18	H1-28	H1-28	H1-28	H1-28	K1-29	K1-29	K1-29	S1-37	S1-37	S1-37	G1-39	G1-39	G1-39	L1-44	L1-44	L1-44	L1-44
					Sample Depth (inch)	0 - 2	2 - 4	4-6	6-8	0 - 2	2 - 4	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	0 - 2	2 - 4	4-6	0 - 2	4 - 6	6 - 8	0 - 2	2 - 4	4 - 6	6 - 8
					Date Sampled	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017	06/15/2017
					Sample Matrix	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
					Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use																					
Arsenic	13	16	16	16	16	4.17	6.15			3.01	3.26			6.20	3.97		7.19	6.93		5.54	5.36		8.00	10.8		
Barium	350	350	400	400	10000	42.6	90.7			30.4	36.0			58.0	51.4		73.4	72.8		60.4	58.6		68.0	74.4		
Beryllium	7.2	14	72	590	2700	0.377	0.744			0.198 J	0.214 J			0.400	0.351		0.621	0.622		0.412	0.427		0.328 J	0.428		
Cadmium	2.5	2.5	4.3	9.3	60	1.07	0.787			1.67	2.06			1.07	0.776		1.18	1.22		1.40	1.03		19.9	16.3	4.58	1.42
Chromium, Total	30	36	180	1500	6800	44.1	56.4	32.1	24.5	18.0	22.1			81.6	18.0		33.2	32.1	21.2	39.1	26.3		325	230	85.6	17.2
Copper	50	270	270	270	10000	15.6	18.3			14.7	14.5			14.2	19.7		16.5	17.6		14.9	10.9		33.1	30.8		
Cyanide	27	27	27	27	10000	0.22 J	ND			0.23 J	ND			0.70 J	0.28 J		0.22 J	ND		ND	ND		0.68 J	0.99 J		
Lead	63	400	400	1000	3900	33.7	30.9			18.7	20.5			49.4	28.6		29.1	28.1		29.6	21.2		84.8	83	34.3	
Manganese	1600	2000	2000	10000	10000	261	612			203	179			411	274		258	240		131	132		58.2	53.6		
Mercury	0.18	0.81	0.81	2.8	5.7	0.24	0.19	0.17		0.57	0.68	0.47	0.12	1.1	0.2	0.15	0.16	0.17		0.26	0.23	0.14	0.76	0.66	0.07 J	
Nickel	30	140	310	310	10000	10.8	17.9			6.83	8.00			12.2	13.5		18.6	18.3		10.9	10.4		11.0	12.4		
Selenium	3.9	36	180	1500	6800	0.599 J	ND			0.599 J	0.272 J			0.978 J	0.504 J		ND	ND		ND	ND		0.588 J	0.479 J		
Silver	2	36	180	1500	6800	0.275 J	0.242 J			ND	ND			0.572 J	ND		ND	ND		0.214 J	ND		2.11	1.61		
Zinc	109	2200	10000	10000	10000	62.5	80.6			162	76.6			71.7	79.8		73.2	69.3		60.7	50.1		83.3	92.2		

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-01-A		SB-01-B		SB-1A-A	
SAMPLING DATE										12/29/2023		12/29/2023		12/29/2023	
LAB SAMPLE ID										L2376694-01		L2376694-02		L2376694-03	
SAMPLE TYPE										SOIL		SOIL		SOIL	
		Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances							
	CasNum								Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE								%	69.1		65.7		54.6	
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.4	UJ	1.5	U	1.7	U
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-
Total Metals															
Aluminum, Total	7429-90-5								mg/kg	9710		9650		10300	
Antimony, Total	7440-36-0								mg/kg	5.6	U	5.91	U	7.19	U
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	5.05		4.82		7.06	
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	45.8		44		71.7	
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.438	J	0.427	J	0.529	J
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.165	J	0.17	J	8.37	
Calcium, Total	7440-70-2								mg/kg	2500		2020		3500	
Chromium, Total	7440-47-3								mg/kg	10.3		10.2		107	
Cobalt, Total	7440-48-4								mg/kg	3.57		3.38		6.13	
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	11		10.4		20.3	
Iron, Total	7439-89-6								mg/kg	13500		13400		17400	
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	42.6		42		50.2	
Magnesium, Total	7439-95-4								mg/kg	1790		1680		2560	
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	117		93.3		301	
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.129		0.119		0.668	
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	10.1		9.76		14.9	
Potassium, Total	7440-09-7								mg/kg	449		451		706	
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	0.6	J	0.567	J	0.558	J
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.56	U	0.591	U	0.98	
Sodium, Total	7440-23-5								mg/kg	58.3	J	57.7	J+	66.4	J
Thallium, Total	7440-28-0								mg/kg	2.24	U	2.36	U	2.88	U
Vanadium, Total	7440-62-2								mg/kg	18.3		18.4		21	
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	59.5		57.3		82	

* Comparison is not performed on parameters with non-numeric criteria.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
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NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-1A-B		SB-02-A		SB-02-B		SB-03-A	
SAMPLING DATE										12/29/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376694-04		L2376309-01		L2376309-02		L2376309-03	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
	Solids, Total	NONE								%	70		63.7		74.5		69.7	
	Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.4	U	1.5	U	1.2	U	1.3	U
	Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-
Total Metals																		
	Aluminum, Total	7429-90-5								mg/kg	11300		10800		11000		9790	
	Antimony, Total	7440-36-0								mg/kg	5.58	U	6	U	5.21	U	5.6	U
	Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	7.39		6.56		7.36		3.91	
	Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	85.4		83.5		112		61.7	
	Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.583		0.598	J	0.632		0.444	J
	Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	6.07		0.244	J	0.427	J	0.128	J
	Calcium, Total	7440-70-2								mg/kg	2940		3940		4370		2460	
	Chromium, Total	7440-47-3								mg/kg	67		14.6		13.6		10.8	
	Cobalt, Total	7440-48-4								mg/kg	9.21		6.01		10.6		4.69	
	Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	17		15.7		11.1		9.58	
	Iron, Total	7439-89-6								mg/kg	20800		17400		22000		14400	
	Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	37		40.7		33.7		32.7	
	Magnesium, Total	7439-95-4								mg/kg	2840		3090		3140		2310	
	Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	640		413		1190		184	
	Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.471		0.082	J	0.092	J	0.107	U
	Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	15.5		15.9		13.8		11.1	
	Potassium, Total	7440-09-7								mg/kg	675		789		495		519	
	Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	0.54	J	2.4	U	2.08	U	2.24	U
	Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.742		0.362	J	0.35	J	0.56	U
	Sodium, Total	7440-23-5								mg/kg	48.3	J	53.3	J	50.8	J	39.9	J
	Thallium, Total	7440-28-0								mg/kg	2.23	U	2.4	U	2.08	U	2.24	U
	Vanadium, Total	7440-62-2								mg/kg	24.5		21.9		25.6		19.5	
	Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	72.6		87.8		69.5		55.3	

* Comparison is not performed on parameters with non-numeric criteria.

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NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 20
NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective Dece
NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-03-B		SB-04-A		SB-04-B		SB-05-A	
SAMPLING DATE										12/27/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-04		L2376309-05		L2376309-06		L2376309-07	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances									
	CasNum								Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
Solids, Total	NONE								%	71.8		73.8		88.8		61.2	
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.3	U	1.3	U	1	UJ	1.6	U
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-
Total Metals																	
Aluminum, Total	7429-90-5								mg/kg	11500		9720		4840		9290	
Antimony, Total	7440-36-0								mg/kg	5.47	U	5.3	U	4.46	U	6.52	U
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	4.54		5.89		4.76		5.21	
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	69.1		73.6		81.5		72	
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.516	J	0.595		0.298	J	0.556	J
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.128	J	0.797	J	0.999		0.601	J
Calcium, Total	7440-70-2								mg/kg	2330		44400		97200		2900	
Chromium, Total	7440-47-3								mg/kg	12.4		16.7		10.9		14.5	
Cobalt, Total	7440-48-4								mg/kg	5.7		6.91		4.72		4.78	
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	9.4		115		17.5		11.1	
Iron, Total	7439-89-6								mg/kg	17300		18000		11600		17700	
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	37.2		56.1		51.1		32.1	
Magnesium, Total	7439-95-4								mg/kg	2540		12800		44800		2590	
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	219		503		535		347	
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.066	J	0.093	U	0.079	U	0.081	J
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	11.3		20		12.6		12.5	
Potassium, Total	7440-09-7								mg/kg	503		827		470		654	
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	0.371	J	2.12	U	1.78	U	2.61	U
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.325	J	0.53	U	0.446	U	0.652	U
Sodium, Total	7440-23-5								mg/kg	49.2	J	98.2	J	132	J	33.2	J
Thallium, Total	7440-28-0								mg/kg	2.19	U	2.12	U	1.78	U	2.61	U
Vanadium, Total	7440-62-2								mg/kg	23.2		19.6		11.9		21.9	
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	59.5		112		226		71	

* Comparison is not performed on parameters with non-numeric criteria.

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NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 20
NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective Dece
NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-05-B		SB-06-A		SB-06-B		SB-07-A	
SAMPLING DATE										12/27/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-08		L2376309-09		L2376309-10		L2376309-11	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
	Solids, Total	NONE								%	66.3		67.3		78.8		76.6	
	Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.5	U	1.4	U	1.2	U	1.3	U
	Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	1.21	U	-	-	-	-	-	-
Total Metals																		
	Aluminum, Total	7429-90-5								mg/kg	12500		11900		11700		7500	
	Antimony, Total	7440-36-0								mg/kg	5.9	U	5.84	U	4.88	U	5.1	U
	Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	5.68		3.39		4.95		6.46	
	Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	95.3		53		79.7		63.6	
	Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.691		0.407	J	0.601		0.397	J
	Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.61	J	0.773	J	0.71	J	0.51	J
	Calcium, Total	7440-70-2								mg/kg	2210		7060		3500		6260	
	Chromium, Total	7440-47-3								mg/kg	19.3		33.2		18.9		12.7	
	Cobalt, Total	7440-48-4								mg/kg	7.95		11.1		9.81		4.51	
	Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	12.4		46.4		19.8		15.7	
	Iron, Total	7439-89-6								mg/kg	21600		23000		21900		13200	
	Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	13.5		24.1		14.7		48.8	
	Magnesium, Total	7439-95-4								mg/kg	3650		9270		4600		3910	
	Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	478		352		617		233	
	Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.112	U	0.109	U	0.093	U	0.097	
	Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	16.8		22.9		19.4		12	
	Potassium, Total	7440-09-7								mg/kg	587		717		660		522	
	Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	2.36	U	2.34	U	1.95	U	2.04	U
	Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.59	U	0.584	U	0.488	U	0.51	U
	Sodium, Total	7440-23-5								mg/kg	45.2	J	39.6	J	51.4	J	39.5	J
	Thallium, Total	7440-28-0								mg/kg	2.36	U	2.34	U	1.95	U	2.04	U
	Vanadium, Total	7440-62-2								mg/kg	29.1		30.7		26		16	
	Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	62.8		113		63.8		69.5	

* Comparison is not performed on parameters with non-numeric criteria.

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NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-07-B	SB-08-A		SB-08-B		SB-09-A		SB-09-B	
SAMPLING DATE										12/27/2023	12/29/2023		12/29/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-12	L2376694-05		L2376694-06		L2376309-13		L2376309-14	
SAMPLE TYPE										SOIL	SOIL		SOIL		SOIL		SOIL	
	CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE								%	81.3	67.2		65		64.2		75.8	
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.1	1.4	U	1.4	U	1.5	U	1.2	U
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	0.338	J	-	-	-	-
Total Metals																		
Aluminum, Total	7429-90-5								mg/kg	8740	9210		12200		11500		9500	
Antimony, Total	7440-36-0								mg/kg	4.77	5.81	U	5.82	U	5.96	U	5.18	U
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	5.76	4.28		6.7		5.08		4.24	
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	74.6	61.8		107		66.5		48.7	
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.459	0.45	J	0.662		0.541	J	0.406	J
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.547	0.843	J	1.83		0.676	J	1.09	
Calcium, Total	7440-70-2								mg/kg	13200	3150		3280		4060		3670	
Chromium, Total	7440-47-3								mg/kg	12.1	17.5		20.5		16.3		17.7	
Cobalt, Total	7440-48-4								mg/kg	5.66	4.26		8.56		6.64		7.19	
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	12.2	10.3		12.6		19.2		21.5	
Iron, Total	7439-89-6								mg/kg	14400	14600		26700		18900		16600	
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	37.7	29.3		36		28.9		21.9	
Magnesium, Total	7439-95-4								mg/kg	5470	1780		2140		3800		4300	
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	370	288		1750		333		270	
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.067	0.095	J	0.107	J	0.076	J	0.102	U
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	12.8	9.49		13.3		14.5		14.5	
Potassium, Total	7440-09-7								mg/kg	516	535		629		493		596	
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	1.91	0.766	J	2.33	U	2.38	U	2.53	
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.477	0.581	U	0.476	J	0.596	U	0.518	U
Sodium, Total	7440-23-5								mg/kg	52.8	38.3	J	53.4	J	42.3	J	85.3	J
Thallium, Total	7440-28-0								mg/kg	1.91	2.32	U	2.33	U	2.38	U	2.07	U
Vanadium, Total	7440-62-2								mg/kg	17	18.4		27.8		24.3		21.9	
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	61.4	57.8		72.1		80.4		80.6	

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NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-10-A		SB-10-B		SB-11-A		SB-11-B	
SAMPLING DATE										12/27/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-15		L2376309-16		L2376309-17		L2376309-18	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances									
	CasNum								Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
Solids, Total	NONE								%	56.2		77.7		75.6		76.2	
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.7	U	1.2	U	1.2	U	1.2	U
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-
Total Metals																	
Aluminum, Total	7429-90-5								mg/kg	10100		14100		9170		16300	
Antimony, Total	7440-36-0								mg/kg	7.04	U	5.03	U	5.22	U	0.406	J
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	5.92		6.71		4.16		5.49	
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	66.4		113		52.2		67.2	
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.498	J	1.07		0.43	J	0.589	
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.561	J	0.812	J	0.661	J	0.563	J
Calcium, Total	7440-70-2								mg/kg	2660		2100		4330		2180	
Chromium, Total	7440-47-3								mg/kg	12.8		19.1		13.4		19.2	
Cobalt, Total	7440-48-4								mg/kg	4.13		21.3		4.99		8.4	
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	9.88		19.3		12.5		11.9	
Iron, Total	7439-89-6								mg/kg	17500		29400		14800		27800	
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	27.7		16		23.3		14.5	
Magnesium, Total	7439-95-4								mg/kg	2150		3850		3140		3760	
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	99.1		1080		146		373	
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.129	U	0.096	U	0.117		0.1	U
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	10.5		22.5		12.3		17.2	
Potassium, Total	7440-09-7								mg/kg	435		665		551		566	
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	2.82	U	2.01	U	0.327	J	2.1	U
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.704	U	0.503	U	0.522	U	0.524	U
Sodium, Total	7440-23-5								mg/kg	74.3	J	85.3	J	47.3	J	67.9	J
Thallium, Total	7440-28-0								mg/kg	2.82	U	2.01	U	2.09	U	2.1	U
Vanadium, Total	7440-62-2								mg/kg	20.8		30.3		20.1		30.8	
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	45.8		59.9		65		51.2	

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NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-12-A		SB-12-B		SB-13-A		SB-13-B	
SAMPLING DATE										12/27/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-21		L2376309-22		L2376309-26		L2376309-27	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
	Solids, Total	NONE								%	65.4		77.7		82.5		91.6	
	Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.4	U	1.2	U	1.2	U	1	U
	Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-
Total Metals																		
	Aluminum, Total	7429-90-5								mg/kg	7420		9030		1140		1320	
	Antimony, Total	7440-36-0								mg/kg	0.672	J	0.561	J	4.7	U	4.18	U
	Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	3.36		4.32		0.938	J	0.431	J
	Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	54.4		59.5		12.2		15.7	
	Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.357	J	0.43	J	0.47	U	0.043	J
	Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.919	J	0.625	J	0.962		0.836	U
	Calcium, Total	7440-70-2								mg/kg	12700		4420		1630		1120	
	Chromium, Total	7440-47-3								mg/kg	19.5		11.7		3.76		3.02	
	Cobalt, Total	7440-48-4								mg/kg	4.46		4.03		0.853	J	0.797	J
	Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	30.8		10.6		26.2		5.15	
	Iron, Total	7439-89-6								mg/kg	15000		14500		3260		4290	
	Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	28.9		28.9		1.89	J	0.602	J
	Magnesium, Total	7439-95-4								mg/kg	4530		2550		864		769	
	Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	231		151		154		32.1	
	Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.086	J	0.123		0.085	U	0.069	U
	Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	14.6		10.4		2.16	J	1.8	J
	Potassium, Total	7440-09-7								mg/kg	1140		465		263		348	
	Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	0.517	J	2.03	U	1.88	U	1.67	U
	Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.602	U	0.508	U	0.47	U	0.418	U
	Sodium, Total	7440-23-5								mg/kg	58.5	J	45.4	J	22.9	J	33.2	J
	Thallium, Total	7440-28-0								mg/kg	2.41	U	2.03	U	1.88	U	0.279	J
	Vanadium, Total	7440-62-2								mg/kg	15.5		17.8		5.56		9.85	
	Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	86.4		47.7		28.9		6.8	

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Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-14-A		SB-14-B		SB-15-A		SB-15-B	
SAMPLING DATE										12/27/2023		12/27/2023		12/27/2023		12/27/2023	
LAB SAMPLE ID										L2376309-31		L2376309-32		L2376309-19		L2376309-20	
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL	
		CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																	
	Solids, Total	NONE								%	72.2		71.7		71.9		72.4	
	Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.3	U	1.3	U	1.3	U	1.3	U
	Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	1.12	U	-	-	-	-
Total Metals																		
	Aluminum, Total	7429-90-5								mg/kg	5550		7590		12600		14600	
	Antimony, Total	7440-36-0								mg/kg	5.34	U	5.29	U	5.53	U	5.37	U
	Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	2.71		3.92		4.9		5.55	
	Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	37.8		53.1		91.5		101	
	Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.262	J	0.375	J	0.625		0.91	
	Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	1.89		3.4		0.525	J	0.659	J
	Calcium, Total	7440-70-2								mg/kg	2940		3060		17400		10100	
	Chromium, Total	7440-47-3								mg/kg	16.7		21.2		17		17.6	
	Cobalt, Total	7440-48-4								mg/kg	2.64		4.04		7.15		17.4	
	Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	9.83		10.5		14.5		14.1	
	Iron, Total	7439-89-6								mg/kg	8870		12100		21000		23600	
	Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	22		29.3		22.4		25.1	
	Magnesium, Total	7439-95-4								mg/kg	1460		1870		7380		5280	
	Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	114		194		249		606	
	Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.101		0.14		0.107	U	0.102	U
	Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	7		9.18		18.6		18.8	
	Potassium, Total	7440-09-7								mg/kg	689		450		832		779	
	Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	0.365	J	0.305	J	2.21	U	2.15	U
	Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.534	U	0.356	J	0.553	U	0.537	U
	Sodium, Total	7440-23-5								mg/kg	26.6	J	38	J	83.8	J	86.7	J
	Thallium, Total	7440-28-0								mg/kg	2.14	U	2.12	U	2.21	U	2.15	U
	Vanadium, Total	7440-62-2								mg/kg	10.9		14.9		24.6		27.4	
	Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	44.3		50.5		59		60.3	

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Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-16-A		SB-16-B		SB-17-A		SB-17-B		SB-18-A
SAMPLING DATE										12/29/2023		12/29/2023		12/29/2023		12/29/2023		12/29/2023
LAB SAMPLE ID										L2376694-08		L2376694-09		L2376694-10		L2376694-11		L2376694-12
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL		SOIL
	CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results
General Chemistry																		
Solids, Total	NONE								%	67.9		73		64.8		75.7		63.7
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.3	U	1.3	U	1.5	U	1.3	U	1.5
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-	-
Total Metals																		
Aluminum, Total	7429-90-5								mg/kg	11100		10100		10400		10300		9330
Antimony, Total	7440-36-0								mg/kg	5.66	U	5.27	U	5.88	U	5.23	U	6.04
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	5.64		4.93		8.4		10.3		3.8
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	59.9		54.5		79.2		85.7		48.8
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.442	J	0.412	J	0.515	J	0.542		0.411
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	0.308	J	0.27	J	6.25		5.44		0.16
Calcium, Total	7440-70-2								mg/kg	1820		1600		4100		3990		3100
Chromium, Total	7440-47-3								mg/kg	21.9		19.1		112		82.4		10.2
Cobalt, Total	7440-48-4								mg/kg	5.03		4.6		4.82		6.07		2.91
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	9.6		9.66		25.3		21.4		10.1
Iron, Total	7439-89-6								mg/kg	16300		15100		15800		17600		12000
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	28.3		25.3		42.9		34.6		27.3
Magnesium, Total	7439-95-4								mg/kg	2270		2070		2660		3170		1750
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	206		186		208		287		124
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.159		0.147		0.374		0.439		0.1
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	10.8		9.74		13.9		14.5		8.86
Potassium, Total	7440-09-7								mg/kg	534		591		714		649		469
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	2.26	U	0.434	J	0.487	J	0.352	J	0.599
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.367	J	0.346	J	1.06		0.836		0.604
Sodium, Total	7440-23-5								mg/kg	42.3	J	45.5	J	54.3	J	45.4	J	63.3
Thallium, Total	7440-28-0								mg/kg	2.26	U	2.11	U	2.35	U	2.09	U	2.42
Vanadium, Total	7440-62-2								mg/kg	22.4		20.1		19.5		20.8		16.5
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	54.2		48.5		84.5		77.1		42.1

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Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION											SB-18-B		SB-19-A		SB-19-B		SB-20-A	
SAMPLING DATE											12/29/2023		12/29/2023		12/29/2023		12/29/2023	
LAB SAMPLE ID											L2376694-13		L2376694-15		L2376694-14		L2376694-16	
SAMPLE TYPE											SOIL		SOIL		SOIL		SOIL	
	CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																		
Solids, Total	NONE								%		61		68.7		63.5		61.3	
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	U	1.5	U	1.4	U	1.5	U	1.6	U
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	1.31	UJ	-	-	1.26	UJ	-	-
Total Metals																		
Aluminum, Total	7429-90-5								mg/kg		10400		8990		9600		12000	
Antimony, Total	7440-36-0								mg/kg	U	6.34	U	5.57	U	5.99	U	6.3	U
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg		4.33		5.91		9.28		7.48	
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg		54.2		46		54.4		78.6	
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	J	0.452	J	0.334	J	0.391	J	0.664	
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	J	0.175	J	4.69		7.32		5.68	
Calcium, Total	7440-70-2								mg/kg		3230		2970		3340		2650	
Chromium, Total	7440-47-3								mg/kg		11.6		84.1		117		49.8	
Cobalt, Total	7440-48-4								mg/kg		3.28		2.78		3.13		9.47	
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg		10.7		14		18.7		16.4	
Iron, Total	7439-89-6								mg/kg		13000		12400		12600		21000	
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg		30.4		31.8		46.1		49	
Magnesium, Total	7439-95-4								mg/kg		1950		1210		1380		3570	
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg		140		96.2		121		382	
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	U	0.119	U	0.165		0.255		0.375	
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg		9.95		8.54		10.3		16.6	
Potassium, Total	7440-09-7								mg/kg		503		245	J	371		1160	
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	J	0.597	J	2.23	U	0.663	J+	0.51	J
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	U	0.634	U	0.5	J	0.953		0.577	J
Sodium, Total	7440-23-5								mg/kg	J	68.2	J	69.2	J	71.8	J	42.6	J
Thallium, Total	7440-28-0								mg/kg	U	2.54	U	0.392	J	2.4	U	2.52	U
Vanadium, Total	7440-62-2								mg/kg		18.8		18.7		18.9		24.9	
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg		46.1		51		65		74.7	

* Comparison is not performed on parameters with non-numeric criteria.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2(
NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 20
NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective Dece
NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 7

Amherst Central Park South Subsurface Soil Sample

LOCATION										SB-20-B		SB-21-A		SB-21-B		SB-22-A		SB-23-A
SAMPLING DATE										12/29/2023		12/29/2023		12/29/2023		12/27/2023		12/27/2023
LAB SAMPLE ID										L2376694-17		L2376694-18		L2376694-19		L2376309-36		L2376309-37
SAMPLE TYPE										SOIL		SOIL		SOIL		SOIL		SOIL
	CasNum	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	Active Recreation Exceedances	Passive Recreation Exceedances	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results
General Chemistry																		
Solids, Total	NONE								%	65.3		64.6		71.6		77.1		63.3
Cyanide, Total	57-12-5	27	27	27	27	10000	27	27	mg/kg	1.4	U	1.4	U	1.3	U	4	J	1.4
Chromium, Hexavalent	18540-29-9	1	22	110	400	800	110	400	mg/kg	-	-	-	-	-	-	-	-	1.26
Total Metals																		
Aluminum, Total	7429-90-5								mg/kg	12800		10100		9620		9960		8930
Antimony, Total	7440-36-0								mg/kg	5.93	U	5.95	U	5.27	U	4.94	U	5.95
Arsenic, Total	7440-38-2	13	16	16	16	16	16	16	mg/kg	8.52		7.44		8.03		4.28		7.61
Barium, Total	7440-39-3	350	350	400	400	10000	400	400	mg/kg	83.8		73.7		72.2		81.3		69.5
Beryllium, Total	7440-41-7	7.2	14	72	590	2700	72	590	mg/kg	0.72		0.521	J	0.489	J	0.526		0.475
Cadmium, Total	7440-43-9	2.5	2.5	4.3	9.3	60	4.3	9.3	mg/kg	5.77		11		11.8		0.214	J	1.19
Calcium, Total	7440-70-2								mg/kg	2450		10500		8520		22000		20900
Chromium, Total	7440-47-3								mg/kg	47.1		135		152		14		13.3
Cobalt, Total	7440-48-4								mg/kg	11.8		6.32		5.98		5.94		7.22
Copper, Total	7440-50-8	50	270	270	270	10000	270	270	mg/kg	16.9		24.9		25		15.7		18.9
Iron, Total	7439-89-6								mg/kg	23000		16500		15600		16500		17100
Lead, Total	7439-92-1	63	400	400	1000	3900	400	1000	mg/kg	52.7		43.6		46.7		33.5		18.3
Magnesium, Total	7439-95-4								mg/kg	3780		4110		3520		9660		7750
Manganese, Total	7439-96-5	1600	2000	2000	10000	10000	2000	10000	mg/kg	407		289		337		431		385
Mercury, Total	7439-97-6	0.18	0.81	0.81	2.8	5.7	0.81	2.8	mg/kg	0.307		0.287		0.224		0.083	U	0.102
Nickel, Total	7440-02-0	30	140	310	310	10000	310	310	mg/kg	17.5		16.5		15.5		13.2		16.3
Potassium, Total	7440-09-7								mg/kg	1080		916		793		771		989
Selenium, Total	7782-49-2	3.9	36	180	1500	6800	180	1500	mg/kg	2.37	U	0.378	J	0.646	J	0.376	J	0.623
Silver, Total	7440-22-4	2	36	180	1500	6800	180	1500	mg/kg	0.586	J	1.18		1.34		0.494	U	0.595
Sodium, Total	7440-23-5								mg/kg	52.6	J	61.4	J	60	J	61.4	J	64.1
Thallium, Total	7440-28-0								mg/kg	2.37	U	2.38	U	2.11	U	1.97	U	2.38
Vanadium, Total	7440-62-2								mg/kg	27.4		20.8		19.8		18.4		17.8
Zinc, Total	7440-66-6	109	2200	10000	10000	10000	10000	10000	mg/kg	77.6		82.8		83.7		84.9	J	55.6

* Comparison is not performed on parameters with non-numeric criteria.

NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 20
NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.
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NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H1-T1-0-6		H1-T1-6-12		H1-T2-0-6		H1-F1-0-6		H1-F2-0-6		H1-G1-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519068-01		L2519068-02		L2519068-03		L2519068-05		L2519068-07		L2519068-09	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	78.7		82		67.2		63.1		73.1		78.2	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	3640		-	-	9020		11600		13400		4350	
	Antimony, Total	7440-36-0		mg/kg	4.8	U	-	-	5.88	U	6.02	U	5.34	U	4.88	U
	Arsenic, Total	7440-38-2	16	mg/kg	8.03		-	-	6.11		9.14		8.02		19.1	
	Barium, Total	7440-39-3	400	mg/kg	29.4		-	-	78.9		96.1		128		31.7	
	Beryllium, Total	7440-41-7	590	mg/kg	0.193	J	-	-	0.476	J	0.526	J	0.823		0.214	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	3.41		-	-	4.03		7.89		1.22		2.62	
	Calcium, Total	7440-70-2		mg/kg	9950		-	-	50700		4340		3600		3240	
	Chromium, Total	7440-47-3		mg/kg	36		-	-	45.5		133		24.3		31.6	
	Cobalt, Total	7440-48-4		mg/kg	2.46		-	-	6.89		3.68		12		2.24	
	Copper, Total	7440-50-8	270	mg/kg	12.6		-	-	24.2		20		12.5		18.4	
	Iron, Total	7439-89-6		mg/kg	7510		-	-	17600		16600		27600		8010	
	Lead, Total	7439-92-1	1000	mg/kg	46		-	-	36.4		47.5		28.4		55	
	Magnesium, Total	7439-95-4		mg/kg	4380		-	-	15600		2040		3450		1310	
	Manganese, Total	7439-96-5	10000	mg/kg	200		-	-	536		124		1040		175	
	Mercury, Total	7439-97-6	2.8	mg/kg	15.9		0.16		0.08	J	0.321		0.103		7.18	
	Nickel, Total	7440-02-0	310	mg/kg	6.43		-	-	16.3		12.7		16.8		7.07	
	Potassium, Total	7440-09-7		mg/kg	481		-	-	1400		710		1030		288	
	Selenium, Total	7782-49-2	1500	mg/kg	1.92	U	-	-	2.35	U	0.588	J	2.14	U	1.95	U
	Silver, Total	7440-22-4	1500	mg/kg	0.48	U	-	-	0.588	U	0.666		0.534	U	0.488	U
	Sodium, Total	7440-23-5		mg/kg	192	U	-	-	235	U	241	U	214	U	195	U
	Thallium, Total	7440-28-0		mg/kg	1.92	U	-	-	2.35	U	2.41	U	2.14	U	1.95	U
	Vanadium, Total	7440-62-2		mg/kg	8.13		-	-	18.3		17.9		28.2		8.2	
	Zinc, Total	7440-66-6	10000	mg/kg	46.7		-	-	126		80.2		69.2		37.3	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H1-G1-6-12		H1-G2-0-6		H1-G2-6-12		H2-T1-0-6		H2-T2-0-6		H2-F1-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519068-10		L2519068-11		L2519068-12		L2519068-13		L2519068-15		L2519068-17	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	79.8		75.3		81.4		76.9		80.1		69.8	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	-	-	4200		-	-	6120		5670		9540	
	Antimony, Total	7440-36-0		mg/kg	-	-	5.23	U	-	-	5.1	U	4.69	U	5.39	U
	Arsenic, Total	7440-38-2	16	mg/kg	6.51		15.2		-	-	5.98		7.03		6.62	
	Barium, Total	7440-39-3	400	mg/kg	-	-	32.2		-	-	54.9		41.6		63.2	
	Beryllium, Total	7440-41-7	590	mg/kg	-	-	0.215	J	-	-	0.347	J	0.29	J	0.42	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	-	-	3.45		-	-	8.87		2.57		5	
	Calcium, Total	7440-70-2		mg/kg	-	-	3470		-	-	9910		4970		3070	
	Chromium, Total	7440-47-3		mg/kg	-	-	43		-	-	97.1		12.4		70.2	
	Cobalt, Total	7440-48-4		mg/kg	-	-	2.24		-	-	4.3		3.89		3.28	
	Copper, Total	7440-50-8	270	mg/kg	-	-	24.5		-	-	22.6		15.3		12.7	
	Iron, Total	7439-89-6		mg/kg	-	-	7960		-	-	13500		12400		15300	
	Lead, Total	7439-92-1	1000	mg/kg	-	-	62.5		-	-	45.2		15.5		34.4	
	Magnesium, Total	7439-95-4		mg/kg	-	-	1670		-	-	5120		2780		1420	
	Manganese, Total	7439-96-5	10000	mg/kg	-	-	194		-	-	313		328		77	
	Mercury, Total	7439-97-6	2.8	mg/kg	2.91		13.9		3.68		1.66		0.185		0.799	
	Nickel, Total	7440-02-0	310	mg/kg	-	-	6.82		-	-	12.3		9.64		9.34	
	Potassium, Total	7440-09-7		mg/kg	-	-	366		-	-	376		422		453	
	Selenium, Total	7782-49-2	1500	mg/kg	-	-	2.09	U	-	-	2.04	U	1.88	U	0.538	J
	Silver, Total	7440-22-4	1500	mg/kg	-	-	0.523	U	-	-	0.545		0.469	U	0.539	U
	Sodium, Total	7440-23-5		mg/kg	-	-	209	U	-	-	204	U	188	U	216	U
	Thallium, Total	7440-28-0		mg/kg	-	-	2.09	U	-	-	2.04	U	1.88	U	2.16	U
	Vanadium, Total	7440-62-2		mg/kg	-	-	8.94		-	-	13.8		11.6		16.7	
	Zinc, Total	7440-66-6	10000	mg/kg	-	-	48.6		-	-	87.6		63.4		48.1	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H2-F2-0-6		H2-G1-0-6		H2-G1-6-12		H2-G2-0-6		H2-G2-6-12		H3-T1-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519068-19		L2519068-21		L2519068-22		L2519068-23		L2519068-24		L2519068-25	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	74.5		75.9		76.8		75.6		75.8		72.4	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	16900		4200		-	-	3610		-	-	8500	
	Antimony, Total	7440-36-0		mg/kg	5.33	U	5.03	U	-	-	5.14	U	-	-	5.38	U
	Arsenic, Total	7440-38-2	16	mg/kg	7.85		121		48.5		92.6		140		5.95	
	Barium, Total	7440-39-3	400	mg/kg	84.7		38.3		-	-	38.5		-	-	66.3	
	Beryllium, Total	7440-41-7	590	mg/kg	0.538		0.233	J	-	-	0.215	J	-	-	0.389	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	1.78		12.3		1.22		11		3.96		6.48	
	Calcium, Total	7440-70-2		mg/kg	2650		3860		-	-	5270		-	-	5360	
	Chromium, Total	7440-47-3		mg/kg	39.4		199		-	-	152		-	-	134	
	Cobalt, Total	7440-48-4		mg/kg	6.36		2.39		-	-	2.26		-	-	3.41	
	Copper, Total	7440-50-8	270	mg/kg	13		45.5		-	-	45.2		-	-	21.3	
	Iron, Total	7439-89-6		mg/kg	35000		8950		-	-	7320		-	-	14200	
	Lead, Total	7439-92-1	1000	mg/kg	18.1		416		-	-	361		-	-	36.4	
	Magnesium, Total	7439-95-4		mg/kg	3340		1670		-	-	2550		-	-	2550	
	Manganese, Total	7439-96-5	10000	mg/kg	306		224		-	-	277		-	-	214	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.087	U	69		17.8		53		29.2		0.336	
	Nickel, Total	7440-02-0	310	mg/kg	15.9		8.5		-	-	7.5		-	-	11.5	
	Potassium, Total	7440-09-7		mg/kg	889		408		-	-	257		-	-	544	
	Selenium, Total	7782-49-2	1500	mg/kg	2.13	U	0.351	J	-	-	2.06	U	-	-	0.45	J
	Silver, Total	7440-22-4	1500	mg/kg	0.533	U	1.27		-	-	0.986		-	-	0.711	
	Sodium, Total	7440-23-5		mg/kg	213	U	201	U	-	-	206	U	-	-	215	U
	Thallium, Total	7440-28-0		mg/kg	2.13	U	2.01	U	-	-	2.06	U	-	-	2.15	U
	Vanadium, Total	7440-62-2		mg/kg	31.4		9.64		-	-	7.45		-	-	14.1	
	Zinc, Total	7440-66-6	10000	mg/kg	57.2		92.7		-	-	85.7		-	-	57.8	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H3-T2-0-6		H3-T2-6-12		H3-F1-0-6		H3-F2-0-6		H3-G1-0-6		H3-G1-6-12	
SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
LAB SAMPLE ID				L2519068-27		L2519068-28		L2519068-29		L2519069-01		L2519069-03		L2519069-04	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	58.6		58.1		68.1		68.9		82.4		82.8	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	10200		-	-	7990		10100		5820		-	-
Antimony, Total	7440-36-0		mg/kg	6.69	U	-	-	5.6	U	5.7	U	4.71	U	-	-
Arsenic, Total	7440-38-2	16	mg/kg	7.78		-	-	6.87		8.12		25.6		4.55	
Barium, Total	7440-39-3	400	mg/kg	81.3		-	-	52.6		64.4		42.8		-	-
Beryllium, Total	7440-41-7	590	mg/kg	0.469	J	-	-	0.359	J	0.426	J	0.288	J	-	-
Cadmium, Total	7440-43-9	9.3	mg/kg	12.5		4.79		1	J	3.98		1.95		-	-
Calcium, Total	7440-70-2		mg/kg	5100		-	-	2480		2530		10500		-	-
Chromium, Total	7440-47-3		mg/kg	196		-	-	58		65.9		36.4		-	-
Cobalt, Total	7440-48-4		mg/kg	3.62		-	-	2.47		2.81		2.09		-	-
Copper, Total	7440-50-8	270	mg/kg	27.4		-	-	10.2		13.3		16.4		-	-
Iron, Total	7439-89-6		mg/kg	17400		-	-	12200		17700		11100		-	-
Lead, Total	7439-92-1	1000	mg/kg	50.1		-	-	25.2		33.3		48.9		-	-
Magnesium, Total	7439-95-4		mg/kg	2050		-	-	1440		1500		4920		-	-
Manganese, Total	7439-96-5	10000	mg/kg	276		-	-	93.1		76.3		220		-	-
Mercury, Total	7439-97-6	2.8	mg/kg	0.417		-	-	0.233		0.253		9.57		1.02	
Nickel, Total	7440-02-0	310	mg/kg	13.1		-	-	8.11		9.55		6.33		-	-
Potassium, Total	7440-09-7		mg/kg	814		-	-	472		661		456		-	-
Selenium, Total	7782-49-2	1500	mg/kg	0.499	J	-	-	0.491	J	0.626	J	0.399	J	-	-
Silver, Total	7440-22-4	1500	mg/kg	1.06		-	-	0.56	U	0.557	J	0.375	J	-	-
Sodium, Total	7440-23-5		mg/kg	268	U	-	-	224	U	228	U	188	U	-	-
Thallium, Total	7440-28-0		mg/kg	2.68	U	-	-	2.24	U	2.28	U	1.88	U	-	-
Vanadium, Total	7440-62-2		mg/kg	17.4		-	-	13.8		18.1		10.4		-	-
Zinc, Total	7440-66-6	10000	mg/kg	82.4		-	-	42.8		52		45.3		-	-

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H3-G2-0-6		H3-G2-6-12		H4-T1-0-6		H4-T2-0-6		H4-F1-0-6		H4-F2-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519069-05		L2519069-06		L2519069-07		L2519069-09		L2519069-11		L2519069-15	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	78.2		80		76.2		74.5		68.6		72	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	5670		-	-	9580		7280		11300		14500	
	Antimony, Total	7440-36-0		mg/kg	4.88	U	-	-	5.05	U	5.08	U	5.61	U	5.37	U
	Arsenic, Total	7440-38-2	16	mg/kg	38.8		4.26		5.85		5.77		10.2		7.5	
	Barium, Total	7440-39-3	400	mg/kg	46.5		-	-	75.9		64.1		82.9		109	
	Beryllium, Total	7440-41-7	590	mg/kg	0.306	J	-	-	0.43	J	0.367	J	0.612		0.727	
	Cadmium, Total	7440-43-9	9.3	mg/kg	2.98		-	-	6.72		6.49		4.54		1.52	
	Calcium, Total	7440-70-2		mg/kg	24200		-	-	4640		3150		8730		11100	
	Chromium, Total	7440-47-3		mg/kg	50.5		-	-	124		98.1		52		26.3	
	Cobalt, Total	7440-48-4		mg/kg	3.51		-	-	2.93		3.28		6.67		10.8	
	Copper, Total	7440-50-8	270	mg/kg	25.8		-	-	21.6		17.9		16.5		19.3	
	Iron, Total	7439-89-6		mg/kg	11600		-	-	15200		13600		21100		24700	
	Lead, Total	7439-92-1	1000	mg/kg	117		-	-	37.4		50.2		31.8		18.4	
	Magnesium, Total	7439-95-4		mg/kg	12000		-	-	1880		1490		4140		6680	
	Manganese, Total	7439-96-5	10000	mg/kg	273		-	-	135		167		329		776	
	Mercury, Total	7439-97-6	2.8	mg/kg	18.2		1.49		0.321		0.387		0.184		0.088	J
	Nickel, Total	7440-02-0	310	mg/kg	8.67		-	-	10.7		10.3		13.7		23.3	
	Potassium, Total	7440-09-7		mg/kg	501		-	-	644		454		829		1320	
	Selenium, Total	7782-49-2	1500	mg/kg	1.95	U	-	-	0.484	J	0.428	J	0.412	J	2.15	U
	Silver, Total	7440-22-4	1500	mg/kg	0.53		-	-	1.04		0.877		0.55	J	0.326	J
	Sodium, Total	7440-23-5		mg/kg	195	U	-	-	202	U	203	U	224	U	215	U
	Thallium, Total	7440-28-0		mg/kg	1.95	U	-	-	2.02	U	2.03	U	2.24	U	2.15	U
	Vanadium, Total	7440-62-2		mg/kg	12.8		-	-	14.7		14		21.6		27.9	
	Zinc, Total	7440-66-6	10000	mg/kg	67.8		-	-	53		55		58.7		50.6	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H4-G1-0-6		H4-G2-0-6		H5-T1-0-6		H5-T2-0-6		H5-F1-0-6		H5-F2-0-6	
SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
LAB SAMPLE ID				L2519069-19		L2519076-13		L2519069-21		L2519069-23		L2519069-25		L2519069-27	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	85		93.8		66.4		62.2		77.3		67.5	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	2340		1700		7540		9180		8580		9490	
Antimony, Total	7440-36-0		mg/kg	4.62	U	4.18	U	5.67	U	6.13	U	4.89	U	5.86	U
Arsenic, Total	7440-38-2	16	mg/kg	1.19		1.4		5.55		9.39		7.31		3.11	
Barium, Total	7440-39-3	400	mg/kg	18		11.4		53.9		68.8		50.2		57.2	
Beryllium, Total	7440-41-7	590	mg/kg	0.098	J	0.068	J	0.389	J	0.52	J	0.439	J	0.426	J
Cadmium, Total	7440-43-9	9.3	mg/kg	0.086	J	0.836	U	8.33		5.64		4.83		1.94	
Calcium, Total	7440-70-2		mg/kg	3610		2100		3720		9440		2320		2750	
Chromium, Total	7440-47-3		mg/kg	3.91		3.04		108		38.1		76.1		18.9	
Cobalt, Total	7440-48-4		mg/kg	2.33		1.53	J	4.58		7.01		5.39		1.08	J
Copper, Total	7440-50-8	270	mg/kg	14.5		18.4		19.3		19.6		12.4		7.41	
Iron, Total	7439-89-6		mg/kg	4800		4020		15200		19300		18400		8020	
Lead, Total	7439-92-1	1000	mg/kg	3.04	J	2.25	J	28.7		32.6		32.1		16.2	
Magnesium, Total	7439-95-4		mg/kg	2310		1310		2210		4210		1800		913	
Manganese, Total	7439-96-5	10000	mg/kg	127		146		310		541		330		16.1	
Mercury, Total	7439-97-6	2.8	mg/kg	0.091	U	0.068	U	0.998		0.861		0.214		0.12	
Nickel, Total	7440-02-0	310	mg/kg	4.49		3.75		11.6		15.1		10.6		5.52	
Potassium, Total	7440-09-7		mg/kg	441		280		518		713		446		446	
Selenium, Total	7782-49-2	1500	mg/kg	1.85	U	1.67	U	2.27	U	2.45	U	1.96	U	2.34	U
Silver, Total	7440-22-4	1500	mg/kg	0.462	U	0.418	U	0.624		0.613	U	0.37	J	0.586	U
Sodium, Total	7440-23-5		mg/kg	185	U	167	U	227	U	245	U	196	U	234	U
Thallium, Total	7440-28-0		mg/kg	1.85	U	1.67	U	2.27	U	2.45	U	1.96	U	2.34	U
Vanadium, Total	7440-62-2		mg/kg	8		5.84		16.1		19.2		21.2		10.5	
Zinc, Total	7440-66-6	10000	mg/kg	36		28.8		66.7		73.7		56.4		22.8	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H5-G1-0-6		H5-G1-6-12		H5-G2-0-6		H5-G2-6-12		H7-T1-0-6		H7-T2-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519069-29		L2519069-30		L2519070-01		L2519070-02		L2519070-13		L2519070-11	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	65.1		81.4		81.1		85.5		72.9		67.3	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	9890		-	-	5680		-	-	10200		7400	
	Antimony, Total	7440-36-0		mg/kg	5.91	U	-	-	4.89	U	-	-	5.46	U	5.86	U
	Arsenic, Total	7440-38-2	16	mg/kg	2.97		-	-	41.4		4.26		6.89		7.62	
	Barium, Total	7440-39-3	400	mg/kg	59.2		-	-	33.5		-	-	71.4		45.4	
	Beryllium, Total	7440-41-7	590	mg/kg	0.445	J	-	-	0.265	J	-	-	0.548		0.342	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	2.22		-	-	2.07		-	-	4.23		4.3	
	Calcium, Total	7440-70-2		mg/kg	2840		-	-	26800		-	-	5330		8920	
	Chromium, Total	7440-47-3		mg/kg	21.6		-	-	42.8		-	-	24.2		15.3	
	Cobalt, Total	7440-48-4		mg/kg	1.06	J	-	-	3.73		-	-	9.08		4.81	
	Copper, Total	7440-50-8	270	mg/kg	7.55		-	-	19.4		-	-	14.7		17.5	
	Iron, Total	7439-89-6		mg/kg	7480		-	-	11100		-	-	20200		15300	
	Lead, Total	7439-92-1	1000	mg/kg	16.7		-	-	77		-	-	32.2		118	
	Magnesium, Total	7439-95-4		mg/kg	890		-	-	13700		-	-	2910		4060	
	Manganese, Total	7439-96-5	10000	mg/kg	15		-	-	380		-	-	595		343	
	Mercury, Total	7439-97-6	2.8	mg/kg	18.9		1.84		7.8		0.394		0.162		0.276	
	Nickel, Total	7440-02-0	310	mg/kg	5.33		-	-	8.08		-	-	12.3		12.2	
	Potassium, Total	7440-09-7		mg/kg	458		-	-	487		-	-	764		749	
	Selenium, Total	7782-49-2	1500	mg/kg	2.36	U	-	-	0.328	J	-	-	0.386	J	2.34	U
	Silver, Total	7440-22-4	1500	mg/kg	0.591	U	-	-	0.366	J	-	-	0.546	U	0.586	U
	Sodium, Total	7440-23-5		mg/kg	236	U	-	-	196	U	-	-	218	U	234	U
	Thallium, Total	7440-28-0		mg/kg	2.36	U	-	-	1.96	U	-	-	2.18	U	2.34	U
	Vanadium, Total	7440-62-2		mg/kg	10.1		-	-	13.1		-	-	23.7		15.2	
	Zinc, Total	7440-66-6	10000	mg/kg	21.7		-	-	61.6		-	-	62.5		56	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H7-F1-0-6		H7-F2-0-6		H7-G1-0-6		H7-G1-6-12		H7-G2-0-6		H7-G2-6-12	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519070-09		L2519070-07		L2519070-05		L2519070-06		L2519070-03		L2519070-04	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	75.6		76.9		74.8		75.3		62.4		83	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	6290		9340		7030		-	-	5480		-	-
	Antimony, Total	7440-36-0		mg/kg	4.98	U	5.06	U	5.14	U	-	-	6.35	U	-	-
	Arsenic, Total	7440-38-2	16	mg/kg	4.82		4.24		29.7		6.62		32.1		12.6	
	Barium, Total	7440-39-3	400	mg/kg	55.3		86.7		48.3		-	-	38.4		-	-
	Beryllium, Total	7440-41-7	590	mg/kg	0.381	J	0.77		0.388	J	-	-	0.274	J	-	-
	Cadmium, Total	7440-43-9	9.3	mg/kg	4.83		4.86		4.42		-	-	5.47		-	-
	Calcium, Total	7440-70-2		mg/kg	2730		2330		2180		-	-	3400		-	-
	Chromium, Total	7440-47-3		mg/kg	45.9		21.3		39.7		-	-	48.3		-	-
	Cobalt, Total	7440-48-4		mg/kg	3.86		5.89		7		-	-	3.08		-	-
	Copper, Total	7440-50-8	270	mg/kg	14.8		17.9		14.3		-	-	27.1		-	-
	Iron, Total	7439-89-6		mg/kg	12400		15100		15300		-	-	10400		-	-
	Lead, Total	7439-92-1	1000	mg/kg	25		20.7		136		-	-	135		-	-
	Magnesium, Total	7439-95-4		mg/kg	1760		2710		1440		-	-	2060		-	-
	Manganese, Total	7439-96-5	10000	mg/kg	268		850		748		-	-	307		-	-
	Mercury, Total	7439-97-6	2.8	mg/kg	0.263		0.132		14.9		1.64		28.4		1.48	
	Nickel, Total	7440-02-0	310	mg/kg	7.08		10.8		7.58		-	-	7.89		-	-
	Potassium, Total	7440-09-7		mg/kg	311		551		431		-	-	455		-	-
	Selenium, Total	7782-49-2	1500	mg/kg	0.345	J	2.02	U	2.06	U	-	-	2.54	U	-	-
	Silver, Total	7440-22-4	1500	mg/kg	0.507		0.337	J	0.443	J	-	-	0.506	J	-	-
	Sodium, Total	7440-23-5		mg/kg	199	U	202	U	206	U	-	-	254	U	-	-
	Thallium, Total	7440-28-0		mg/kg	1.99	U	2.02	U	2.06	U	-	-	2.54	U	-	-
	Vanadium, Total	7440-62-2		mg/kg	14.4		17.5		15.7		-	-	11.4		-	-
	Zinc, Total	7440-66-6	10000	mg/kg	41.1		61.1		40.6		-	-	72.6		-	-

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H8-T1-0-6		H8-T1-6-12		H8-T2-0-6		H8-F1-0-6		H8-F2-0-6		H8-G1-0-6	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519070-29		L2519070-30		L2519070-27		L2519070-25		L2519070-19		L2519070-21	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	73.4		78.9		64.9		59.7		76.9		75.8	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	5880		-	-	8240		11700		8740		7590	
	Antimony, Total	7440-36-0		mg/kg	5.22	U	-	-	5.94	U	6.48	U	5.01	U	5.08	U
	Arsenic, Total	7440-38-2	16	mg/kg	22.2		3.07		6.55		7.23		6.03		29.7	
	Barium, Total	7440-39-3	400	mg/kg	51.1		-	-	64.2		81.6		59		50.5	
	Beryllium, Total	7440-41-7	590	mg/kg	0.305	J	-	-	0.433	J	0.627	J	0.476	J	0.392	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	4.16		-	-	3.95		3.87		4.94		3.12	
	Calcium, Total	7440-70-2		mg/kg	10800		-	-	19600		2960		2800		3530	
	Chromium, Total	7440-47-3		mg/kg	44.6		-	-	19.3		56.4		82.5		55.4	
	Cobalt, Total	7440-48-4		mg/kg	3.86		-	-	4.51		8.8		8.46		4.53	
	Copper, Total	7440-50-8	270	mg/kg	18.1		-	-	17.5		15.1		15.6		23.4	
	Iron, Total	7439-89-6		mg/kg	15800		-	-	15600		23200		16500		13700	
	Lead, Total	7439-92-1	1000	mg/kg	33.3		-	-	35.5		44.1		41		100	
	Magnesium, Total	7439-95-4		mg/kg	5030		-	-	5590		2760		2510		2280	
	Manganese, Total	7439-96-5	10000	mg/kg	437		-	-	402		383		425		317	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.55		-	-	0.631		0.3		0.328		15.1	
	Nickel, Total	7440-02-0	310	mg/kg	9.24		-	-	10.5		13.4		11.8		10.3	
	Potassium, Total	7440-09-7		mg/kg	350		-	-	737		575		597		559	
	Selenium, Total	7782-49-2	1500	mg/kg	2.09	U	-	-	0.415	J	0.486	J	0.485	J	0.345	J
	Silver, Total	7440-22-4	1500	mg/kg	0.567		-	-	0.594	U	0.56	J	0.698		0.569	
	Sodium, Total	7440-23-5		mg/kg	209	U	-	-	238	U	259	U	200	U	203	U
	Thallium, Total	7440-28-0		mg/kg	2.09	U	-	-	2.38	U	2.59	U	2	U	2.03	U
	Vanadium, Total	7440-62-2		mg/kg	13.1		-	-	16.8		27.7		19.4		17.1	
	Zinc, Total	7440-66-6	10000	mg/kg	53.1		-	-	87.3		65.5		65.9		80.2	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H8-G1-6-12		H8-G2-0-6		H8-G2-6-12		H10-T1-0-6		H10-T2-0-6		H10-T2-6-12	
SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID				L2519070-22		L2519070-23		L2519070-24		L2519429-03		L2519429-01		L2519429-02	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	75.1		76.7		73.9		60.6		58.1		60.6	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	-	-	8830		-	-	8700		7440		-	-
Antimony, Total	7440-36-0		mg/kg	-	-	4.98	U	-	-	6.27	U	6.55	U	-	-
Arsenic, Total	7440-38-2	16	mg/kg	9.57		38.4		21.8		4.6		9.14		-	-
Barium, Total	7440-39-3	400	mg/kg	-	-	57.8		-	-	78.8		71.6		-	-
Beryllium, Total	7440-41-7	590	mg/kg	-	-	0.433	J	-	-	0.487	J	0.452	J	-	-
Cadmium, Total	7440-43-9	9.3	mg/kg	-	-	3.9		-	-	7.25		11.4		6.55	
Calcium, Total	7440-70-2		mg/kg	-	-	5090		-	-	4250		4280		-	-
Chromium, Total	7440-47-3		mg/kg	-	-	57		-	-	136		116		-	-
Cobalt, Total	7440-48-4		mg/kg	-	-	5.07		-	-	3.96		3.72		-	-
Copper, Total	7440-50-8	270	mg/kg	-	-	25.3		-	-	21.6		23.6		-	-
Iron, Total	7439-89-6		mg/kg	-	-	15200		-	-	12900		13200		-	-
Lead, Total	7439-92-1	1000	mg/kg	-	-	123		-	-	37.9		55		-	-
Magnesium, Total	7439-95-4		mg/kg	-	-	3060		-	-	2160		1840		-	-
Manganese, Total	7439-96-5	10000	mg/kg	-	-	322		-	-	183		242		-	-
Mercury, Total	7439-97-6	2.8	mg/kg	5.19		15.3		12.1		0.276		0.343		-	-
Nickel, Total	7440-02-0	310	mg/kg	-	-	11.9		-	-	12.1		12		-	-
Potassium, Total	7440-09-7		mg/kg	-	-	626		-	-	460		346		-	-
Selenium, Total	7782-49-2	1500	mg/kg	-	-	0.493	J	-	-	0.566	J	2.62	U	-	-
Silver, Total	7440-22-4	1500	mg/kg	-	-	0.56		-	-	0.78		0.68		-	-
Sodium, Total	7440-23-5		mg/kg	-	-	199	U	-	-	251	U	262	U	-	-
Thallium, Total	7440-28-0		mg/kg	-	-	1.99	U	-	-	2.51	U	2.62	U	-	-
Vanadium, Total	7440-62-2		mg/kg	-	-	19.4		-	-	16.8		15.8		-	-
Zinc, Total	7440-66-6	10000	mg/kg	-	-	84.4		-	-	75.6		69.9		-	-

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H10-F1-0-6		H10-F2-0-6		H10-G1-0-6		H10-G1-6-12		H10-G2-0-6		H10-G2-6-12	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519429-11		L2519429-24		L2519429-26		L2519429-27		L2519429-28		L2519429-29	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	71.8		66.2		74		71.2		72.8		62.8	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	8570		6930		3040		-	-	6190		-	-
	Antimony, Total	7440-36-0		mg/kg	5.4	U	5.9	U	5.21	U	-	-	5.41	U	-	-
	Arsenic, Total	7440-38-2	16	mg/kg	4.82		4.54		80.3		138		73.9		151	
	Barium, Total	7440-39-3	400	mg/kg	53.3		62.2		30		-	-	54.8		-	-
	Beryllium, Total	7440-41-7	590	mg/kg	0.461	J	0.47	J	0.188	J	-	-	0.42	J	-	-
	Cadmium, Total	7440-43-9	9.3	mg/kg	5.95		6.46		5.49		-	-	7.71		-	-
	Calcium, Total	7440-70-2		mg/kg	2680		3190		2840		-	-	4570		-	-
	Chromium, Total	7440-47-3		mg/kg	58		64.2		107		-	-	75.7		-	-
	Cobalt, Total	7440-48-4		mg/kg	4.94		6.33		2.02	J	-	-	2.69		-	-
	Copper, Total	7440-50-8	270	mg/kg	13.2		16.3		23.6		-	-	31.3		-	-
	Iron, Total	7439-89-6		mg/kg	15300		14800		5860		-	-	8980		-	-
	Lead, Total	7439-92-1	1000	mg/kg	37.4		28.8		306		-	-	157		-	-
	Magnesium, Total	7439-95-4		mg/kg	2110		2340		1120		-	-	1680		-	-
	Manganese, Total	7439-96-5	10000	mg/kg	243		453		182		-	-	174		-	-
	Mercury, Total	7439-97-6	2.8	mg/kg	0.233		0.222		70		44.4		26.6		63.4	
	Nickel, Total	7440-02-0	310	mg/kg	13.5		17.2		5.78		-	-	9.19		-	-
	Potassium, Total	7440-09-7		mg/kg	350		367		288		-	-	394		-	-
	Selenium, Total	7782-49-2	1500	mg/kg	2.16	U	2.36	U	2.08	U	-	-	2.16	U	-	-
	Silver, Total	7440-22-4	1500	mg/kg	0.54	U	0.59	U	0.722		-	-	0.474	J	-	-
	Sodium, Total	7440-23-5		mg/kg	216	U	236	U	208	U	-	-	216	U	-	-
	Thallium, Total	7440-28-0		mg/kg	2.16	U	2.36	U	2.08	U	-	-	2.16	U	-	-
	Vanadium, Total	7440-62-2		mg/kg	15.3		13.7		6.26		-	-	12.2		-	-
	Zinc, Total	7440-66-6	10000	mg/kg	70.1		78.2		49.8		-	-	59		-	-

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H11-T1-0-6		H11-T2-0-6		H11-F1-0-6		H11-F2-0-6		H11-G1-0-6		H11-G1-6-12	
	SAMPLING DATE				3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025		3/31/2025	
	LAB SAMPLE ID				L2519076-01		L2519076-03		L2519076-05		L2519076-07		L2519076-09		L2519076-10	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	66.6		65.1		60.8		74.9		74.3		72.2	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	6840		6410		9470		8720		9640		-	-
	Antimony, Total	7440-36-0		mg/kg	5.72	U	5.8	U	6.39	U	5.08	U	5.3	U	-	-
	Arsenic, Total	7440-38-2	16	mg/kg	8.34		4.51		6.44		6.81		364		136	
	Barium, Total	7440-39-3	400	mg/kg	52.3		59.3		78		62.8		73.2		-	-
	Beryllium, Total	7440-41-7	590	mg/kg	0.368	J	0.375	J	0.543	J	0.477	J	0.552		-	-
	Cadmium, Total	7440-43-9	9.3	mg/kg	4.93		5.8		1.63		3.87		9.72		4.5	
	Calcium, Total	7440-70-2		mg/kg	3560		3890		4390		11400		15300		-	-
	Chromium, Total	7440-47-3		mg/kg	66.2		81.3		44.8		60.7		91.5		-	-
	Cobalt, Total	7440-48-4		mg/kg	3.94		2.88		5.52		5.89		8.81		-	-
	Copper, Total	7440-50-8	270	mg/kg	19.3		17.9		20.8		20.8		34.8		-	-
	Iron, Total	7439-89-6		mg/kg	12900		10600		15700		15900		20400		-	-
	Lead, Total	7439-92-1	1000	mg/kg	38.4		28.1		50.4		46.6		574		-	-
	Magnesium, Total	7439-95-4		mg/kg	1780		1500		2980		5990		8150		-	-
	Manganese, Total	7439-96-5	10000	mg/kg	232		145		322		308		719		-	-
	Mercury, Total	7439-97-6	2.8	mg/kg	0.217		0.269		0.296		0.345		75		35.7	
	Nickel, Total	7440-02-0	310	mg/kg	11.1		9.64		16.7		15.6		12.8		-	-
	Potassium, Total	7440-09-7		mg/kg	350		266	J	555		593		545		-	-
	Selenium, Total	7782-49-2	1500	mg/kg	2.29	U	2.32	U	0.453	J	0.508	J	0.575	J	-	-
	Silver, Total	7440-22-4	1500	mg/kg	0.624		0.804		0.51	J	0.6		0.849		-	-
	Sodium, Total	7440-23-5		mg/kg	229	U	232	U	256	U	203	U	212	U	-	-
	Thallium, Total	7440-28-0		mg/kg	2.29	U	2.32	U	2.56	U	2.03	U	2.12	U	-	-
	Vanadium, Total	7440-62-2		mg/kg	14.8		16.2		17.5		18.4		20		-	-
	Zinc, Total	7440-66-6	10000	mg/kg	59.4		56.1		110		100		95.8		-	-

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H11-G2-0-6		H11-G2-6-12		H12-T1-0-6		H12-T2-0-6		H12-T2-6-12		H12-F1-0-6	
SAMPLING DATE				3/31/2025		3/31/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID				L2519076-11		L2519076-12		L2519501-25		L2519501-23		L2519501-24		L2519501-21	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	75.2		75.9		73.2		64.8		74.6		77.9	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	6160		-	-	3820		5030		-	-	6880	
Antimony, Total	7440-36-0		mg/kg	5.08	U	-	-	5.35	U	6.02	U	-	-	5.07	U
Arsenic, Total	7440-38-2	16	mg/kg	260		107		2.88		5.24		-	-	4.25	
Barium, Total	7440-39-3	400	mg/kg	57		-	-	28.4		35.6		-	-	63.4	
Beryllium, Total	7440-41-7	590	mg/kg	0.368	J	-	-	0.187	J	0.25	J	-	-	0.374	J
Cadmium, Total	7440-43-9	9.3	mg/kg	19.4		6.96		1.89		14		9.49		7.88	
Calcium, Total	7440-70-2		mg/kg	5560		-	-	1670		2380		-	-	3250	
Chromium, Total	7440-47-3		mg/kg	240		-	-	28.1		46.4		-	-	88.4	
Cobalt, Total	7440-48-4		mg/kg	3.41		-	-	2.09	J	3.24		-	-	2.95	
Copper, Total	7440-50-8	270	mg/kg	69.5		-	-	7.54		11.8		-	-	14.7	
Iron, Total	7439-89-6		mg/kg	11700		-	-	6390		9640		-	-	10600	
Lead, Total	7439-92-1	1000	mg/kg	1220		237		19.2		31.9		-	-	34.1	
Magnesium, Total	7439-95-4		mg/kg	2120		-	-	874		1470		-	-	1390	
Manganese, Total	7439-96-5	10000	mg/kg	282		-	-	113		215		-	-	154	
Mercury, Total	7439-97-6	2.8	mg/kg	127		37.7		0.179		0.774		-	-	0.512	
Nickel, Total	7440-02-0	310	mg/kg	13.2		-	-	5.23		7.62		-	-	9.47	
Potassium, Total	7440-09-7		mg/kg	366		-	-	185	J	305		-	-	407	
Selenium, Total	7782-49-2	1500	mg/kg	0.742	J	-	-	0.472	J	2.41	U	-	-	0.508	J
Silver, Total	7440-22-4	1500	mg/kg	1.88		-	-	0.535	U	0.377	J	-	-	0.621	
Sodium, Total	7440-23-5		mg/kg	203	U	-	-	214	U	241	U	-	-	203	U
Thallium, Total	7440-28-0		mg/kg	2.03	U	-	-	2.14	U	2.41	U	-	-	2.03	U
Vanadium, Total	7440-62-2		mg/kg	12.9		-	-	7.87		11.2		-	-	12.8	
Zinc, Total	7440-66-6	10000	mg/kg	135		-	-	35.6		55		-	-	58.7	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H12-F2-0-6		H12-F2-6-12		H12-G1-0-6		H12-G1-6-12		H12-G2-0-6		H12-G2-6-12	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519501-19		L2519501-20		L2519501-17		L2519501-18		L2519501-15		L2519501-16	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	62.9		74.5		63.6		75.7		59.7		64.4	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	12200		-	-	11000		-	-	7950		-	-
	Antimony, Total	7440-36-0		mg/kg	6.14	U	-	-	5.91	U	-	-	6.42	U	-	-
	Arsenic, Total	7440-38-2	16	mg/kg	8.33		-	-	142		48.1		259		102	
	Barium, Total	7440-39-3	400	mg/kg	88.7		-	-	90.1		-	-	81.6		-	-
	Beryllium, Total	7440-41-7	590	mg/kg	0.694		-	-	0.66		-	-	0.458	J	-	-
	Cadmium, Total	7440-43-9	9.3	mg/kg	10.9		1.54		8.38		-	-	25.4		6.41	
	Calcium, Total	7440-70-2		mg/kg	5860		-	-	6500		-	-	6650		-	-
	Chromium, Total	7440-47-3		mg/kg	148		-	-	122		-	-	308		-	-
	Cobalt, Total	7440-48-4		mg/kg	8.87		-	-	4.36		-	-	4.77		-	-
	Copper, Total	7440-50-8	270	mg/kg	23.9		-	-	39.3		-	-	82.5		-	-
	Iron, Total	7439-89-6		mg/kg	24200		-	-	12800		-	-	14900		-	-
	Lead, Total	7439-92-1	1000	mg/kg	48.6		-	-	238		-	-	774		-	-
	Magnesium, Total	7439-95-4		mg/kg	3530		-	-	3070		-	-	2940		-	-
	Manganese, Total	7439-96-5	10000	mg/kg	520		-	-	270		-	-	309		-	-
	Mercury, Total	7439-97-6	2.8	mg/kg	0.345		-	-	54.7		32.9		85.3		20.1	
	Nickel, Total	7440-02-0	310	mg/kg	15.8		-	-	13.1		-	-	14.7		-	-
	Potassium, Total	7440-09-7		mg/kg	778		-	-	745		-	-	637		-	-
	Selenium, Total	7782-49-2	1500	mg/kg	0.835	J	-	-	0.624	J	-	-	1.04	J	-	-
	Silver, Total	7440-22-4	1500	mg/kg	1.01		-	-	0.969		-	-	2.32		-	-
	Sodium, Total	7440-23-5		mg/kg	246	U	-	-	236	U	-	-	257	U	-	-
	Thallium, Total	7440-28-0		mg/kg	2.46	U	-	-	2.36	U	-	-	2.57	U	-	-
	Vanadium, Total	7440-62-2		mg/kg	30		-	-	17		-	-	16.8		-	-
	Zinc, Total	7440-66-6	10000	mg/kg	98		-	-	85.3		-	-	152		-	-

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H13-T1-0-6		H13-T2-0-6		H13-T2-6-12		H13-F1-0-6		H13-F2-0-6		H13-G1-0-6	
SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID				L2519501-31		L2519501-33		L2519501-34		L2519501-13		L2519501-11		L2519501-09	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	76.2		70.3		71.7		66.2		64		60	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	5690		5930		-	-	10500		13700		8860	
Antimony, Total	7440-36-0		mg/kg	4.95	U	5.44	U	-	-	5.88	U	6.06	U	6.45	U
Arsenic, Total	7440-38-2	16	mg/kg	5.84		31.8		22.5		9.74		11		116	
Barium, Total	7440-39-3	400	mg/kg	41.7		58.1		-	-	73.4		84.7		61.8	
Beryllium, Total	7440-41-7	590	mg/kg	0.295	J	0.336	J	-	-	0.739		0.926		0.482	J
Cadmium, Total	7440-43-9	9.3	mg/kg	4.21		9.98		5.04		3.86		3.54		5.82	
Calcium, Total	7440-70-2		mg/kg	6870		3770		-	-	3460		4780		3470	
Chromium, Total	7440-47-3		mg/kg	19.8		127		-	-	71.6		65.7		141	
Cobalt, Total	7440-48-4		mg/kg	4.3		3.17		-	-	7.32		15.4		6.66	
Copper, Total	7440-50-8	270	mg/kg	14.4		22.3		-	-	14		15.5		30.7	
Iron, Total	7439-89-6		mg/kg	11900		9400		-	-	41800		52800		17500	
Lead, Total	7439-92-1	1000	mg/kg	20.5		136		-	-	40.9		40.3		347	
Magnesium, Total	7439-95-4		mg/kg	3600		1700		-	-	1910		2580		2540	
Manganese, Total	7439-96-5	10000	mg/kg	290		204		-	-	634		1530		438	
Mercury, Total	7439-97-6	2.8	mg/kg	0.403		3.59		2.43		0.234		0.414		31.3	
Nickel, Total	7440-02-0	310	mg/kg	8.83		8.7		-	-	9.82		11.2		14.8	
Potassium, Total	7440-09-7		mg/kg	542		305		-	-	530		660		769	
Selenium, Total	7782-49-2	1500	mg/kg	0.426	J	0.46	J	-	-	0.942	J	1.12	J	0.974	J
Silver, Total	7440-22-4	1500	mg/kg	0.495	U	0.854		-	-	0.589		0.476	J	1.02	
Sodium, Total	7440-23-5		mg/kg	198	U	218	U	-	-	235	U	242	U	258	U
Thallium, Total	7440-28-0		mg/kg	1.98	U	2.18	U	-	-	2.35	U	1.22	J	2.58	U
Vanadium, Total	7440-62-2		mg/kg	12.9		11.4		-	-	41.6		58.7		21.6	
Zinc, Total	7440-66-6	10000	mg/kg	52.3		71.4		-	-	64.6		87.9		88.4	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H13-G1-6-12		H13-G2-0-6		H13-G2-6-12		H14-T1-0-6		H14-T2-0-6		H14-F1-0-6	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519501-10		L2519501-07		L2519501-08		L2519501-01		L2519474-29		L2519474-27	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	75.6		76		64.6		73.6		77		67.8	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	-	-	3980		-	-	5140		10900		9980	
	Antimony, Total	7440-36-0		mg/kg	-	-	5.01	U	-	-	5.23	U	5.03	U	5.81	U
	Arsenic, Total	7440-38-2	16	mg/kg	58.5		106		94.2		7.42		6.68		10.4	
	Barium, Total	7440-39-3	400	mg/kg	-	-	47.3		-	-	46.3		89.9		71	
	Beryllium, Total	7440-41-7	590	mg/kg	-	-	0.242	J	-	-	0.278	J	0.611		0.546	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	-	-	18.7		6.39		6.42		3.26		3.33	
	Calcium, Total	7440-70-2		mg/kg	-	-	4100		-	-	5480		24200		3260	
	Chromium, Total	7440-47-3		mg/kg	-	-	280		-	-	49		84.5		52.8	
	Cobalt, Total	7440-48-4		mg/kg	-	-	2.53		-	-	3.98		8.32		5.51	
	Copper, Total	7440-50-8	270	mg/kg	-	-	55.2		-	-	16.4		20.2		13.1	
	Iron, Total	7439-89-6		mg/kg	-	-	7690		-	-	9900		20300		21500	
	Lead, Total	7439-92-1	1000	mg/kg	-	-	395		-	-	31.1		19.8		38.1	
	Magnesium, Total	7439-95-4		mg/kg	-	-	1340		-	-	2940		8230		2140	
	Manganese, Total	7439-96-5	10000	mg/kg	-	-	165		-	-	418		452		158	
	Mercury, Total	7439-97-6	2.8	mg/kg	10.5		65.8		54.9		1.06		0.137		0.58	
	Nickel, Total	7440-02-0	310	mg/kg	-	-	9.71		-	-	8.91		20.2		12.6	
	Potassium, Total	7440-09-7		mg/kg	-	-	278		-	-	354		788		712	
	Selenium, Total	7782-49-2	1500	mg/kg	-	-	0.851	J	-	-	0.512	J	2.01	U	2.32	U
	Silver, Total	7440-22-4	1500	mg/kg	-	-	2.19		-	-	0.453	J	0.503	U	0.581	U
	Sodium, Total	7440-23-5		mg/kg	-	-	200	U	-	-	209	U	201	U	232	U
	Thallium, Total	7440-28-0		mg/kg	-	-	2	U	-	-	2.09	U	2.01	U	2.32	U
	Vanadium, Total	7440-62-2		mg/kg	-	-	8.79		-	-	12.7		21.6		22.2	
	Zinc, Total	7440-66-6	10000	mg/kg	-	-	107		-	-	50.8		60.1		58.7	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H14-F2-0-6		H14-G1-0-6		H14-G1-6-12		H14-G2-0-6		H14-G2-6-12		H16-T1-0-6	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519474-25		L2519474-23		L2519474-24		L2519474-21		L2519474-22		L2519474-18	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	64		68.3		64.4		61.7		74		72.8	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	13800		10000		-	-	6100		-	-	6980	
	Antimony, Total	7440-36-0		mg/kg	5.89	U	5.59	U	-	-	6.38	U	-	-	5.23	U
	Arsenic, Total	7440-38-2	16	mg/kg	9.82		27.7		25.3		58.3		34.4		6.16	
	Barium, Total	7440-39-3	400	mg/kg	84.7		62.5		-	-	42.1		-	-	60	
	Beryllium, Total	7440-41-7	590	mg/kg	0.772		0.585		-	-	0.322	J	-	-	0.381	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	5.13		4.29		-	-	7.1		-	-	8.09	
	Calcium, Total	7440-70-2		mg/kg	3050		4480		-	-	5300		-	-	8540	
	Chromium, Total	7440-47-3		mg/kg	72.7		64.7		-	-	114		-	-	152	
	Cobalt, Total	7440-48-4		mg/kg	17.6		13.6		-	-	3.52		-	-	5.09	
	Copper, Total	7440-50-8	270	mg/kg	14.2		19.2		-	-	30.7		-	-	25.8	
	Iron, Total	7439-89-6		mg/kg	29800		18500		-	-	12900		-	-	14300	
	Lead, Total	7439-92-1	1000	mg/kg	36.4		96.2		-	-	188		-	-	37	
	Magnesium, Total	7439-95-4		mg/kg	2930		2800		-	-	2330		-	-	4070	
	Manganese, Total	7439-96-5	10000	mg/kg	1200		455		-	-	323		-	-	347	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.64		31.2		7.41		34.6		22		0.325	
	Nickel, Total	7440-02-0	310	mg/kg	15.3		15.4		-	-	9.63		-	-	13.8	
	Potassium, Total	7440-09-7		mg/kg	886		832		-	-	420		-	-	524	
	Selenium, Total	7782-49-2	1500	mg/kg	2.35	U	2.24	U	-	-	2.55	U	-	-	0.473	J
	Silver, Total	7440-22-4	1500	mg/kg	0.589	U	0.559	U	-	-	0.679		-	-	0.912	
	Sodium, Total	7440-23-5		mg/kg	235	U	224	U	-	-	255	U	-	-	209	U
	Thallium, Total	7440-28-0		mg/kg	1.09	J	2.24	U	-	-	2.55	U	-	-	2.09	U
	Vanadium, Total	7440-62-2		mg/kg	30		21.1		-	-	14.5		-	-	15	
	Zinc, Total	7440-66-6	10000	mg/kg	77.2		77		-	-	75.1		-	-	81.8	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H16-T2-0-6		H16-F1-0-6		H16-F2-0-6		H16-G1-0-6		H16-G1-6-12		H16-G2-0-6	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519474-16		L2519474-14		L2519474-12		L2519474-08		L2519474-09		L2519474-10	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	69.5		67.6		74.5		57		70.8		73.7	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	6070		16100		7340		4090		-	-	5740	
	Antimony, Total	7440-36-0		mg/kg	5.61	U	5.85	U	5.27	U	7	U	-	-	5.19	U
	Arsenic, Total	7440-38-2	16	mg/kg	3.66		7.55		5.04		75.5		171		59.1	
	Barium, Total	7440-39-3	400	mg/kg	39.9		90.6		64		37.2		-	-	37.4	
	Beryllium, Total	7440-41-7	590	mg/kg	0.325	J	0.886		0.396	J	0.229	J	-	-	0.264	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	0.832	J	1.14	J	7.78		12.4		11.5		6.51	
	Calcium, Total	7440-70-2		mg/kg	9460		3160		20200		4400		-	-	4220	
	Chromium, Total	7440-47-3		mg/kg	19.8		27.6		72.7		150		-	-	93.8	
	Cobalt, Total	7440-48-4		mg/kg	3.5		20.4		5.38		2.15	J	-	-	3.1	
	Copper, Total	7440-50-8	270	mg/kg	15.6		13.1		18.6		45.8		-	-	30.4	
	Iron, Total	7439-89-6		mg/kg	11200		29800		14400		7770		-	-	10800	
	Lead, Total	7439-92-1	1000	mg/kg	30.1		25.9		32.2		264		-	-	184	
	Magnesium, Total	7439-95-4		mg/kg	3830		4870		8080		1650		-	-	2010	
	Manganese, Total	7439-96-5	10000	mg/kg	219		1340		341		212		-	-	235	
	Mercury, Total	7439-97-6	2.8	mg/kg	0.334		0.122		0.297		36.1		39.5		30	
	Nickel, Total	7440-02-0	310	mg/kg	8.72		22		12.3		7.82		-	-	9.44	
	Potassium, Total	7440-09-7		mg/kg	414		1150		699		414		-	-	416	
	Selenium, Total	7782-49-2	1500	mg/kg	2.24	U	2.34	U	2.11	U	2.8	U	-	-	2.08	U
	Silver, Total	7440-22-4	1500	mg/kg	0.561	U	0.585	U	0.527	U	0.99		-	-	0.57	
	Sodium, Total	7440-23-5		mg/kg	224	U	234	U	211	U	280	U	-	-	208	U
	Thallium, Total	7440-28-0		mg/kg	2.24	U	1.11	J	2.11	U	2.8	U	-	-	2.08	U
	Vanadium, Total	7440-62-2		mg/kg	12.9		31.9		16		8.19		-	-	11.4	
	Zinc, Total	7440-66-6	10000	mg/kg	55.7		71.1		76.3		83		-	-	71.1	

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION				H16-G2-6-12		H17-T1-0-6		H17-T2-0-6		H17-F1-0-6		H17-F2-0-6		H17-G1-0-6	
	SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
	LAB SAMPLE ID				L2519474-11		L2519474-06		L2519474-04		L2519474-02		L2519429-30		L2519429-19	
	SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	SAMPLE DEPTH (ft.)															
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry																
	Solids, Total	NONE		%	70.5		73		76.1		67		68.6		64.7	
Total Metals																
	Aluminum, Total	7429-90-5		mg/kg	-	-	3040		2900		4970		6780		6780	
	Antimony, Total	7440-36-0		mg/kg	-	-	5.29	U	5.21	U	5.64	U	5.49	U	6.14	U
	Arsenic, Total	7440-38-2	16	mg/kg	71.7		3.27		3.42		3.71		5.12		245	
	Barium, Total	7440-39-3	400	mg/kg	-	-	27.1		24.2		30.3		46.1		67	
	Beryllium, Total	7440-41-7	590	mg/kg	-	-	0.138	J	0.15	J	0.266	J	0.405	J	0.396	J
	Cadmium, Total	7440-43-9	9.3	mg/kg	-	-	5.61		5.02		2.31		3.97		16.6	
	Calcium, Total	7440-70-2		mg/kg	-	-	10200		6120		1840		2160		11100	
	Chromium, Total	7440-47-3		mg/kg	-	-	59.5		50.1		48.3		72.4		160	
	Cobalt, Total	7440-48-4		mg/kg	-	-	2.35		2.18		3.33		4.59		4	
	Copper, Total	7440-50-8	270	mg/kg	-	-	20.6		18.7		8.73		13.7		52.5	
	Iron, Total	7439-89-6		mg/kg	-	-	6950		6450		10600		13600		12700	
	Lead, Total	7439-92-1	1000	mg/kg	-	-	17.9		16.7		21.2		33.2		824	
	Magnesium, Total	7439-95-4		mg/kg	-	-	4390		1980		1330		1930		6110	
	Manganese, Total	7439-96-5	10000	mg/kg	-	-	257		187		194		279		386	
	Mercury, Total	7439-97-6	2.8	mg/kg	29.3		0.153		0.228		0.228		0.284		76.8	
	Nickel, Total	7440-02-0	310	mg/kg	-	-	5.8		5.63		8.04		13.4		13.2	
	Potassium, Total	7440-09-7		mg/kg	-	-	257	J	239	J	310		342		480	
	Selenium, Total	7782-49-2	1500	mg/kg	-	-	2.12	U	0.658	J	2.25	U	2.2	U	2.46	U
	Silver, Total	7440-22-4	1500	mg/kg	-	-	0.572		0.468	J	0.564	U	0.345	J	0.954	
	Sodium, Total	7440-23-5		mg/kg	-	-	212	U	208	U	225	U	220	U	246	U
	Thallium, Total	7440-28-0		mg/kg	-	-	2.12	U	2.08	U	2.25	U	2.2	U	2.46	U
	Vanadium, Total	7440-62-2		mg/kg	-	-	8.12		7.02		11.6		14.4		13.4	
	Zinc, Total	7440-66-6	10000	mg/kg	-	-	54		43		48.2		72.8		104	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H17-G1-6-12		H17-G2-0-6		H17-G2-6-12		H18-T1-0-6		H18-T2-0-6		H18-F1-0-6	
SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID				L2519429-20		L2519429-21		L2519429-22		L2519429-17		L2519429-15		L2519429-13	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)															
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry															
Solids, Total	NONE		%	77.8		72.9		64.6		69.2		74.4		69.4	
Total Metals															
Aluminum, Total	7429-90-5		mg/kg	-	-	2460		-	-	6800		3650		5760	
Antimony, Total	7440-36-0		mg/kg	-	-	5.38	U	-	-	5.66	U	5.3	U	5.51	U
Arsenic, Total	7440-38-2	16	mg/kg	148		89.5		222		11.2		3.14		6.38	
Barium, Total	7440-39-3	400	mg/kg	-	-	35.3		-	-	56.8		33.3		50	
Beryllium, Total	7440-41-7	590	mg/kg	-	-	0.158	J	-	-	0.392	J	0.247	J	0.383	J
Cadmium, Total	7440-43-9	9.3	mg/kg	6.86		11.7		7		1.02	J	0.924	J	5.31	
Calcium, Total	7440-70-2		mg/kg	-	-	4110		-	-	5130		6160		4420	
Chromium, Total	7440-47-3		mg/kg	-	-	178		-	-	58		22.9		79.3	
Cobalt, Total	7440-48-4		mg/kg	-	-	1.87	J	-	-	4.99		3.37		5.37	
Copper, Total	7440-50-8	270	mg/kg	-	-	40.6		-	-	18.8		11.2		17.5	
Iron, Total	7439-89-6		mg/kg	-	-	6220		-	-	13400		8120		12400	
Lead, Total	7439-92-1	1000	mg/kg	-	-	369		-	-	50.8		24.6		43.7	
Magnesium, Total	7439-95-4		mg/kg	-	-	1850		-	-	2910		3450		2690	
Manganese, Total	7439-96-5	10000	mg/kg	-	-	176		-	-	403		240		352	
Mercury, Total	7439-97-6	2.8	mg/kg	29.8		94.6		152		0.65		0.282		0.682	
Nickel, Total	7440-02-0	310	mg/kg	-	-	7.06		-	-	12.8		8.82		14.5	
Potassium, Total	7440-09-7		mg/kg	-	-	167	J	-	-	360		283		515	
Selenium, Total	7782-49-2	1500	mg/kg	-	-	2.15	U	-	-	0.409	J	2.12	U	2.2	U
Silver, Total	7440-22-4	1500	mg/kg	-	-	1.44		-	-	0.566	U	0.53	U	0.459	J
Sodium, Total	7440-23-5		mg/kg	-	-	215	U	-	-	226	U	212	U	220	U
Thallium, Total	7440-28-0		mg/kg	-	-	2.15	U	-	-	2.26	U	2.12	U	2.2	U
Vanadium, Total	7440-62-2		mg/kg	-	-	5.92		-	-	14.2		7.46		11.8	
Zinc, Total	7440-66-6	10000	mg/kg	-	-	83.8		-	-	80.2		57.1		93.9	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION					H18-F2-0-6		H18-G1-0-6		H18-G1-6-12		H18-G2-0-6		H18-G2-6-12	
SAMPLING DATE					4/1/2025		4/1/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID					L2519429-09		L2519429-05		L2519429-06		L2519429-07		L2519429-08	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)														
		CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry														
	Solids, Total	NONE		%	66.9		57.1		75.4		73.9		66.4	
Total Metals														
	Aluminum, Total	7429-90-5		mg/kg	9920		9400		-	-	3440		-	-
	Antimony, Total	7440-36-0		mg/kg	5.67	U	6.87	U	-	-	5.35	U	-	-
	Arsenic, Total	7440-38-2	16	mg/kg	6.48		155		35		77		113	
	Barium, Total	7440-39-3	400	mg/kg	74.6		79.6		-	-	38.2		-	-
	Beryllium, Total	7440-41-7	590	mg/kg	0.562	J	0.568	J	-	-	0.213	J	-	-
	Cadmium, Total	7440-43-9	9.3	mg/kg	5.96		10.5		0.902	J	13.3		13.5	
	Calcium, Total	7440-70-2		mg/kg	20200		9980		-	-	4330		-	-
	Chromium, Total	7440-47-3		mg/kg	76		91.4		-	-	198		-	-
	Cobalt, Total	7440-48-4		mg/kg	8.03		4.09		-	-	2.07	J	-	-
	Copper, Total	7440-50-8	270	mg/kg	20.5		38.5		-	-	49.8		-	-
	Iron, Total	7439-89-6		mg/kg	18600		12200		-	-	6950		-	-
	Lead, Total	7439-92-1	1000	mg/kg	36.2		374		-	-	327		-	-
	Magnesium, Total	7439-95-4		mg/kg	8140		4900		-	-	1570		-	-
	Manganese, Total	7439-96-5	10000	mg/kg	418		293		-	-	198		-	-
	Mercury, Total	7439-97-6	2.8	mg/kg	1.01		49.1		3.95		69.9		66.9	
	Nickel, Total	7440-02-0	310	mg/kg	18.7		11.8		-	-	7.54		-	-
	Potassium, Total	7440-09-7		mg/kg	1110		589		-	-	336		-	-
	Selenium, Total	7782-49-2	1500	mg/kg	2.27	U	2.75	U	-	-	0.431	J	-	-
	Silver, Total	7440-22-4	1500	mg/kg	0.567	U	0.467	J	-	-	1.29		-	-
	Sodium, Total	7440-23-5		mg/kg	227	U	275	U	-	-	214	U	-	-
	Thallium, Total	7440-28-0		mg/kg	2.27	U	2.75	U	-	-	2.14	U	-	-
	Vanadium, Total	7440-62-2		mg/kg	20.5		15.9		-	-	7.3		-	-
	Zinc, Total	7440-66-6	10000	mg/kg	84.6		72.7		-	-	82.2		-	-

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				H10-5S		H18-SS-02		DR-01-0-6		DR-02-0-6		DUP-01-20250401	
SAMPLING DATE				4/1/2025		4/3/2025		3/31/2025		3/31/2025		4/1/2025	
LAB SAMPLE ID				L2519429-23		L2520098-01		L2519070-15		L2519070-17		L2519474-20	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)													
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry													
Solids, Total	NONE		%	54.4		87.8		72.8		65.6		75	
Total Metals													
Aluminum, Total	7429-90-5		mg/kg	5320		1740		7200		11100		6710	
Antimony, Total	7440-36-0		mg/kg	7.08	U	22	U	5.19	U	5.89	U	5.25	U
Arsenic, Total	7440-38-2	16	mg/kg	8.42		4.38	J	4.95		7.53		4.27	
Barium, Total	7440-39-3	400	mg/kg	48.4		36.4		43.3		80.4		52.9	
Beryllium, Total	7440-41-7	590	mg/kg	0.329	J	2.2	U	0.339	J	0.635		0.393	J
Cadmium, Total	7440-43-9	9.3	mg/kg	1.89		4.39	U	0.493	J	0.518	J	2.42	
Calcium, Total	7440-70-2		mg/kg	7390		145000		1610		2050		2640	
Chromium, Total	7440-47-3		mg/kg	17.7		4.67		16		13.4		53.4	
Cobalt, Total	7440-48-4		mg/kg	4.96		3.64	J	2.54		8.12		4.04	
Copper, Total	7440-50-8	270	mg/kg	13.1		5.66		8.71		12.1		10.2	
Iron, Total	7439-89-6		mg/kg	15000		8070		11900		22900		15600	
Lead, Total	7439-92-1	1000	mg/kg	27.4		8.42	J	31.8		36		24.4	
Magnesium, Total	7439-95-4		mg/kg	3530		8700		1350		2750		1440	
Manganese, Total	7439-96-5	10000	mg/kg	219		635		93.2		483		266	
Mercury, Total	7439-97-6	2.8	mg/kg	2.87		0.075	U	0.114		0.086	J	0.193	
Nickel, Total	7440-02-0	310	mg/kg	11.6		11	U	6.64		12.4		8.58	
Potassium, Total	7440-09-7		mg/kg	355		1100	U	299		740		364	
Selenium, Total	7782-49-2	1500	mg/kg	0.589	J	8.79	U	2.08	U	0.482	J	0.36	J
Silver, Total	7440-22-4	1500	mg/kg	0.708	U	2.2	U	0.519	U	0.589	U	0.525	U
Sodium, Total	7440-23-5		mg/kg	283	U	879	U	208	U	236	U	210	U
Thallium, Total	7440-28-0		mg/kg	2.83	U	8.79	U	2.08	U	2.36	U	2.1	U
Vanadium, Total	7440-62-2		mg/kg	11.2		12		15.9		26.2		17.7	
Zinc, Total	7440-66-6	10000	mg/kg	67.5		35.6		34.1		57.3		42.4	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION				WOODS-01-0-6		WOODS-02-0-6		WOODS-03-0-6		WOODS-04-0-6	
SAMPLING DATE				4/1/2025		4/1/2025		4/1/2025		4/1/2025	
LAB SAMPLE ID				L2519501-03		L2519501-05		L2519501-27		L2519501-29	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)											
	CasNum	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry											
Solids, Total	NONE		%	68.6		71.1		74.4		66.7	
Total Metals											
Aluminum, Total	7429-90-5		mg/kg	8960		13400		7740		10600	
Antimony, Total	7440-36-0		mg/kg	5.72	U	5.41	U	5.18	U	5.8	U
Arsenic, Total	7440-38-2	16	mg/kg	2.94		5.06		5.67		3.89	
Barium, Total	7440-39-3	400	mg/kg	30.6		70.5		47.6		65.1	
Beryllium, Total	7440-41-7	590	mg/kg	0.228	J	0.67		0.378	J	0.526	J
Cadmium, Total	7440-43-9	9.3	mg/kg	0.138	J	0.158	J	0.379	J	0.212	J
Calcium, Total	7440-70-2		mg/kg	1160		992		11500		1640	
Chromium, Total	7440-47-3		mg/kg	9.01		18.8		17.3		13.7	
Cobalt, Total	7440-48-4		mg/kg	2.52		11.6		5.27		5.09	
Copper, Total	7440-50-8	270	mg/kg	5.23		10.8		12.3		8.65	
Iron, Total	7439-89-6		mg/kg	9340		25500		14500		14500	
Lead, Total	7439-92-1	1000	mg/kg	16.8		21.8		12.7		28	
Magnesium, Total	7439-95-4		mg/kg	1290		3560		3430		2300	
Manganese, Total	7439-96-5	10000	mg/kg	42.1		490		260		180	
Mercury, Total	7439-97-6	2.8	mg/kg	0.07	J	0.067	J	0.074	J	0.128	
Nickel, Total	7440-02-0	310	mg/kg	6.36		15		9.04		10.4	
Potassium, Total	7440-09-7		mg/kg	378		853		524		926	
Selenium, Total	7782-49-2	1500	mg/kg	2.29	U	0.389	J	2.07	U	2.32	U
Silver, Total	7440-22-4	1500	mg/kg	0.572	U	0.541	U	0.518	U	0.58	U
Sodium, Total	7440-23-5		mg/kg	229	U	216	U	207	U	232	U
Thallium, Total	7440-28-0		mg/kg	2.29	U	2.16	U	2.07	U	2.32	U
Vanadium, Total	7440-62-2		mg/kg	15.8		30.4		17.1		19	
Zinc, Total	7440-66-6	10000	mg/kg	32.2		57.7		44.2		55.8	

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION					H6-G3-0-6-20250618		H6-G4-0-6-20250618		H6-G5-0-6-20250618		H11-G3-0-6-20250618	
SAMPLING DATE					6/18/2025		6/18/2025		6/18/2025		6/18/2025	
LAB SAMPLE ID					L2538381-01		L2538381-02		L2538381-03		L2538381-04	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)												
	CasNum	EPA-TCL	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
Solids, Total	NONE			%	78.8		59.5		60		75.5	
TCLP Metals by EPA 1311												
Arsenic, TCLP	7440-38-2	5		mg/l	0.309	J	0.396	J	0.238	J	0.47	J
Barium, TCLP	7440-39-3	100		mg/l	0.28	J	0.281	J	0.265	J	0.245	J
Cadmium, TCLP	7440-43-9	1		mg/l	0.0504	J	0.0434	J	0.0333	J	0.024	J
Chromium, TCLP	7440-47-3	5		mg/l	0.0233	J	0.2	U	0.2	U	0.2	U
Lead, TCLP	7439-92-1	5		mg/l	0.134	J	0.0964	J	0.0799	J	0.056	J
Mercury, TCLP	7439-97-6	0.2		mg/l	0.0025		0.0021		0.0021		0.0023	
Selenium, TCLP	7782-49-2	1		mg/l	0.0399	J	0.5	U	0.0384	J	0.0362	J
Silver, TCLP	7440-22-4	5		mg/l	0.1	U	0.1	U	0.1	U	0.1	U
Total Metals												
Aluminum, Total	7429-90-5			mg/kg	-	-	-	-	-	-	-	-
Antimony, Total	7440-36-0			mg/kg	-	-	-	-	-	-	-	-
Arsenic, Total	7440-38-2		16	mg/kg	111		144		145		136	
Barium, Total	7440-39-3		400	mg/kg	-	-	-	-	-	-	-	-
Beryllium, Total	7440-41-7		590	mg/kg	-	-	-	-	-	-	-	-
Cadmium, Total	7440-43-9		9.3	mg/kg	-	-	-	-	-	-	-	-
Calcium, Total	7440-70-2			mg/kg	-	-	-	-	-	-	-	-
Chromium, Total	7440-47-3			mg/kg	-	-	-	-	-	-	-	-
Cobalt, Total	7440-48-4			mg/kg	-	-	-	-	-	-	-	-
Copper, Total	7440-50-8		270	mg/kg	-	-	-	-	-	-	-	-
Iron, Total	7439-89-6			mg/kg	-	-	-	-	-	-	-	-
Lead, Total	7439-92-1		1000	mg/kg	-	-	-	-	-	-	-	-
Magnesium, Total	7439-95-4			mg/kg	-	-	-	-	-	-	-	-
Manganese, Total	7439-96-5		10000	mg/kg	-	-	-	-	-	-	-	-
Mercury, Total	7439-97-6		2.8	mg/kg	14.6		84		89.8		13.4	
Nickel, Total	7440-02-0		310	mg/kg	-	-	-	-	-	-	-	-
Potassium, Total	7440-09-7			mg/kg	-	-	-	-	-	-	-	-
Selenium, Total	7782-49-2		1500	mg/kg	-	-	-	-	-	-	-	-
Silver, Total	7440-22-4		1500	mg/kg	-	-	-	-	-	-	-	-
Sodium, Total	7440-23-5			mg/kg	-	-	-	-	-	-	-	-
Thallium, Total	7440-28-0			mg/kg	-	-	-	-	-	-	-	-
Vanadium, Total	7440-62-2			mg/kg	-	-	-	-	-	-	-	-
Zinc, Total	7440-66-6		10000	mg/kg	-	-	-	-	-	-	-	-

* Comparison is not performed on parameters with non-numeric criteria.

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION						H11-G4-0-6-20250618		H11-G5-0-6-20250618		H17-G3-0-6-20250618		H17-G4-0-6-20250618	
SAMPLING DATE						6/18/2025		6/18/2025		6/18/2025		6/18/2025	
LAB SAMPLE ID						L2538381-05		L2538381-06		L2538381-07		L2538381-08	
SAMPLE TYPE						SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)													
		CasNum	EPA-TCL	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry													
	Solids, Total	NONE			%	71.3		58.2		59.5		77.2	
TCLP Metals by EPA 1311													
	Arsenic, TCLP	7440-38-2	5		mg/l	0.618	J	0.382	J	0.3	J	0.325	J
	Barium, TCLP	7440-39-3	100		mg/l	0.26	J	0.255	J	0.162	J	0.227	J
	Cadmium, TCLP	7440-43-9	1		mg/l	0.0429	J	0.0264	J	0.0574	J	0.0647	J
	Chromium, TCLP	7440-47-3	5		mg/l	0.2	U	0.2	U	0.0388	J	0.0246	J
	Lead, TCLP	7439-92-1	5		mg/l	0.113	J	0.0748	J	0.144	J	0.192	J
	Mercury, TCLP	7439-97-6	0.2		mg/l	0.0018		0.0016		0.0032		0.0036	
	Selenium, TCLP	7782-49-2	1		mg/l	0.0388	J	0.5	U	0.5	U	0.0389	J
	Silver, TCLP	7440-22-4	5		mg/l	0.1	U	0.1	U	0.1	U	0.1	U
Total Metals													
	Aluminum, Total	7429-90-5			mg/kg	-	-	-	-	-	-	-	-
	Antimony, Total	7440-36-0			mg/kg	-	-	-	-	-	-	-	-
	Arsenic, Total	7440-38-2		16	mg/kg	128		368		169		90.7	
	Barium, Total	7440-39-3		400	mg/kg	-	-	-	-	-	-	-	-
	Beryllium, Total	7440-41-7		590	mg/kg	-	-	-	-	-	-	-	-
	Cadmium, Total	7440-43-9		9.3	mg/kg	-	-	-	-	-	-	-	-
	Calcium, Total	7440-70-2			mg/kg	-	-	-	-	-	-	-	-
	Chromium, Total	7440-47-3			mg/kg	-	-	-	-	-	-	-	-
	Cobalt, Total	7440-48-4			mg/kg	-	-	-	-	-	-	-	-
	Copper, Total	7440-50-8		270	mg/kg	-	-	-	-	-	-	-	-
	Iron, Total	7439-89-6			mg/kg	-	-	-	-	-	-	-	-
	Lead, Total	7439-92-1		1000	mg/kg	-	-	-	-	-	-	-	-
	Magnesium, Total	7439-95-4			mg/kg	-	-	-	-	-	-	-	-
	Manganese, Total	7439-96-5		10000	mg/kg	-	-	-	-	-	-	-	-
	Mercury, Total	7439-97-6		2.8	mg/kg	21.4		118		77.6		13.4	
	Nickel, Total	7440-02-0		310	mg/kg	-	-	-	-	-	-	-	-
	Potassium, Total	7440-09-7			mg/kg	-	-	-	-	-	-	-	-
	Selenium, Total	7782-49-2		1500	mg/kg	-	-	-	-	-	-	-	-
	Silver, Total	7440-22-4		1500	mg/kg	-	-	-	-	-	-	-	-
	Sodium, Total	7440-23-5			mg/kg	-	-	-	-	-	-	-	-
	Thallium, Total	7440-28-0			mg/kg	-	-	-	-	-	-	-	-
	Vanadium, Total	7440-62-2			mg/kg	-	-	-	-	-	-	-	-
	Zinc, Total	7440-66-6		10000	mg/kg	-	-	-	-	-	-	-	-

* Comparison is not performed on parameters with non-numeric criteria.

Table 8

Amherst Central Park Additional Sampling
2025

LOCATION					H17-G5-0-6-20250618		CREEK-SS-03-20250618		H10-SS-02-20250618		CREEK-SS-02-20250618	
SAMPLING DATE					6/18/2025		6/18/2025		6/18/2025		6/18/2025	
LAB SAMPLE ID					L2538381-09		L2538381-10		L2538381-11		L2538381-12	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)												
	CasNum	EPA-TCL	NY-RESC	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual
General Chemistry												
Solids, Total	NONE			%	56.4		58.8		61.6		53	
TCLP Metals by EPA 1311												
Arsenic, TCLP	7440-38-2	5		mg/l	0.0311	J	-	-	-	-	-	-
Barium, TCLP	7440-39-3	100		mg/l	0.169	J	-	-	-	-	-	-
Cadmium, TCLP	7440-43-9	1		mg/l	0.0139	J	-	-	-	-	-	-
Chromium, TCLP	7440-47-3	5		mg/l	0.0404	J	-	-	-	-	-	-
Lead, TCLP	7439-92-1	5		mg/l	0.5	U	-	-	-	-	-	-
Mercury, TCLP	7439-97-6	0.2		mg/l	0.0013		-	-	-	-	-	-
Selenium, TCLP	7782-49-2	1		mg/l	0.5	U	-	-	-	-	-	-
Silver, TCLP	7440-22-4	5		mg/l	0.1	U	-	-	-	-	-	-
Total Metals												
Aluminum, Total	7429-90-5			mg/kg	-	-	6340		6400		3260	
Antimony, Total	7440-36-0			mg/kg	-	-	6.75	U	6.18	U	7.26	U
Arsenic, Total	7440-38-2		16	mg/kg	22.1		1.52		2.79		1.77	
Barium, Total	7440-39-3		400	mg/kg	-	-	52.9		53.2		39.7	
Beryllium, Total	7440-41-7		590	mg/kg	-	-	0.376	J	0.356	J	0.171	J
Cadmium, Total	7440-43-9		9.3	mg/kg	-	-	1.35	U	1.69		1.45	U
Calcium, Total	7440-70-2			mg/kg	-	-	11800		19500		78300	
Chromium, Total	7440-47-3			mg/kg	-	-	11.5		20.6		8.66	
Cobalt, Total	7440-48-4			mg/kg	-	-	6.06		6.24		3.28	
Copper, Total	7440-50-8		270	mg/kg	-	-	13.3		20.6		14.8	
Iron, Total	7439-89-6			mg/kg	-	-	10500		12700		7990	
Lead, Total	7439-92-1		1000	mg/kg	-	-	19.1		35		15	
Magnesium, Total	7439-95-4			mg/kg	-	-	3490		7640		8460	
Manganese, Total	7439-96-5		10000	mg/kg	-	-	114		230		274	
Mercury, Total	7439-97-6		2.8	mg/kg	25.3		0.11	J	0.191		0.125	U
Nickel, Total	7440-02-0		310	mg/kg	-	-	13.3		13.3		7.78	
Potassium, Total	7440-09-7			mg/kg	-	-	530		522		580	
Selenium, Total	7782-49-2		1500	mg/kg	-	-	0.578	J	0.721	J	2.9	U
Silver, Total	7440-22-4		1500	mg/kg	-	-	0.675	U	0.618	U	0.726	U
Sodium, Total	7440-23-5			mg/kg	-	-	211	J	247	U	285	J
Thallium, Total	7440-28-0			mg/kg	-	-	2.7	U	2.47	U	2.9	U
Vanadium, Total	7440-62-2			mg/kg	-	-	11.8		12.3		6.82	
Zinc, Total	7440-66-6		10000	mg/kg	-	-	53.4		94		89.4	

* Comparison is not performed on parameters with non-numeric criteria.

Table 8

Amherst Central Park Additional Sampling
2025

	LOCATION					**CREEK-SS-01-20250618**	
	SAMPLING DATE					**6/18/2025**	
	LAB SAMPLE ID					**L2538381-13**	
	SAMPLE TYPE					**SOIL**	
	SAMPLE DEPTH (ft.)						
		CasNum	**EPA-TCL**	**NY-RESC**	**Units**	**Results**	**Qual**
General Chemistry							
	Solids, Total	NONE			%	57.5	
TCLP Metals by EPA 1311							
	Arsenic, TCLP	7440-38-2	5		mg/l	-	-
	Barium, TCLP	7440-39-3	100		mg/l	-	-
	Cadmium, TCLP	7440-43-9	1		mg/l	-	-
	Chromium, TCLP	7440-47-3	5		mg/l	-	-
	Lead, TCLP	7439-92-1	5		mg/l	-	-
	Mercury, TCLP	7439-97-6	0.2		mg/l	-	-
	Selenium, TCLP	7782-49-2	1		mg/l	-	-
	Silver, TCLP	7440-22-4	5		mg/l	-	-
Total Metals							
	Aluminum, Total	7429-90-5			mg/kg	4270	
	Antimony, Total	7440-36-0			mg/kg	6.78	U
	Arsenic, Total	7440-38-2		16	mg/kg	1.83	
	Barium, Total	7440-39-3		400	mg/kg	42.8	
	Beryllium, Total	7440-41-7		590	mg/kg	0.22	J
	Cadmium, Total	7440-43-9		9.3	mg/kg	1.36	U
	Calcium, Total	7440-70-2			mg/kg	47000	
	Chromium, Total	7440-47-3			mg/kg	10.8	
	Cobalt, Total	7440-48-4			mg/kg	3.01	
	Copper, Total	7440-50-8		270	mg/kg	15.6	
	Iron, Total	7439-89-6			mg/kg	8740	
	Lead, Total	7439-92-1		1000	mg/kg	18	
	Magnesium, Total	7439-95-4			mg/kg	7470	
	Manganese, Total	7439-96-5		10000	mg/kg	176	
	Mercury, Total	7439-97-6		2.8	mg/kg	0.137	U
	Nickel, Total	7440-02-0		310	mg/kg	8.84	
	Potassium, Total	7440-09-7			mg/kg	453	
	Selenium, Total	7782-49-2		1500	mg/kg	2.71	U
	Silver, Total	7440-22-4		1500	mg/kg	0.678	U
	Sodium, Total	7440-23-5			mg/kg	353	
	Thallium, Total	7440-28-0			mg/kg	2.71	U
	Vanadium, Total	7440-62-2			mg/kg	8.29	
	Zinc, Total	7440-66-6		10000	mg/kg	67.7	

* Comparison is not performed on parameters with non-numeric criteria.

Table 9 **2022 Surface Water Sampling Results**

					Pond #1	Pond #2	Pond #3	Pond #4	Hole #8 Drainage Feature	
	LOCATION				**SW-Y1-15-062822**	**SW-N1-12-062822**	**SW-G1-34-062822**	**SW-Z1-92-051922**	**SW-C1-91-051922**	**TRIP BLANK**
	SAMPLING DATE				**6/28/2022**	**6/28/2022**	**6/28/2022**	**5/19/2022**	**5/19/2022**	**6/28/2022**
	LAB SAMPLE ID				**L2234406-01**	**L2234406-02**	**L2234406-03**	**L2226573-01**	**L2226573-02**	**L2234406-04**
	SAMPLE TYPE				**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
	SAMPLE DEPTH (ft.)									
		CasNum	**NY-AWQS**	**Units**	**Results**	**Results**	**Results**	**Results**	**Results**	**Results**
1,4 Dioxane by 8270E-SIM										
	1,4-Dioxane	123-91-1		ug/l	ND	ND	ND	ND	ND	-
General Chemistry										
	Cyanide, Total	57-12-5	200	ug/l	2J	2J	2J	ND	ND	-
	Total Organic Carbon	7440-44-0		ug/l	19000	16800	23100	12400	16200	-
	Chromium, Hexavalent	18540-29-9	50	ug/l	ND	4J	3J	ND	3J	-
Organochlorine Pesticides by GC										
	Delta-BHC	319-86-8	0.04	ug/l	ND	ND	ND	ND	ND	-
	Lindane	58-89-9	0.05	ug/l	ND	ND	ND	ND	ND	-
	Alpha-BHC	319-84-6	0.01	ug/l	ND	ND	ND	ND	ND	-
	Beta-BHC	319-85-7	0.04	ug/l	ND	ND	ND	ND	ND	-
	Heptachlor	76-44-8	0.04	ug/l	ND	ND	ND	ND	ND	-
	Aldrin	309-00-2	0	ug/l	ND	ND	ND	ND	ND	-
	Heptachlor epoxide	1024-57-3	0.03	ug/l	ND	ND	ND	ND	ND	-
	Endrin	72-20-8	0	ug/l	ND	ND	ND	ND	ND	-
	Endrin aldehyde	7421-93-4	5	ug/l	ND	ND	ND	ND	ND	-
	Endrin ketone	53494-70-5	5	ug/l	ND	ND	ND	ND	ND	-
	Dieldrin	60-57-1	0.004	ug/l	ND	ND	ND	ND	ND	-
	4,4'-DDE	72-55-9	0.2	ug/l	ND	ND	ND	ND	ND	-
	4,4'-DDD	72-54-8	0.3	ug/l	ND	ND	ND	ND	ND	-
	4,4'-DDT	50-29-3	0.2	ug/l	ND	ND	ND	ND	ND	-
	Endosulfan I	959-98-8		ug/l	ND	ND	ND	ND	ND	-
	Endosulfan II	33213-65-9		ug/l	ND	ND	ND	ND	ND	-
	Endosulfan sulfate	1031-07-8		ug/l	ND	ND	ND	ND	ND	-
	Methoxychlor	72-43-5	35	ug/l	ND	ND	ND	ND	ND	-
	Toxaphene	8001-35-2	0.06	ug/l	ND	ND	ND	ND	ND	-
	cis-Chlordane	5103-71-9		ug/l	ND	ND	ND	ND	ND	-
	trans-Chlordane	5103-74-2		ug/l	ND	ND	ND	ND	ND	-
	Chlordane	57-74-9	0.05	ug/l	ND	ND	ND	ND	ND	-
Perfluorinated Alkyl Acids by Isotope Dilution										
	Perfluorobutanoic Acid (PFBA)	375-22-4		ug/l	0.0206	0.0226	0.0979	0.00593	0.0106	-
	Perfluoropentanoic Acid (PFPeA)	2706-90-3		ug/l	0.00122J	0.00195	0.00318	0.00192J	0.00148J	-
	Perfluorobutanesulfonic Acid (PFB	375-73-5		ug/l	0.00251	0.00327	0.00401	0.00235	0.00301	-
	Perfluorohexanoic Acid (PFHxA)	307-24-4		ug/l	0.00194	0.0026	0.00363	0.0023	0.00238	-
	Perfluoroheptanoic Acid (PFHpA)	375-85-9		ug/l	0.00211	0.00236	0.00318	0.00211	0.00213	-
	Perfluorohexanesulfonic Acid (PFH	355-46-4		ug/l	0.00127J	0.0018J	0.00283	0.00134J	0.00203	-
	Perfluorooctanoic Acid (PFOA)	335-67-1		ug/l	0.00631	0.00626	0.00885	0.00577	0.0083	-
	1H,1H,2H,2H-Perfluorooctanesulfo	27619-97-2		ug/l	ND	ND	ND	ND	ND	-
	Perfluoroheptanesulfonic Acid (PF	375-92-8		ug/l	ND	ND	ND	ND	ND	-
	Perfluorononanoic Acid (PFNA)	375-95-1		ug/l	0.000774J	0.000736J	0.000484J	0.000609J	0.000567J	-
	Perfluorooctanesulfonic Acid (PFO	1763-23-1		ug/l	0.00469	0.00504	0.00635	0.00484	0.00536	-
	Perfluorodecanoic Acid (PFDA)	335-76-2		ug/l	ND	ND	ND	ND	ND	-
	1H,1H,2H,2H-Perfluorodecanesulf	39108-34-4		ug/l	ND	ND	ND	ND	ND	-
	N-Methyl Perfluorooctanesulfonan	2355-31-9		ug/l	ND	ND	ND	ND	ND	-
	Perfluoroundecanoic Acid (PFUnA	2058-94-8		ug/l	ND	ND	ND	ND	ND	-
	Perfluorodecanesulfonic Acid (PFD	335-77-3		ug/l	ND	ND	ND	ND	ND	-
	Perfluorooctanesulfonamide (FOS	754-91-6		ug/l	ND	ND	ND	ND	ND	-
	N-Ethyl Perfluorooctanesulfonami	2991-50-6		ug/l	ND	ND	ND	ND	ND	-
	Perfluorododecanoic Acid (PFDoA	307-55-1		ug/l	ND	ND	ND	ND	ND	-
	Perfluorotridecanoic Acid (PFTrDA	72629-94-8		ug/l	ND	ND	ND	ND	ND	-
	Perfluorotetradecanoic Acid (PFTA	376-06-7		ug/l	ND	ND	ND	ND	ND	-
	PFOA/PFOS, Total	null		ug/l	0.011	0.0113	0.0152	0.0106	0.0137	-
Polychlorinated Biphenyls by GC										
	Aroclor 1016	12674-11-2	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1221	11104-28-2	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1232	11141-16-5	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1242	53469-21-9	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1248	12672-29-6	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1254	11097-69-1	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1260	11096-82-5	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1262	37324-23-5	0.09	ug/l	ND	ND	ND	ND	ND	-
	Aroclor 1268	11100-14-4	0.09	ug/l	ND	ND	ND	ND	ND	-
	PCBs, Total	1336-36-3		ug/l	ND	ND	ND	ND	ND	-
Semivolatile Organics by GC/MS										
	Bis(2-chloroethyl)ether	111-44-4	1	ug/l	ND	ND	ND	ND	ND	-
	3,3'-Dichlorobenzidine	91-94-1	5	ug/l	ND	ND	ND	ND	ND	-

Table 9 **2022 Surface Water Sampling Results**

					Pond #1	Pond #2	Pond #3	Pond #4	Hole #8 Drainage Feature	
LOCATION					**SW-Y1-15-062822**	**SW-N1-12-062822**	**SW-G1-34-062822**	**SW-Z1-92-051922**	**SW-C1-91-051922**	**TRIP BLANK**
SAMPLING DATE					**6/28/2022**	**6/28/2022**	**6/28/2022**	**5/19/2022**	**5/19/2022**	**6/28/2022**
LAB SAMPLE ID					**L2234406-01**	**L2234406-02**	**L2234406-03**	**L2226573-01**	**L2226573-02**	**L2234406-04**
SAMPLE TYPE					**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
2,4-Dinitrotoluene	121-14-2	5	ug/l		ND	ND	ND	ND	ND	-
2,6-Dinitrotoluene	606-20-2	5	ug/l		ND	ND	ND	ND	ND	-
4-Chlorophenyl phenyl ether	7005-72-3		ug/l		ND	ND	ND	ND	ND	-
4-Bromophenyl phenyl ether	101-55-3		ug/l		ND	ND	ND	ND	ND	-
Bis(2-chloroisopropyl)ether	108-60-1	5	ug/l		ND	ND	ND	ND	ND	-
Bis(2-chloroethoxy)methane	111-91-1	5	ug/l		ND	ND	ND	ND	ND	-
Hexachlorocyclopentadiene	77-47-4	5	ug/l		ND	ND	ND	ND	ND	-
Isophorone	78-59-1	50	ug/l		ND	ND	ND	ND	ND	-
Nitrobenzene	98-95-3	0.4	ug/l		ND	ND	ND	ND	ND	-
NDPA/DPA	86-30-6	50	ug/l		ND	ND	ND	ND	ND	-
n-Nitrosodi-n-propylamine	621-64-7		ug/l		ND	ND	ND	ND	ND	-
Bis(2-ethylhexyl)phthalate	117-81-7	5	ug/l		ND	1.5J	1.6J	ND	ND	-
Butyl benzyl phthalate	85-68-7	50	ug/l		ND	ND	ND	ND	ND	-
Di-n-butylphthalate	84-74-2	50	ug/l		ND	ND	ND	ND	ND	-
Di-n-octylphthalate	117-84-0	50	ug/l		ND	ND	ND	ND	ND	-
Diethyl phthalate	84-66-2	50	ug/l		ND	ND	ND	ND	ND	-
Dimethyl phthalate	131-11-3	50	ug/l		ND	ND	ND	ND	ND	-
Biphenyl	92-52-4		ug/l		ND	ND	ND	ND	ND	-
4-Chloroaniline	106-47-8	5	ug/l		ND	ND	ND	ND	ND	-
2-Nitroaniline	88-74-4	5	ug/l		ND	ND	ND	ND	ND	-
3-Nitroaniline	99-09-2	5	ug/l		ND	ND	ND	ND	ND	-
4-Nitroaniline	100-01-6	5	ug/l		ND	ND	ND	ND	ND	-
Dibenzofuran	132-64-9		ug/l		ND	ND	ND	ND	ND	-
1,2,4,5-Tetrachlorobenzene	95-94-3	5	ug/l		ND	ND	ND	ND	ND	-
Acetophenone	98-86-2		ug/l		ND	ND	ND	ND	ND	-
2,4,6-Trichlorophenol	88-06-2		ug/l		ND	ND	ND	ND	ND	-
p-Chloro-m-cresol	59-50-7		ug/l		ND	ND	ND	ND	ND	-
2-Chlorophenol	95-57-8		ug/l		ND	ND	ND	ND	ND	-
2,4-Dichlorophenol	120-83-2	1	ug/l		ND	ND	ND	ND	ND	-
2,4-Dimethylphenol	105-67-9	50	ug/l		ND	ND	ND	ND	ND	-
2-Nitrophenol	88-75-5		ug/l		ND	ND	ND	ND	ND	-
4-Nitrophenol	100-02-7		ug/l		ND	ND	ND	ND	ND	-
2,4-Dinitrophenol	51-28-5	10	ug/l		ND	ND	ND	ND	ND	-
4,6-Dinitro-o-cresol	534-52-1		ug/l		ND	ND	ND	ND	ND	-
Phenol	108-95-2	1	ug/l		ND	ND	ND	ND	ND	-
2-Methylphenol	95-48-7		ug/l		ND	ND	ND	ND	ND	-
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5		ug/l		ND	ND	ND	ND	ND	-
2,4,5-Trichlorophenol	95-95-4		ug/l		ND	ND	ND	ND	ND	-
Carbazole	86-74-8		ug/l		ND	ND	ND	ND	ND	-
Atrazine	1912-24-9	7.5	ug/l		ND	ND	ND	ND	ND	-
Benzaldehyde	100-52-7		ug/l		ND	ND	ND	ND	ND	-
Caprolactam	105-60-2		ug/l		ND	ND	ND	ND	ND	-
2,3,4,6-Tetrachlorophenol	58-90-2		ug/l		ND	ND	ND	ND	ND	-
Semivolatile Organics by GC/MS-SIM										
Acenaphthene	83-32-9	20	ug/l		ND	0.02J	ND	ND	ND	-
2-Chloronaphthalene	91-58-7	10	ug/l		ND	ND	ND	ND	ND	-
Fluoranthene	206-44-0	50	ug/l		ND	ND	0.02J	ND	ND	-
Hexachlorobutadiene	87-68-3	0.5	ug/l		ND	ND	ND	ND	ND	-
Naphthalene	91-20-3	10	ug/l		ND	ND	ND	0.07JB	0.06JB	-
Benzo(a)anthracene	56-55-3	0.002	ug/l		ND	0.02J	0.03J	ND	ND	-
Benzo(a)pyrene	50-32-8	0	ug/l		ND	ND	ND	ND	ND	-
Benzo(b)fluoranthene	205-99-2	0.002	ug/l		0.01J	0.01J	0.02J	ND	ND	-
Benzo(k)fluoranthene	207-08-9	0.002	ug/l		0.01J	ND	ND	0.01J	ND	-
Chrysene	218-01-9	0.002	ug/l		ND	ND	ND	ND	ND	-
Acenaphthylene	208-96-8		ug/l		ND	ND	ND	ND	ND	-
Anthracene	120-12-7	50	ug/l		ND	ND	ND	ND	ND	-
Benzo(ghi)perylene	191-24-2		ug/l		ND	ND	ND	ND	ND	-
Fluorene	86-73-7	50	ug/l		ND	ND	ND	0.02J	0.02J	-
Phenanthrene	85-01-8	50	ug/l		ND	0.04J	ND	0.03J	0.03J	-
Dibenzo(a,h)anthracene	53-70-3		ug/l		ND	ND	ND	ND	ND	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	ug/l		ND	ND	ND	ND	ND	-
Pyrene	129-00-0	50	ug/l		ND	ND	0.02J	0.03J	ND	-
2-Methylnaphthalene	91-57-6		ug/l		ND	ND	ND	ND	ND	-
Pentachlorophenol	87-86-5	1	ug/l		ND	ND	ND	ND	ND	-
Hexachlorobenzene	118-74-1	0.04	ug/l		ND	ND	ND	ND	ND	-
Hexachloroethane	67-72-1	5	ug/l		ND	ND	ND	ND	ND	-
Total Metals										
Aluminum, Total	7429-90-5		ug/l		86.5	2110	186	5.88J	121	-
Antimony, Total	7440-36-0	3	ug/l		ND	ND	ND	ND	ND	-
Arsenic, Total	7440-38-2	25	ug/l		1.69	1.8	4.24	1.04	5.06	-
Barium, Total	7440-39-3	1000	ug/l		6.27	58.37	16.79	23.67	39.24	-
Beryllium, Total	7440-41-7	3	ug/l		ND	0.12J	ND	ND	ND	-
Cadmium, Total	7440-43-9	5	ug/l		ND	0.47	0.09J	ND	0.19J	-
Calcium, Total	7440-70-2		ug/l		19700	67400	33700	68700	86800	-
Chromium, Total	7440-47-3	50	ug/l		0.62J	4.14	1.43	0.49J	2.04	-

Table 9 **2022 Surface Water Sampling Results**

				Pond #1	Pond #2	Pond #3	Pond #4	Hole #8 Drainage Feature	
LOCATION				**SW-Y1-15-062822**	**SW-N1-12-062822**	**SW-G1-34-062822**	**SW-Z1-92-051922**	**SW-C1-91-051922**	**TRIP BLANK**
SAMPLING DATE				**6/28/2022**	**6/28/2022**	**6/28/2022**	**5/19/2022**	**5/19/2022**	**6/28/2022**
LAB SAMPLE ID				**L2234406-01**	**L2234406-02**	**L2234406-03**	**L2226573-01**	**L2226573-02**	**L2234406-04**
SAMPLE TYPE				**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Cobalt, Total	7440-48-4		ug/l	0.19J	1.63	0.32J	ND	0.26J	-
Copper, Total	7440-50-8	200	ug/l	1.02	13.56	0.97J	0.75J	2.82	-
Iron, Total	7439-89-6	300	ug/l	162	4330	415	35.6J	387	-
Lead, Total	7439-92-1	25	ug/l	ND	4.1	0.81J	ND	0.43J	-
Magnesium, Total	7439-95-4	35000	ug/l	12700	25600	18800	28000	29500	-
Manganese, Total	7439-96-5	300	ug/l	93.98	823.3	116.1	44.58	531	-
Mercury, Total	7439-97-6	0.7	ug/l	0.14J	0.18J	0.16J	0.13J	0.2	-
Nickel, Total	7440-02-0	100	ug/l	0.57J	4.73	1.39J	ND	1.45J	-
Potassium, Total	7440-09-7		ug/l	1980	4280	1830	2140	1010	-
Selenium, Total	7782-49-2	10	ug/l	ND	ND	ND	ND	ND	-
Silver, Total	7440-22-4	50	ug/l	ND	ND	ND	ND	ND	-
Sodium, Total	7440-23-5	20000	ug/l	4650	6530	6670	9900	13400	-
Thallium, Total	7440-28-0	0.5	ug/l	ND	ND	ND	ND	ND	-
Vanadium, Total	7440-62-2		ug/l	ND	4.71J	1.81J	ND	ND	-
Zinc, Total	7440-66-6	2000	ug/l	10.81	42.28	9.9J	8.65J	14.61	-
Volatile Organics by GC/MS									
Methylene chloride	75-09-2	5	ug/l	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	ug/l	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	7	ug/l	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5	5	ug/l	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1	ug/l	ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1	50	ug/l	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5	1	ug/l	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	ug/l	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	ug/l	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	75-69-4	5	ug/l	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.6	ug/l	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	ug/l	ND	ND	ND	ND	ND	ND
Bromodichloromethane	75-27-4	50	ug/l	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6	0.4	ug/l	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5	0.4	ug/l	ND	ND	ND	ND	ND	ND
Bromoform	75-25-2	50	ug/l	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/l	ND	ND	ND	ND	ND	ND
Benzene	71-43-2	1	ug/l	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	ug/l	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	ug/l	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3		ug/l	ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9	5	ug/l	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	2	ug/l	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	ug/l	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	ug/l	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	5	ug/l	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	ug/l	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	ug/l	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	3	ug/l	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	3	ug/l	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	1634-04-4	10	ug/l	ND	ND	ND	ND	ND	ND
p/m-Xylene	179601-23-1	5	ug/l	ND	ND	ND	ND	ND	ND
o-Xylene	95-47-6	5	ug/l	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	ug/l	ND	ND	ND	ND	ND	ND
Styrene	100-42-5	5	ug/l	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8	5	ug/l	ND	ND	ND	ND	ND	ND
Acetone	67-64-1	50	ug/l	5.6	3.6J	6.9	ND	1.7J	ND
Carbon disulfide	75-15-0	60	ug/l	ND	ND	ND	ND	ND	ND
2-Butanone	78-93-3	50	ug/l	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ug/l	ND	ND	ND	ND	ND	ND
2-Hexanone	591-78-6	50	ug/l	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	106-93-4	0.0006	ug/l	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	ug/l	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	ug/l	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	98-06-6	5	ug/l	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	96-12-8	0.04	ug/l	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	ug/l	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	99-87-6	5	ug/l	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	ug/l	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	ug/l	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1	5	ug/l	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	ND	ND	ND	ND	ND	ND
Methyl Acetate	79-20-9		ug/l	ND	ND	ND	ND	ND	ND
Cyclohexane	110-82-7		ug/l	ND	ND	ND	ND	ND	ND
Freon-113	76-13-1	5	ug/l	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	108-87-2		ug/l	ND	ND	ND	ND	ND	ND

* Comparison is not performed on parameters with non-numeric criteria.

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.
NY-TOGS-GA: New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.

APPENDIX A

HEALTH AND SAFETY PLAN

Health and Safety Plan
for
Amherst Central Park-South

Amherst Central Park-South
772 North Forest Road
Amherst, Erie County, New York

Prepared by

C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203

December, 2023

EMERGENCY PHONE NUMBERS

Emergency Medical Service 911

Police Department.....911

Fire Department.....911

Millard Fillmore Suburban Hospital.....(716) 568-3600

National Response Center .....(800) 424-8802

Poison Control Center .....(800) 222-1222

Center for Disease Control .....(800) 311-3435

NYSDEC Region 9 (Buffalo, New York).....(716) 851-7201

C&S Engineers.....(315) 455-2000

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FIGURES

Figure 1 Site Location
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Attachment A – Map and Directions to Hospital

Appendix A – Guidance on Incident Investigation and Reporting

SECTION 1 – GENERAL INFORMATION

This Health and Safety Plan (HASP) addresses health and safety considerations for the activities that personnel employed by C&S Engineers, Inc., (C&S) may be engaged in during site investigation at the Amherst Central Park- South located in Amherst, New York (Site). **Figure 1** and **Figure 2** shows the location and layout of the Site. This HASP will be implemented by the Health and Safety Officer (HSO) during site work.

Compliance with this HASP is required of C&S personnel who enter this Site. The content of the HASP may change or undergo revision based upon additional information made available to the health, safety, and training (H&S) committee, monitoring results or changes in the technical scope of work. Any changes proposed must be reviewed by the H&S committee.

1.1 Responsibilities

Project Manager……	Dan Riker Phone: (716) 847-1630
Health and Safety Manager……	Brent Testut Phone: (315) 703-4376 Cell: (707) 631-8846
Site Health and Safety Officer……..	Cody Martin Phone: (716) 955-3021
Emergency Coordinator……..	Cody Martin Phone: (716) 955-3021

SECTION 2 - HEALTH AND SAFETY PERSONNEL

The following information briefly describes the health and safety designations and general responsibilities for this Site.

2.1 Project Manager (PM)

The PM is responsible for the overall project including the implementation of the HASP. Specifically, this includes allocating adequate manpower, equipment, and time resources to conduct Site activities safely.

2.2 Health and Safety Manager

- Has the overall responsibility for coordinating and reporting health and safety activities and the health and safety of Site Workers.
- Must have completed, at a minimum, the OSHA 30-Hour Construction Safety Training, and either the 24-Hour training course for the Occasional Hazardous Waste Site Worker or the 40-Hour training course for the Hazardous Waste Operations Worker that meets OHSA 29 CFR 1910.
- Must have completed the 8-Hour Site supervisor/manager's course for supervisors and managers having responsibilities for hazardous waste Site operations and management.
- Directs and coordinates health and safety monitoring activities.
- Ensures that field teams utilize proper personal protective equipment (PPE).
- Conducts initial on-site specific training prior to Site Workers commencing work.
- Conducts and documents daily and periodic safety briefings.
- Ensures that field team members comply with this HASP.
- Immediately notifies the Project Manager of all accident/incidents.
- Determines upgrading or downgrading of PPE based on Site conditions and/or real time monitoring results.
- Ensures that monitoring instruments are calibrated daily or as the manufacturer's instructions determine.
- Provides daily summaries of field operations and progress to the Project Manager.
- Submits and maintains all documentation required in this HASP and any other pertinent health and safety documentation.

2.3 Health and Safety Officer (HSO)

- Must be designated by the Health and Safety Manager and at a minimum, have the 40-Hour training course for the Hazardous Waste Operations Worker that meets OHSA 29 CFR 1910, as well as the OSHA 10-Hour Construction Safety Training.
- Must schedule and attend a Pre-Construction Safety Meeting with the Health and Safety Manager to discuss the Subcontractor Safety Requirements and must attend the Weekly Subcontractor Coordination Meeting.
- Responsible for ensuring subcontractors and their lower tier contractors comply with project safety requirements.

- Must make frequent and regular inspections of their work areas and activities and ensure hazards that are under their control are corrected immediately and all other hazards are reported to the Project Manager and Health and Safety Manager.
- Must report all work related injuries, regardless of severity, to the Project Manager and the Health and Safety Manager within 24 hours after they occur.

2.4 Emergency Coordinator

- Will at a minimum, have the 40-Hour training course for the Hazardous Waste Operations Worker that meets OHSA 29 CFR 1910, as well as the OSHA 10-Hour Construction Safety Training.
- The Emergency Coordinator or his on-site designee will, in coordination with Town of Amherst, implement the emergency response procedures outlined in Section 12 whenever conditions at the Site warrant such action.
- The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel as necessary, and notification of emergency response units (refer to phone listing in the beginning of this HASP) and the appropriate management staff.

2.5 Site Workers

- Report any unsafe or potentially hazardous conditions to the Health and Safety Manager.
- Maintain knowledge of the information, instructions, and emergency response actions contained in the HASP.
- Comply with rules, regulations, and procedures as set forth in this HASP, including any revisions that are instituted.
- Prevent unauthorized personnel from entering work Site.

SECTION 3 - PERTINENT SITE INFORMATION

3.1 Site Location and General History

The Site is located at 772 North Forest Road, Amherst, New York (Tax Parcel ID# 68.01-1-1.2). The Site is 18 acres in size and sits on the southern portion of the former Westwood Country Club.

The previous owner completed preliminary sampling of surface soils to determine if long-term, historic use of golf-course-related pesticides impacted the property. Contamination was identified and the owner entered into the New York State Brownfield Cleanup Program (BCP) in 2015 (NYSDEC Site No. C915291). After several long negotiations between the owner and the Town of Amherst, the property was sold to the Town and the 2015 Brownfield Cleanup Agreement was terminated.

Previous investigations revealed the contamination present on the Site:

- Metals historically commonly used in pesticides with concentrations above Restricted Residential Use SCOs throughout the site

- Surface water samples with exceedances for PFOs and Benzo(k)fluoranthene

SECTION 4 – TRAINING

4.1 Site-Specific Training

Training will be provided that specifically addresses the activities, procedures, monitoring, and equipment for the Site operations prior to going on site. Training will include familiarization with Site and facility layout, known and potential hazards, and emergency services at the Site, and details all provisions contained within this HASP. This training will also allow Site Workers to clarify anything they do not understand and to reinforce their responsibilities regarding safety and operations for their particular activity.

4.2 Safety Briefings

C&S project personnel will be given briefings by the HSO on a daily or as needed basis to further assist Site workers in conducting their activities safely. Pertinent information will be provided when new operations are to be conducted. Changes in work practices must be implemented due to new information made available, or if Site or environmental conditions change. Briefings will also be given to facilitate conformance with prescribed safety practices. When conformance with these practices is not occurring or if deficiencies are identified during safety audits, the project manager will be notified.

SECTION 5 - PERSONAL PROTECTIVE EQUIPMENT

5.1 General

The level of protection to be worn by field personnel will be defined and controlled by the HSO. Depending upon the type and levels of material present or anticipated at the site, varying degrees of protective equipment will be needed. If the possible hazards are unknown, a reasonable level of protection will be taken until sampling and monitoring results can ascertain potential risks. The levels of protection listed below are based on USEPA Guidelines. A list of the appropriate clothing for each level is also provided.

Level A protection must be worn when a reasonable determination has been made that the highest available level of respiratory, skin, eye, and mucous membrane protection is needed. It should be noted that while Level A provides maximum available protection, it does not protect against all possible hazards. Consideration of the heat stress that can arise from wearing Level A protection should also enter into the decision making process. Level A protection includes:

- Open circuit, pressure-demand self-contained breathing apparatus (SCBA)
- Totally encapsulated chemical resistant suit
- Gloves, inner (surgical type)
- Gloves, outer, chemical protective
- Boots, chemical protective

Level B protection must be used when the highest level of respiratory protection is needed, but hazardous material exposure to the few unprotected areas of the body (e.g., the back of the neck) is unlikely. Level B protection includes:

- Open circuit, pressure-demand SCBA or pressure airline with escape air bottle
- Chemical protective clothing: Overalls and long sleeved jacket; disposal chemical resistant coveralls; coveralls; one or two piece chemical splash suit with hood
- Gloves, inner (surgical type)
- Gloves, outer, chemical protective
- Boots, chemical protective

Level C must be used when the required level of respiratory protection is known, or reasonably assumed to be, not greater than the level of protection afforded by air purifying respirators; and hazardous materials exposure to the few unprotected areas of the body (e.g. the back of the neck) is unlikely. Level C protection includes:

- Full or half face air-purifying respirator
- Chemical protective clothing: Overalls and long-sleeve jacket; disposable chemical resistant coveralls; coveralls; one or two piece chemical splash suit
- Gloves, inner (surgical type)
- Gloves, outer, chemical protective
- Boots, chemical protective

Level D is the basic work uniform. It cannot be worn on any site where respiratory or skin hazards exist. Level D protection includes:

- Safety boots/shoes
- Safety glasses
- Hard hat with optional face shield

Note that the use of SCBA and airline equipment is contingent upon the user receiving special training in the proper use and maintenance of such equipment.

5.2 Personal Protective Equipment – Site Specific

Level D with some modification will be required when working in the work zone on this Site. In addition to the basic work uniform specified by Level D protection, Nitrile gloves will be required when contact with soil or ground water is likely. Hearing protection will be worn when power equipment is used to perform subsurface investigation work. An upgrade to a higher level (Level C) of protection may occur if determined necessary by the HSO.

SECTION 6 - MONITORING PROCEDURES

6.1 Monitoring During Site Operations

All Site environmental monitoring should be accompanied by periodic meteorological monitoring of appropriate climatic conditions.

6.1.1 Drilling Operations (Monitoring Well Installation and Subsurface Borings)

Monitoring will be performed by the HSO or drilling observer during the conduct of work. A photoionization detector (PID) equipped with an appropriate map (e.g. 10.6 or 11.7 eV) will be utilized to monitor for the presence of volatile organic vapors within the breathing zone, the borehole, and subsurface samples upon their retrieval. Drill cuttings and excavation spoils will also be monitored by use of the PID. The PID will be field checked for calibration accuracy three times per day (morning, lunch, and end of day. If subsurface conditions warrant, a combustible gas indicator (CGI) with oxygen alarm may also be used to monitor the borehole for the presence of combustible gases. Similar monitoring of fluids produced during well development will also be conducted.

6.2 Action Levels

The action threshold for VOCs established in the CAMP is 5ppm above background. If this value is exceeded for the 15-minute average work will be halted and work may resume once instantaneous readings will also be conducted.

The action level for dust is 100 (µg/m3) over background during a 15-minute average. If this limit is exceeded, dust suppression techniques will be employed, including using water to wet the area.

The NYSDEC will be notified of any exceedances in CAMP monitoring which persist for the 15-minute average within 24-hours. CAMP monitoring and reporting will be submitted to the DEC following sampling.

6.3 Personal Monitoring Procedures

Personal monitoring shall be performed as a contingency measure in the event that VOC concentrations are consistently above the 10 ppm action level as detected by the PID. If the concentration of VOCs is above this action level, then amendments to the HASP must be made before work can continue at the Site.

SECTION 7 – COMMUNICATIONS

Cell phones will be the primary means of communicating with emergency support services/facilities.

SECTION 8 - SAFETY CONSIDERATIONS FOR SITE OPERATIONS

8.1 General

Standard safe work practices that will be followed include:

- Do not climb over/under drums, or other obstacles.
- Do not enter the work zone alone.
- Practice contamination avoidance, on and off-site.
- Plan activities ahead of time, use caution when conducting concurrently running activities.
- No eating, drinking, chewing or smoking is permitted in work zones.
- Due to the unknown nature of waste placement at the Site, extreme caution should be practiced during excavation activities.
- Apply immediate first aid to any and all cuts, scratches, abrasions, etc.
- Be alert to your own physical condition. Watch your buddy for signs of fatigue, exposure, etc.
- A work/rest regimen will be initiated when ambient temperatures and protective clothing create a potential heat or cold stress situation.
- No work will be conducted without adequate natural light or without appropriate supervision.
- Task safety briefings will be held prior to onset of task work.
- Ignition of flammable liquids within or through improvised heating devices (barrels, etc.) or space heaters is forbidden.
- Entry into areas of spaces where toxic or explosive concentrations of gases or dust may exist without proper equipment is prohibited.
- Any injury or unusual health effect must be reported to the Site health and safety officer.
- Prevent splashing or spilling of potentially contaminated materials.
- Use of contact lenses is prohibited while on site.
- Beards and other facial hair that would impair the effectiveness of respiratory protection are prohibited if respiratory protection is necessary.
- Field crew members should be familiar with the physical characteristics of investigations, including:

    - Wind direction in relation to potential sources
    - Accessibility to co-workers, equipment, and vehicles
    - Communication
    - Hot zones (areas of known or suspected contamination)
    - Site access
    - Nearest water sources

- The number of personnel and equipment in potentially contaminated areas should be minimized consistent with site operations.

8.2 Field Operations

The HSO or designee will be present on-site during all intrusive work (e.g., drilling operations, excavations, trenching) and will provide monitoring to oversee that appropriate levels of protection and safety procedures are utilized by C&S personnel. The use of salamanders or other equipment with an open flame is prohibited and the use of protective clothing, especially hard hats and boots, will be required during drilling or other heavy equipment operations.

SECTION 9 - DECONTAMINATION PROCEDURES

Decontamination involves physically removing contaminants and/or converting them chemically into innocuous substances. Only general guidance can be given on methods and techniques for decontamination. Decontamination procedures are designed to:

- Remove contaminant(s).
- Avoid spreading the contamination from the work zone.
- Avoid exposing unprotected personnel outside of the work zone to contaminants.

Contamination avoidance is the first and best method for preventing spread of contamination from a hazardous site. Each person involved in site operations must practice the basic methods of contamination avoidance listed below. Additional precautions may be required in the HASP.

- Know the limitations of all protective equipment being used.
- Do not enter a contaminated area unless it is necessary to carry out a specific objective.
- When in a contaminated area, avoid touching anything unnecessarily.
- Walk around pools of liquids, discolored areas, or any area that shows evidence of possible contamination.
- Walk upwind of contamination, if possible.
- Do not sit or lean against anything in a contaminated area. If you must kneel (e.g., to take samples), use a plastic ground sheet.
- If at all possible, do not set sampling equipment directly on contaminated areas. Place equipment on a protective cover such as a ground cloth.
- Use the proper tools necessary to safely conduct the work.

Specific methods that may reduce the chance of contamination are:

- Use of remote sampling techniques.
- Opening containers by non-manual means.
- Bagging monitoring instruments.
- Use of drum grapplers.
- Watering down dusty areas.

Equipment which will need to be decontaminated includes tools, monitoring equipment, and personal protective equipment. Items to be decontaminated will be brushed off, rinsed, and dropped into a plastic container supplied for that purpose. They will then be washed with a detergent solution and rinsed with clean water. Monitoring instruments may be wrapped in plastic bags prior to entering the field in order to reduce the potential for contamination. Instrumentation that is contaminated during field operations will be carefully wiped down. Heavy equipment, if utilized for operations where it may be contaminated, will have prescribed decontamination procedures to prevent contaminant materials from potentially leaving the Site. On-site contractors, such as drillers or backhoe operators, will be responsible for decontaminating all construction equipment prior to demobilization.

SECTION 10 – DISPOSAL PROCEDURES

All discarded materials, waste materials, or other objects shall be handled in such a way as to reduce or eliminate the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left on-site. All potentially contaminated materials, e.g., clothing, gloves, etc., will be bagged or drummed as necessary and segregated for proper disposal. All contaminated waste materials shall be disposed of as required by the provisions included in the contract and consistent with regulatory provisions. All non-contaminated materials shall be collected and bagged for appropriate disposal. Investigation Derived Waste (IDW) will be managed and characterized. Characterization of IDW may require TCLP sampling and analysis consistent with the work plan for the Site and DER-10 Technical Guidance for Site Investigation and Remediation.

SECTION 11 - EMERGENCY RESPONSE PROCEDURES

As a result of the hazards at the Site, and the conditions under which operations are conducted, there is the possibility of emergency situations. This section establishes procedures for the implementation of an emergency plan.

11.1 Emergency Coordinator

Emergency Coordinator:..... Cody Martin .....Work Phone: (716) 955-3021

The Emergency Coordinator or his on-site designee will, in concert with the Town of Amherst, implement the emergency response procedures whenever conditions at the Site warrant such action. The Emergency Coordinator or his on-site designee will be responsible for assuring the evacuation, emergency treatment, emergency transport of C&S personnel as necessary, and notification of emergency response units (**refer to phone listing** in the beginning of this HASP) and the appropriate management staff.

11.2 Evacuation

In the event of an emergency situation, such as fire, explosion, significant release of toxic gases, etc., all personnel will evacuate and assemble in a designated assembly area. The Emergency Coordinator or his on-site designee will have authority to contact outside services as required. Under no circumstances will incoming personnel or visitors be allowed to proceed into the area once the emergency signal has been given. The Emergency Coordinator or his on-site designee must see that access for emergency equipment is provided and that all ignition sources have been shut down once the emergency situation is established. Once the safety of all personnel is established, the Fire Department and other emergency response groups will be notified by telephone of the emergency.

11.3 Potential or Actual Fire or Explosion

Immediately evacuate the Site and notify local fire and police departments, and other appropriate emergency response groups, if LEL values are above 25% in the work zone or if an actual fire or explosion has taken place.

11.4 Environmental Incident (spread or release of contamination)

Control or stop the spread of contamination if possible. Notify the Emergency Coordinator and the Project Manager. Other appropriate response groups will be notified as appropriate.

11.5 Personnel Injury

Emergency first aid shall be applied on-site as necessary. Then, decontaminate (en route if necessary) and transport the individual to nearest medical facility if needed. The ambulance/rescue squad shall be contacted for transport as necessary in an emergency. A map of directions to the nearest hospital is shown in **Attachment A**.

11.6 Personnel Exposure

- *Skin Contact*: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, and then provide appropriate medical attention. Eyes should be thoroughly rinsed with water for at least 15 minutes.
- *Inhalation*: Move to fresh air and/or, if necessary, decontaminate and transport to emergency medical facility.
- *Ingestion*: Decontaminate and transport to emergency medical facility.
- *Puncture Wound/Laceration*: Decontaminate, if possible, and transport to emergency medical facility.

11.7 Adverse Weather Conditions

In the event of adverse weather conditions, the HSO will determine if work can continue without sacrificing the health and safety of field workers.

11.8 Incident Investigation and Reporting

In the event of an incident, procedures discussed in the Medical Emergency/Incident Response Protocol, presented in **Appendix A** of this HASP, shall be followed.

SECTION 12 – COMMUNITY RELATIONS

13.1 Community Health and Safety Plan

13.1.1 Community Health and Safety Monitoring

As part of the site work, three general types of efforts are scheduled, *update as necessary:* including, non-intrusive reconnaissance tasks, sampling or monitoring tasks (monitoring point sampling), and intrusive tasks (test trenching, subsurface borings, monitoring well installation). During completion of general reconnaissance and sampling or monitoring tasks, potential for health and safety risks to off-site landowners or the local community are not anticipated.

During completion of intrusive efforts at or adjacent to the Site; health and safety monitoring efforts will be concentrated on the area or areas in which intrusive efforts are being completed. Since the air pathway is the most available and likely avenue for the release of potential contaminants to the atmosphere at or near the Site, in addition to limiting public or community access to the areas in which intrusive efforts are completed, health and safety measures will primarily consist of monitoring the air pathway for worker exposure.

13.1.2 Community Air Monitoring Plan

Efforts will be taken to complete field work in a manner which will minimize the creation of airborne dust or particulates. Under dry conditions, work areas may be wetted to control dust. During periods of extreme wind, intrusive field work may be halted until such time as the potential for creating airborne dust or particulate matter as a result of investigation activities is limited. Periodic monitoring following the guidelines of the site's Community Air Monitoring Plan (CAMP) will be implemented during all non-intrusive Site investigation activities, including surface soil and sediment sampling, and collection of groundwater samples from groundwater monitoring wells.

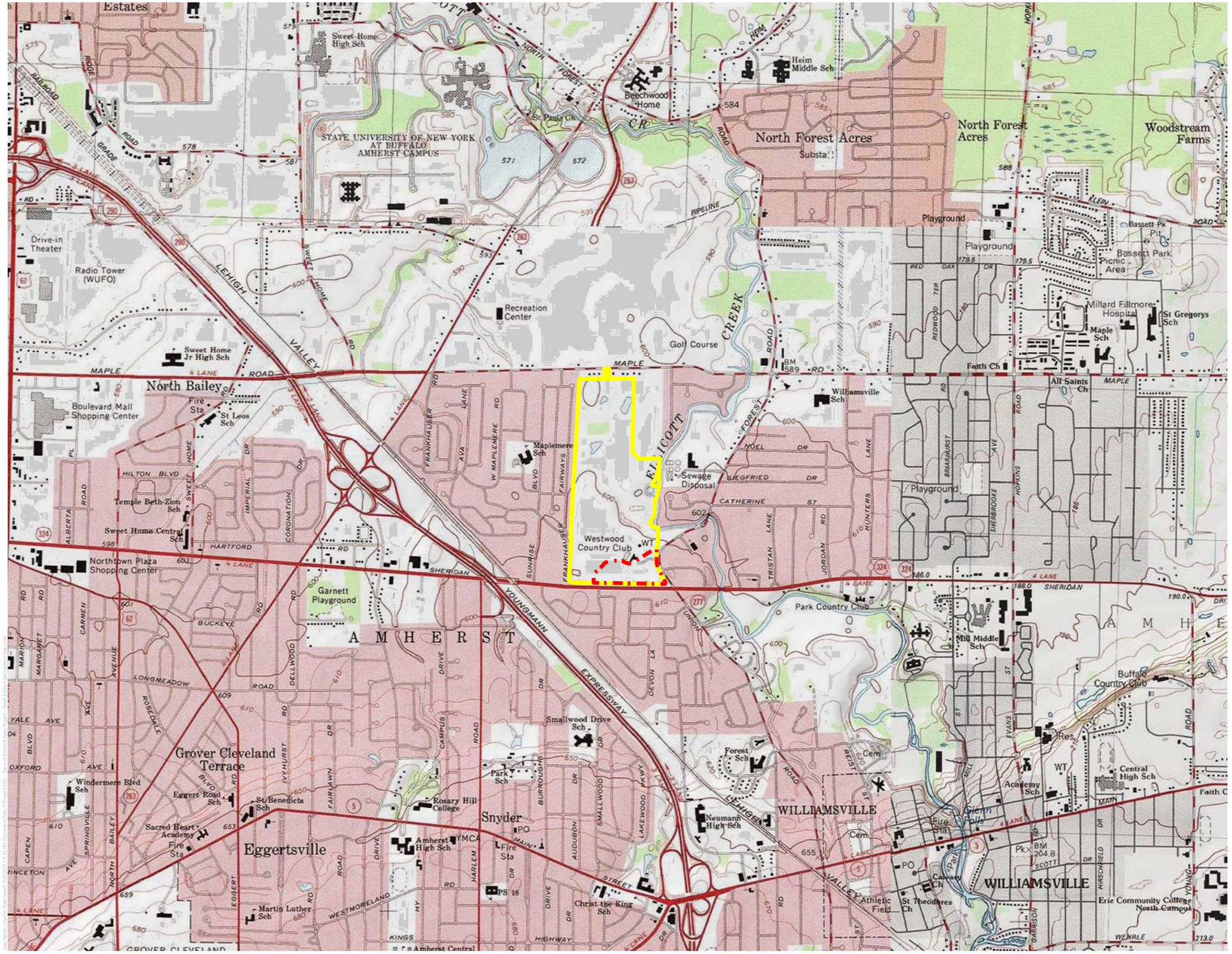
During completion of Site investigation, a CAMP will be implemented for the duration of intrusive activities. These additional air monitoring activities will include establishment of background conditions, continuous monitoring for volatile organic compounds and/or particulates at the downwind work area (exclusion zone) perimeter, recording of monitoring data, and institution and documentation of response levels and appropriate actions consistent with NYSDOH guidance.

SECTION 13 - AUTHORIZATIONS

Personnel authorized to enter the Site while operations are being conducted must be approved by the HSO. Authorization will involve completion of appropriate training courses, medical examination requirements, and review and sign-off of this HASP. No C&S personnel should enter the work zone alone. Each site visitor should check in with the HSO or Project Manager prior to entering the work zones.

FIGURE 1

SITE LOCATION MAP



C&S COMPANIES®

Figure 1

Site Location

Former Westwood Country Club Property

N

0 1,000 2,000 4,000 Feet

1 in. = 2,000 feet
When printed at 11 in. by 17 in.

Amherst Central Park South Phase 1 Construction Characterization

Sources: . Created by C&S Engineers, Inc.

FIGURE 2

SITE DETAIL PHOTO



Figure 2

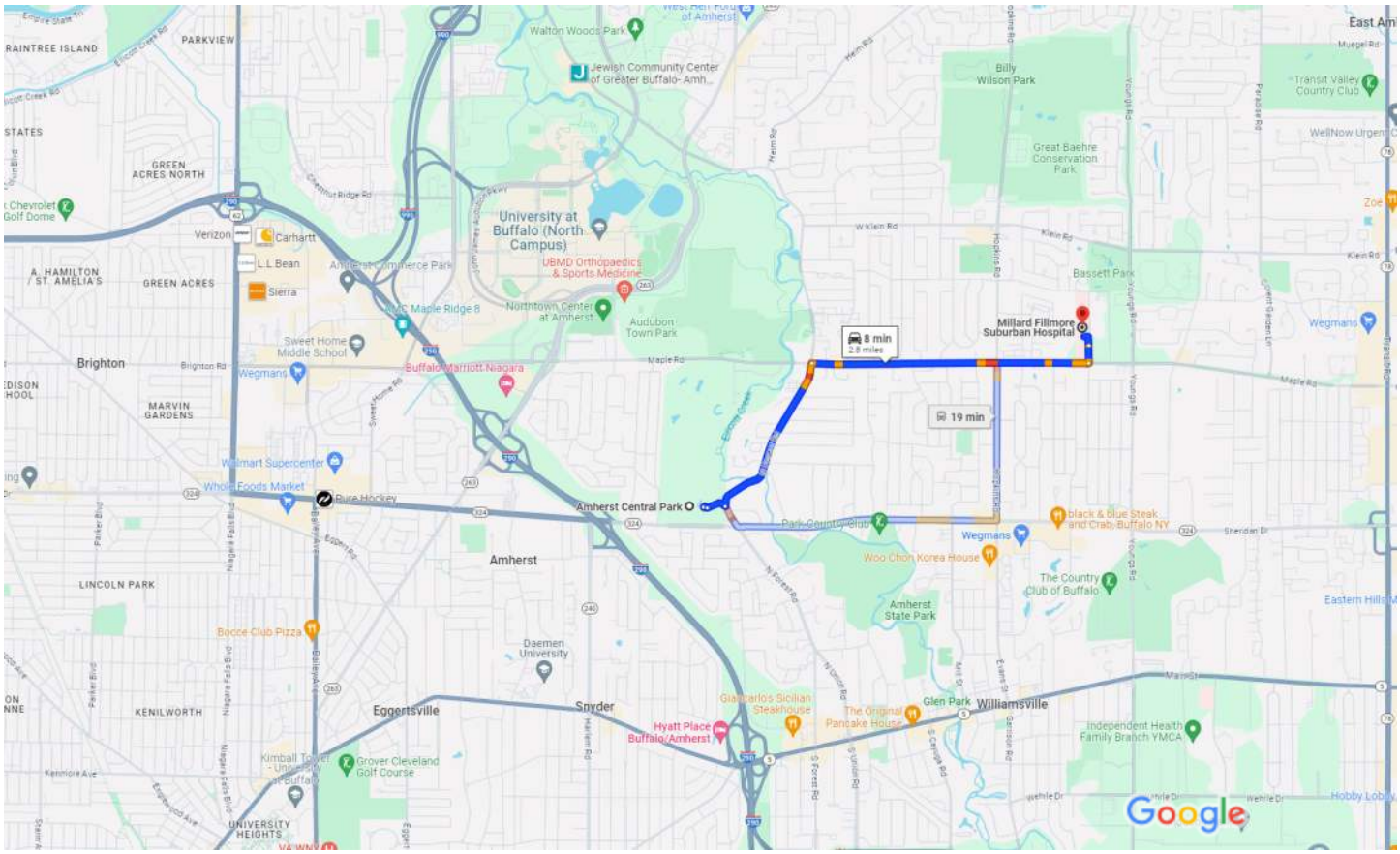
Site Map

ATTACHMENT A

MAP TO HOSPITAL

Amherst Central Park, Amherst, NY 14221 to Millard Fillmore Suburban Hospital

Drive 2.8 miles, 8 min



Map data ©2023 Google 2000 ft

Amherst Central Park
Amherst, NY 14221

1. Head northeast
   151 ft
2. Turn left toward N Forest Rd
   0.1 mi
3. Turn left onto N Forest Rd
   1.0 mi
4. Turn right onto Maple Rd
   1.5 mi
5. Turn left onto MacArthur Dr
   0.1 mi
6. Continue straight
   Destination will be on the right
   377 ft

Appendix A

GUIDANCE ON INCIDENT INVESTIGATION AND REPORTING

MEDICAL EMERGENCY / INCIDENT RESPONSE PROTOCOL

1.0 PURPOSE

From time to time employees of C&S Engineers, Inc. will sustain an injury while working on the job. While every effort is being made to prevent this, in the event of an injury or illness on the job, the following procedures will be implemented. This format may also be utilized in the event of a property damage incident.

2.0 SCOPE

This guideline applies to all C&S Engineers, Inc. job sites and employees.

3.0 GUIDELINES

Upon notification or awareness of an incident/accident with injuries or illness the Emergency Coordinator or his On-Site Designee will:

1. Ensure that the injured employee is receiving immediate first aid and medical care.
2. Notify Emergency Services (911) if injuries are severe.
3. Stabilize the work area; ensure that no one else can be injured.
4. Notify the Project Manager at the earliest possible convenience**.**
5. Notify the Owner/Client at the earliest possible convenience.

To assist the Health and Safety Manager in the root cause analysis, the Emergency Coordinator or his On-Site Designee will also make an attempt to:

1. Obtain the names and phone numbers of witnesses.
2. Preserve the accident scene if possible for analysis.

3.1 Injury Management

1. If the patient is stable with non-life threatening injuries, the foreman will ensure the employee is transported to the emergency medical facility listed in Section 1 of the HASP. Directions to the nearest emergency medical facility are located in **Attachment A** of the HASP.

At no time will an injured employee drive themselves to medical care.

2. If the patient has serious or life threatening injuries, the emergency coordinator or his on- site designee will notify the emergency services for the area for treatment and transport to a hospital or emergency room. Serious injuries can be considered but not limited to head injuries, loss of consciousness, severe laceration or amputation, fractured bones, burns and eye injuries.

3. Following the treatment and care of the injured employee, the emergency coordinator or his on-site designee and the project manager will initiate the completion of the first injury report. The Health & Safety Manager will assist.

3.2 Project Manager

1. Upon notification of a personal injury or illness on the job site, will notify C&S Engineers, Inc, President and Corporate Legal and C&S Companies Health and Safety Manager.
2. Will report to the worksite to initiate the first injury report.
3. Will report to the treatment facility to check on the well being of the injured employee.
4. The project manager will ensure that the treatment facility is aware that this is a workers compensation case.
5. Will assist the Health and Safety Manager in the analysis of the incident.

3.3 Health & Safety Manager

1. Upon notification of the personal injury will determined if it is necessary to report to the treatment facility or the accident site, depending on the nature of the injuries and the circumstances of the accident.
2. Will report to the worksite to begin a root cause analysis investigation of the accident.
3. The investigation may include interview of witnesses, field crew , and project manager, the photographing of the scene, reconstruction of the accident scene, using test instruments and taking measurements. The Health and Safety Manager may draw diagrams from the information learned.
4. The Health and Safety Manager will work with the owner/client as necessary to investigate the accident.
5. The Health & Safety manager will ensure that the site is safe to resume work.
6. The Health & Safety Manager shall initiate the New York State Compensation form requirements (C-2) and forward a copy of the C-2 to the C & S Engineers, Inc. controller for transmittal to the Compensation Carrier within 8 hrs of notification of the incident or by the end of the next business day.
7. The Health and Safety manager, upon completion of the investigation, will provide the
8. Project Manager with a written investigative report (copy to the President)
9. The accident will be reviewed at the next Project Managers meeting with the intent to prevent further or similar events on other projects.
10. The Health & Safety Manager will assess the incident to determine OSHA record ability and make record if necessary on the OSHA 300 form, within five working days.

4.0 INCIDENT RESPONSE

4.1 Purpose

To prevent the occurrence of accidents on C&S Engineers, Inc., work sites and to establish a procedure for investigation and reporting of incidents occurring in, or related to C&S work activities.

4.2 Scope

Applies to all incidents related to C&S Engineers, Inc. work activities.

4.3 Definitions

Accident - An undesired event resulting in personal injury and/or property damage, and/or equipment failure.

Fatality - An injury or illness resulting in death of the individual.

Incident - Any occurrence which results in, or could potentially result in, the need for medical care or property damage. Such incidents shall include lost time accidents or illness, medical treatment cases, unplanned exposure to toxic materials or any other significant occurrence resulting in property damage or in "near misses."

Incidence Rate - the number of injuries, illnesses, or lost workdays related to a common exposure base of 100 full-time workers. The rate is calculated as:

N/EH x 200,000

N = number of injuries and illnesses or lost workday cases; EH = total hours worked by all associates during calendar year. 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

Injury - An injury such as a cut, fracture, sprain, amputation, etc. which results from a work accident or from a single instantaneous event in the work environment.

Lost Workday Case - A lost workday case occurs when an injured or ill employee experiences days away from work beginning with the next scheduled work day. Lost workday cases do not occur unless the employee is effected beyond the day of injury or onset of illness.

Recordable Illness - An illness that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These illnesses require medical treatment and evaluation of work related injury. For example, dermatitis, bronchitis, irritation of eyes, nose, and throat can result from work and non-work related incidents.

Recordable Injury - An injury that results from the course of employment and must be entered on the OSHA 300 Log and Summary of Occupational Injuries and Illnesses. These injuries require medical treatment; may involve loss of consciousness; may result in restriction of work or motion or transfer to another job; or result in a fatality.

Near Miss - An incident which, if occurring at a different time or in a different personnel or equipment configuration, would have resulted in an incident.

4.4 Responsibilities

Employees - It shall be the responsibility of all C&S Engineers, Inc. employees to report all incidents as soon as possible to the HSC, regardless of the severity.

Human Resources - has overall responsibility for maintaining accident/ incident reporting and investigations according to current regulations and recording injuries/ illness on the OSHA 300 log, and posting the OSHA 300 log.

Emergency Coordinator - It is the responsibility of the Emergency Coordinator to investigate and prepare an appropriate report of all accidents, illnesses, and incidents occurring on or related to C&S Engineers, Inc. work. The Emergency Coordinator shall complete **Attachment A** within 24 hours of the incident occurrence.

Health and Safety Manager (HSM) - It is the responsibility of the HSM to investigate and prepare an appropriate report of all lost time injuries and illnesses and significant incidents occurring on or related to C&S Companies. The HSM shall maintain the OSHA 300 form.

Project Managers (PM) - It shall be the PM's responsibility to promptly correct any deficiencies in personnel, training, actions, or any site or equipment deficiencies that were determined to cause or contribute to the incident investigated.

5.0 GUIDELINES

5.1 Incident Investigation

The Project Manager will immediately investigate the circumstances surrounding the incident and will make recommendations to prevent recurrence. The HSM shall be immediately notified by telephone if a serious accident/ incident occurs. The incident shall be evaluated to determine whether it is OSHA recordable. If the incident is determined to be OSHA 300 recordable, it shall be entered on the OSHA 300 form.

The Project Manager with assistance from the HSM must submit to the office an incident report form pertaining to any incident resulting in injury or property damage.

5.2 Incident Report

The completed incident report must be completed by the Project Manager within 12 hours of the incident and distributed to the HSM, and Human Resources. This form shall be maintained by Human Resources for at least five years for all OSHA recordable cases. This form serves as an equivalent to the OSHA 101 form.

5.3 Incident Follow-up Report

The Incident Follow-Up Report (**Attachment B**) shall be distributed with the Incident Report within one week of the incident. Delay in filing this report shall be explained in a brief memorandum.

5.4 Reporting of Fatalities or Multiple Hospitalization Accidents

Fatalities or accidents resulting in the hospitalization of three or more employees must be reported to OSHA verbally or in writing within 8 hours. The report must contain 1) circumstances surrounding the accident(s), 2) the number of fatalities, and 3) the extent of any injuries.

5.5 OSHA 300A Summary Form

Recordable cases must be entered on the log within six workdays of receipt of the information that a recordable case has occurred. The OSHA log must be kept updated to within 45 calendar days.

OSHA 300 forms must be updated during the 5 year retention period, if there is a change in the extent or outcome of an injury or illness which affects an entry on a log. If a change is necessary, the original entry should be lined out and a corrected entry made on that log. New entries should be made for previously unrecorded cases that are discovered or for cases that initially weren't recorded but were found to be recordable after the end of the year. Log totals should also be modified to reflect these changes.

5.6 Posting

The log must be summarized at the end of the calendar year and the summary must be posted from February 1 through May 31.

5.7 OSHA 300A

Facilities selected by the Bureau of Labor Statistics (BLS) to participate in surveys of occupational injuries and illnesses will receive the OSHA 300A. The data from the annual summary on the OSHA 300 log should be transferred to the OSHA 300A, other requested information provided and the form returned as instructed by the BLS.

5.8 Access to OSHA Records

All OSHA records (accident reporting forms and OSHA 300 logs) should be available for inspection and copying by authorized Federal and State government officials.

Employees, former employees, and their representatives must be given access for inspection and copying to only the log, OSHA No. 300, for the establishment in which the employee currently works or formerly worked.

6.0 REFERENCES

29 CFR Part 1904

7.0 ATTACHMENTS

Attachment A - Incident Investigation Form
Attachment B - Incident Follow-Up Report
Attachment C - Establishing Recordability

ATTACHMENT A

INCIDENT INVESTIGATION FORM

Accident investigation should include:

Location: _____

Time of Day: _____

Accident Type: _____

Victim: _____

Nature of Injury: _____

Released Injury: _____

Hazardous Material: _____

Unsafe Acts: _____

Unsafe Conditions: _____

Policies, Decisions: _____

_____

Personal Factors: _____

_____

Environmental Factors: _____

_____

_____

ATTACHMENT B

INCIDENT FOLLOW-UP REPORT

Date _____

Foreman: _____

Date of Incident: _____

Site: _____

Brief description of incident: _____

_____

_____

_____

_____

Outcome of incident: _____

_____

_____

_____

Physician's recommendations: _____

_____

_____

_____

Date the injured returned to work: _____

Project Manager Signature: _____

Date: _____

ATTACH ANY ADDITIONAL INFORMATION TO THIS FORM

ATTACHMENT C

ESTABLISHING RECORDABILITY

1. Deciding whether to record a case and how to classify the case.

   Determine whether a fatality, injury or illness is recordable.

   A fatality is recordable if:

   - Results from employment

   An injury is recordable if:

   - Results from employment and
   - It requires medical treatment beyond first aid or
   - Results in restricted work activity or job transfer, or
   - Results in lost work day or
   - Results in loss of consciousness

   An illness is recordable if:

   - It results from employment

2. Definition of "Resulting from Employment"

   Resulting from employment is when the injury or illness results from an event or exposure in the work environment. The work environment is primarily composed of: 1) The employer's premises, and 2) other locations where associates are engaged in work-related activities or are present as a condition of their employment.

   The employer's premises include company rest rooms, hallways, cafeterias, sidewalks and parking lots. Injuries occurring in these places are generally considered work related.

   The employer's premises EXCLUDES employer controlled ball fields, tennis courts, golf courses, parks, swimming pools, gyms, and other similar recreational facilities, used by associates on a voluntary basis for their own benefit, primarily during off work hours.

   Ordinary and customary commute, is not generally considered work related.

   Employees injured or taken ill while engaged in consuming food, as part of a normal break or activity is not considered work related. Employees injured or taken ill as the result of smoking, consuming illegal drugs, alcohol or applying make up are generally not considered work related. Employee injured by un authorized horseplay is generally not considered work related, however, an employee injured as a result of a fight or other workplace violence act, may be considered work related.

Associates who travel on company business are considered to be engaged in work related activities all the time they spend in the interest of the company. This includes travel to and from customer contacts, and entertaining or being entertained for purpose of promoting or discussing business. Incidents occurring during normal living activities (eating, sleeping, recreation) or if the associate deviates from a reasonably direct route of travel are not considered OSHA recordable.

3. Distinction between Medical Treatment and First Aid.

First aid:

Any one-time treatment, and any follow up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, etc., which do not ordinarily require medical care. Such one time treatment, and follow up visit for the purpose of observation, is considered first aid even though provided by a physician or registered professional personnel.

Medical Treatment (recordable):

a) Must be treated only by a physician or licensed medical personnel.
b) Impairs bodily function (i.e. normal use of senses, limbs, etc.).
c) Results in damage to physical structure of a non-superficial nature (fractures).
d) Involves complications requiring follow up medical treatment.

Appendix B

Community Air Monitoring Plan

Community Air Monitoring Plan

for

Amherst Central Park South
772 North Forest Road
Town of Amherst, Erie County, New York
"P Order" (Index No. R9-20240227-28)

Site No. 915291

June 2024

Community Air Monitoring Plan

Overview

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.

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary.

> **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.

<u>VOC Monitoring, Response Levels and Actions</u>

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, particularly if wind direction changes. 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, such as isobutylene. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. 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.

2. 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) 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.

1. 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 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/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 mcg/m3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number;
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;

(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50$_o$ C (14 to 122$_o$ F); and
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record-keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative, this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM-10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:
(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Special Requirements:

In addition or in combination with the above, the following special requirements apply for work within 20 feet of potentially exposed individuals or structures:

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates will reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices will be considered to prevent exposures related to the work activities and to control dust and odors. Consideration will be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring will occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m^3, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m^3 or less at the monitoring point.

- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements are as stated above under "Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance "nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, shall be understood and the monitoring locations established accordingly. In these situations, exhaust fans or other engineering controls will be used to create negative air pressure within the work area during remedial activities. Additionally, the planned work will be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

APPENDIX C

PREVIOUSLY COMPLETED ENVIRONMENTAL INVESTIGATIONS

Draft

EMPIRE GEO SERVICES, INC.
A SUBSIDIARY OF SJB SERVICES, INC.

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Fax: (585) 359-9668

MEMBER
ACEC New York
American Council of Engineering Companies of New York

April 24, 2014
Project No. BE-13-192

Mr. Bradley A. Packard, Project Manager
Mensch Capital Partners, LLC
350 Essjay Road, Suite 304
Williamsville, New York 14221

Re: Geotechnical Evaluation Report for
Proposed Westwood Country Club Development Project
North Forest Road
Amherst, New York

Dear Mr. Packard:

Empire Geo-Services, Inc. is pleased to submit three (3) copies of the enclosed Geotechnical Evaluation Report to Mensch Capital Partners, LLC (Mensch) for the above referenced project. We have also forwarded to you, via e-mail, an electronic pdf file copy of this report for your use and distribution, as appropriate.

Please contact me should you have any questions or wish to discuss this report. Thank you for considering Empire for this work and we look forward to working with you through completion of this project.

Sincerely,

EMPIRE GEO-SERVICES, INC.

John J. Danzer, P.E.
Senior Geotechnical Engineer

Enc.: Geotechnical Evaluation Report (3 Copies) & Electronic pdf file copy / via e-mail

cc: Mr. Robert J. Pidanick – Nussbaumer & Clarke, Inc. w/ Electronic pdf copy via e-mail only

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ACEC New York
American Council of Engineering Companies of New York

Geotechnical Evaluation Report for Proposed Westwood Country Club Redevelopment Project North Forest Road Amherst, New York

Prepared For:

Mensch Capital Partners, LLC
350 Essjay Road, Suite 304
Williamsville, New York 14221

Prepared By:

Empire Geo-Services, Inc.
5167 South Park Avenue
Hamburg, New York 14075



Project No. BE-13-192
April 2014

Geotechnical Evaluation Report for
Proposed Westwood Country Club Redevelopment Project
North Forest Road
Amherst, New York

EXECUTIVE SUMMARY

Introduction

This report summarizes the results of a subsurface exploration program and geotechnical engineering evaluation completed by Empire Geo-Services, Inc. (Empire) for a proposed mixed use redevelopment project being considered by Mensch Capital Partners, LLC on the site of the Westwood Country Club off North Forest Road in Amherst, New York. The approximate location of the project site is shown on Figure No. 1.

The proposed redevelopment project is proposed within the existing Westwood Country Club golf course area, which is bounded by Maple Road to the north, North Forest Road, Ellicott Creek and the Audubon Par 3 Golf Course to the east, Sheridan Drive to the south and Frankhauser Road and Fairways Boulevard to the west.

The proposed redevelopment project is currently planned to include the following:

- 1 to 2 story single family residential home lots in the northern eastern portion of the site;
- Adjoining 1 to 2 story townhome style residential units in the northern western portion of the site;
- Larger 1 to 2 story single family residential home lots in the eastern center portion of the site;
- An approximate 30 acre parcel in the west center potion of the site for senior living development;
- Mixed use town center type development in the southern portion of the site including commercial/retail buildings, office buildings, multi family townhomes and multi family apartments; and
- Re-use of the existing club house building for conference and reception use, in association with construction of an adjoining hotel building.

In addition the project will also include construction of roadways, access drives and parking lot areas with access to the development from Sheridan Drive and Maple Road.

The subsurface exploration program consisted of a total of forty-nine (49) test borings, designated as B-1 through B-49, which were advanced across the site. Thirty (30) borings were advanced to apparent bedrock refusal, with the remaining nineteen (19) borings being advanced to a planned depth of 20 feet and then terminated. Apparent bedrock refusal was encountered at depths ranging between 13.5 feet and 62.5 feet and confirmed by rock coring in seven (7) of the test borings. Three (3) groundwater observation wells

were installed in borings B-6, B-24 and B-48 to help assess groundwater conditions on the site, Geotechnical laboratory testing of selected recovered soil samples was also completed.

SJB Services, Inc. (SJB), our affiliated drilling and materials testing company, completed the test borings and laboratory testing for the subsurface exploration program. The test borings and groundwater observation well installations were completed between December 3rd, 2013 and February 5, 2014. The approximate locations of the test borings with respect to an aerial photograph of the existing site are shown on Figure No. 2 and the approximate locations of the test borings with respect to the currently proposed conceptual site development plan are shown on Figure No. 3.

The elevations presented in this report were referenced to the rim of an electrical manhole (temporary benchmark established by SJB), which is located off the front of the existing golf cart storage building, located in the south center portion of the site, as shown on Figure No. 2. This benchmark has an elevation El. datum of 602.38 feet, as measured and reported by Nussbaumer & Clarke, Inc.

This report summarizes the subsurface conditions encountered by the exploration program and presents preliminary geotechnical engineering considerations and recommendations to assist in planning and preliminary design of the site redevelopment. Specifically our evaluation addresses the soil, bedrock and groundwater conditions present on the site, with regard to their impacts on foundation, slab-on-grade floor construction, underground utility construction and pavement construction.

Existing Site Information

As part of our study Empire researched existing information concerning the geologic and flood plain conditions present in the Westwood Country Club site area, including the Soil Survey for Erie County, Surficial Geology and Bedrock Geology Maps, and FEMA Flood Plain Mapping.

The USDA – Erie County Soil Survey data indicate that the surficial soils (i.e. soils typically within the upper 5 feet of the existing ground surface) within the Westwood Country Club facility site consist predominately of “clay loam”, “silt loam”, and “loamy fine sand” type soils. These surficial soil types are similarly classified as CL, ML and SM group soils using the Unified Soil Classification System (USCS), respectively.

Geologic maps prepared by the New York State Geological Survey indicate the surficial overburden soils present consist predominately of glacial till deposits of clay, silt and bouldery clay, with glacial outwash deposits of sand and gravel along Ellicott Creek. The uppermost bedrock formation in this area is the upper (late) Silurian period, Camillus Shale formation of the Salina Geologic Group. This bedrock formation is characterized as medium hard, weathered to sound Shale rock, with occasional gypsum partings and seams and has a generally fair to good rock mass quality.

The FEMA flood plain mapping indicates the 500 year and 100 year flood plains from Ellicott Creek extend into the eastern portions of the Westwood Country Club facility site. The 500 year flood elevations range from El. 595 feet to El. 594 feet where it extends onto the site from the southern end to the center portion, and to about El. 593 feet where it extends onto the northern portion of the site.

Subsurface Exploration Results

The subsurface conditions encountered in the test borings consisted generally of surface topsoil, along with man placed fill or disturbed indigenous soils typically extending to depths ranging between about 2 feet and 5 feet, which are underlain by predominately indigenous glacial till deposited silty clay, clayey silt, silt, and silty or clayey sand soils, overlying the Camillus Shale Bedrock. Table 2 summarizes the surface topsoil depths, the depths and bottom elevation of the man-placed fill, the depth and elevation of auger refusal (i.e. apparent bedrock refusal), and the groundwater observations made in the test borings and the wells installed for this investigation.

The indigenous soils are classified as CL, CH, ML, SM-SC and SM group soils using the Unified Soil Classification System (ASTM D2488). The consistency of the cohesive silty clay and clayey silt soils typically ranged between medium and hard, while the more granular silty or clayey sand soils and the non-plastic silt soils were typically of a firm to very compact relative density. Deeper soft to very soft clay soil deposits having SPT "N" values of less than 4 or "woh - weight of hammer" (i.e. the sample spoon was advanced with only the weight of the drop hammer and drill rods applied statically to the sample spoon), were encountered in only a few test borings (B-1, B-18, B-20 and B-25). Accordingly, significant deposits of highly compressible soft to very soft clays, as present in other portions of northern Amherst, are generally absent within this site.

Shale bedrock, as indicated by the auger refusal conditions, and confirmed by rock coring, was encountered at depths ranging between about 13.5 feet (boring B-10) and 62.5 feet (boring B-1), with corresponding elevations ranging between approximately El. 586.9 feet to El. 543.4 feet. The bedrock core recovered consisted generally of gray, medium hard, sound, thinly bedded to bedded Shale Rock, with occasional partings, seams and layers of gypsum. The core recoveries ranged between 100% and 50%, and the rock quality designation (RQD) values ranged between 20% and 82% indicating the recovered rock cores have a varying rock mass quality ranging between "very poor" and "good".

Based on the water levels obtained at the completion of coring in borings B-4, B-43 and B-48, as well as the readings obtained in borings B-9, B-20 and B-25 following completion soil sampling to auger refusal, and the April 1st, 2014 level in well B-24 tends to suggest that a permanent groundwater table may be present at elevations in the range of about El 580 feet to El. 589 feet, although this is not confirmed by the other groundwater observation wells at this time, as they may be partially impacted by upper perched groundwater..

It also appears that zones of perched or trapped groundwater are present in the topsoil and the fill soils at or near the ground surface, at various locations on the site, due to the relatively low permeability of the underlying soils present, and depending on site drainage conditions. Such conditions were observed during the subsurface exploration where areas of standing water and spongy surface conditions were present, hindering some of the drill rig access.

Laboratory Test Results

The laboratory test data indicates the clay soils encountered within the upper reaches of the site below the immediate surface soils, (i.e. within the anticipated depths of proposed spread foundations) appear to be partially desiccated and have a generally non-existent to low potential susceptibility to shrinkage. Also, given the relatively medium stiff to hard nature of the indigenous clay soils and their inherent low permeability it is unlikely saturation and potential swelling of these soils would occur in an undisturbed state. The upper surficial clayey silt /silty clay fill soils, however, which are in a less dense condition, may be more susceptible to potential shrinkage and swelling where they are inundated with poor draining surface water.

Based on DIPRA tests performed the site soils tested appear to have a low corrosion potential to ductile iron waterline pipes and other buried metallic pipes/elements. Accordingly, cathodic protection or a suitable protective coating of metallic pipes and conduits, to resist potential corrosion, does not appear necessary. Also based on sulfate concentrations, the soils are considered to have a negligible potential for sulfate exposure. Accordingly, a Type I-II Portland Cement appears will be acceptable for the concrete structure elements placed in these soils.

Preliminary Geotechnical Considerations and Recommendations

<u>General</u>

The indigenous soils encountered consist predominately of partially desiccated, medium stiff to hard silty clay and clayey silt and firm to very compact silty or clayey sand deposits with some intermixed gravel, and occasional cobbles/boulders and shale fragments. These soils are non-organic, and are not considered to be highly compressible, nor highly susceptible to shrinkage, swelling, or liquefaction. Significant deposits of highly moist, soft to very soft clays, as present in other areas of northern Amherst and which have been problematic to residential foundation/structure movement and distress (i.e. basement foundation subsidence / settlement and lateral movement), are generally absent within this site.

The indigenous soil conditions encountered in the test borings are generally considered suitable to support the anticipated residential and mixed use structure loads using conventional spread foundation systems. In a few cases (i.e. within borings B-9, B-11, B-19, B-21, B-22 and B-45) some limited zones of weaker soils were encountered which may impact the use of spread foundations. Accordingly, these conditions possibly may

require consideration of deep foundations (i.e. driven piles) particularly if a multiple-story more heavily loaded building structure would be proposed at or near these locations.

The existing fill and indigenous soil subgrades are also considered to be generally suitable for basement, at-grade and garage slab-on-grade floor construction, with proper site preparation. The soils encountered are also considered generally suitable for construction of the proposed infrastructure, including the roadways, parking lots, storm and sanitary sewers, waterlines and retention pond structures. The poor draining surface conditions, however, are expected to make site stripping and subgrade preparation difficult, particularly during wet periods

Given, the relatively low to medium low permeability of the soils present, both permanent and perched groundwater seepage if encountered should be relatively slow and of low quantities. Accordingly, these conditions should not significantly impact basement and utility construction. It is anticipated that conventional sump and pump methods of dewatering should generally be sufficient to control surface water, as well as permanent and perched groundwater seepage conditions, should they be encountered.

Based on the subsurface conditions encountered, the overall site should be classified as Seismic Site Class "D" in accordance with the Building Code of New York State. Therefore, seismic design may be based on this site classification.

Foundation Support

Preliminarily, it is expected that spread foundations can be sized, based on net allowable bearing capacities in the range of about 2,000 to 4,000 pounds per square foot (psf) ±, depending on location, foundation bearing depths and actual structure loads.

Spread foundations should bear on suitable, undisturbed, indigenous soil bearing grades, after the removal of all fill soils and any unsuitable indigenous soft or wet soils. Alternatively, the foundations may also bear on Engineered Fill (i.e. compacted Structural Fill or flowable backfill), which is placed over the suitable indigenous soil bearing grades, following excavation and removal of fill soils and any unsuitable indigenous soils which are present below the design bearing grade elevation of the footings.

Where zones of softer soils were encountered, which may impact the use of spread foundations for heavier building structures, the use of driven H-piles or pipe piles driven to refusal on the Shale bedrock appear would be the best suited deep foundation system option for the site conditions present. For preliminary information, a driven HP12x53 H-pile, driven to refusal on the bedrock, would be expected to develop an axial compressive capacity in the range of about 100 to 120 tons ± per pile. Other pile sections can also be used, based on product availability and costs, which would provide higher or lower allowable axial capacities, based on the actual pile section.

Basement Structure Design

Where suitable foundation drainage is provided, the basement walls can be designed for "at rest" lateral earth pressure computed on the basis of an "equivalent fluid unit weight" of 70 pounds per cubic foot (pcf). This is based on the assumption that the wall backfill beyond the drainage system is a suitable well draining granular backfill material, such as a crusher run stone Structural Fill. In this case suitable damp proofing of the walls and floors should also be provided. Alternatively, the basement structures could also be designed to resist potential full hydrostatic pressure. In such case the basement structure should also be fully water proofed.

The use of the on-site clayey silt, silty clay and silty or clayey sand soils to backfill the basement walls is not recommended as they will be susceptible to potential swelling in a looser disturbed state, which could cause additional lateral pressures on the basement walls. The on-site soils could be used, however, to backfill non-earth retaining foundation walls provided they can be properly placed and compacted to a stable and well engineered condition.

Slab-on Grade Floor Construction

The building floors can be constructed as slab-on-grade following proper subgrade preparation. For preliminary design purposes, a minimum of 6-inches of Subbase Stone is recommended beneath the lightly loaded floor slabs (residential floors, lightly loaded office floors, etc.). A minimum 12-inch thick layer of Subbase Stone is recommended beneath more heavily loaded floor slabs (i.e. garage areas, storage areas, mechanical rooms, etc.). A suitable stabilization/separation geotextile, such as Mirafi 500X, should be placed over the existing soil or fill soil subgrades prior to placement of the Subbase Stone layer.

Seismic Design Considerations

Based on the subsurface conditions encountered, the overall site should be classified as Seismic Site Class "D" in accordance with the Building Code of New York State. The soil conditions encountered are generally not considered to be susceptible to potential liquefaction in the case of a seismic event. Therefore, seismic design may proceed based on these considerations.

It is possible that a seismic shear wave velocity study of the site may refine and possibly upgrade the seismic design site class. This may be particularly beneficial in the areas of the mixed use commercial and apartment buildings depending on the costs associated with seismic reinforcement of these structures. It should be understood, however, that there is no guarantee that an upgrade can be made if a seismic shear wave study is performed,

Pavement Design Considerations

The Town of Amherst requires a typical pavement section consisting of the following components for residential and commercial development roadways:

Town of Amherst Asphalt Concrete Pavement Section:

- 1.5 inches – Top Course
- 2.5 inches – Binder Course
- 4.0 inches – Base Course
- 11 inches – Subbase Stone Course

We would recommend, however, the Town of Amherst pavement section also include a suitable stabilization/separation geotextile (i.e. Mirafi 600X or suitable equivalent).

Pavement design recommendations are also provided for two (2) flexible pavement structure types within the proposed mixed use development areas. These include the following:

Heavy Duty Asphalt Concrete Pavement (for the entrance, access drives and pavement areas, which will be subject to delivery truck traffic):

- 1.5 inches – Top Course
- 3.0 inches – Binder Course
- 15 inches – Subbase Stone Course
- Stabilization/Separation Geotextile
- Prepared Subgrade

Light Duty Asphalt Concrete Pavement (for automobile / light SUV only parking areas):

- 1.5 inches – Top Course
- 2.0 inches – Binder Course
- 10 inches – Subbase Stone Course
- Stabilization/Separation Geotextile
- Prepared Subgrade

The installation of suitable drainage is also recommended to drain the pavement subbase course and subgrades in order to limit the potential for frost action and improve pavement structure performance and design life.

Underground Utility Construction

The in-situ soils should provide generally suitable subgrade conditions for underground utility construction, including storm and sanitary sewers, water lines, gas lines and buried

electrical / communication conduits. Accordingly, standard bedding materials and thicknesses can generally be used to support this infrastructure.

Site Preparation

Measures to improve site drainage should be implemented as necessary prior to commencing the site stripping and subgrade preparation work.

All existing structures, trees, stumps, vegetation, topsoil, organic soils, etc., and any other deleterious materials within the proposed building pad areas and pavement areas should be removed. Following stripping and removal of the surface materials (i.e. topsoil, asphalt pavement, concrete pads and structures, etc.), the exposed subgrades should be proof-rolled. The subgrade proof-rolling should be done under the guidance of, and observed by qualified geotechnical engineering personnel. The subgrade fill placement necessary to raise the site grades and/or the placement of subbase courses may proceed following proper site preparation and acceptance of the existing soil subgrades.

The on-site soils could be used for constructing the fills for establishing the building pad and pavement areas, provided they can be properly placed and compacted in a controlled manner and to a stable well engineered condition, in accordance with our recommendations. It should be understood, however, that these soils will be very difficult to dry and work with. Therefore the use of imported granular fill materials will be better suited for building pad, roadway and parking lot fill areas. Efforts should be made to maintain the subgrades in a dry and stable condition at all times, and limit construction traffic directly over these soils, particularly if they become wet.

Additional Geotechnical Investigations

Additional investigations and further evaluations are recommended for final design when final building development plans and loading conditions, along with final site development plans, are established, as discussed further in the report. Empire can assist in planning the locations and scope of the additional explorations and evaluations that may be necessary for final design.

Closing

Additional more detailed site condition findings, along with considerations and recommendations for permitting, planning and preliminary design of the proposed site redevelopment project are presented in the Geotechnical Evaluation Report, which follows.

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1.00 INTRODUCTION

1.10 GENERAL

This report summarizes the results of a subsurface exploration program and geotechnical engineering evaluation completed by Empire Geo-Services, Inc. (Empire) for a proposed mixed use redevelopment project being considered on the site of the Westwood Country Club off North Forest Road in Amherst, New York. The approximate location of the project site is shown on Figure No. 1.

Mensch Capital Partners, LLC (Mensch) retained Empire to complete this work, which was done in accordance with our proposal dated October 11, 2013. This work was completed to evaluate the geotechnical characteristics of the site, with regard to foundation support of the proposed mixed use buildings being considered for redevelopment of the site, and to provide preliminary geotechnical design and construction considerations / recommendations to assist the design team with planning and preliminary design.

The subsurface exploration program completed by Empire consisted of a total of forty-nine (49) test borings advanced across the site, of which thirty (30) borings were advanced to apparent bedrock refusal at depths ranging between 13.5 feet and 62.5 feet, with the remaining nineteen (19) borings being advanced to a planned depth of 20 feet and then terminated. Bedrock was cored in seven (7) of the test borings advanced to refusal. In addition, three (3) groundwater observation wells were installed and geotechnical laboratory testing of selected recovered soil samples was also completed. SJB Services, Inc. (SJB), our affiliated drilling and materials testing company, completed the test borings and laboratory testing for the subsurface exploration program.

On this basis, Empire prepared this report, which summarizes the subsurface conditions encountered by the test borings, groundwater observation wells and laboratory testing, and presents preliminary geotechnical engineering considerations and recommendations to assist in planning and preliminary design of the site redevelopment. Specifically our evaluation addresses the soil, bedrock and groundwater conditions present on the site, with regard to their impacts on foundation, slab-on-grade floor construction, underground utility construction and pavement construction.

1.20 SITE DESCRIPTION AND PROPOSED DEVELOPMENT PROJECT

The proposed site redevelopment project comprises approximately 170 acres and is bounded within the area of Maple Road to the north, North Forest Road, Ellicott Creek and the Audubon Par 3 Golf Course to the east, Sheridan Drive to the south and Frankhauser Road and Fairways Boulevard to the west. The redevelopment project is generally proposed within the existing Westwood Country Club golf course area, which currently consists of the golf tees, fairways, hazards, greens along with bordering cart paths, tall grass, trees, brush and ponds. The main club house building, pool and tennis amenities, maintenance buildings, access drive and parking lot areas are located in the southeast portion of the site, with access from North Forest Road. Grades across the site gradually drop in elevation about 10 to 13 feet from south (i.e. Sheridan Drive) to north (Maple Road). Figure No. 2 presents an aerial photograph of the existing site, along with the approximate locations of the test borings plotted on the plan.

The proposed redevelopment project is currently planned to include the following:

- 1 to 2 story single family residential home lots in the northern eastern portion of the site;
- Adjoining 1 to 2 story townhome style residential units in the northern western portion of the site;
- Larger 1 to 2 story single family residential home lots in the eastern center portion of the site;
- An approximate 30 acre parcel in the west center potion of the site for senior living development;
- Mixed use town center type development in the southern portion of the site including commercial/retail buildings, office buildings, multi family townhomes and multi family apartments; and
- Re-use of the existing club house building for conference and reception use, in association with construction of an adjoining hotel building.

In addition the project will also include construction of roadways, access drives and parking lot areas with access to the development from Sheridan Drive and Maple Road. Figure No. 3 presents a conceptual plan of the proposed site development along with the approximate locations of the test borings plotted on the plan.

The1 to 2 story single family residential homes and townhome residential units are expected to consist of wood framed construction, with possible basement structures. The commercial/retail buildings, office buildings, multi family townhomes and multi family apartments are also expected to be 1 to 2 stories with

either wood or steel frame type construction, and with at grade ground floors constructed as slab-on-grade. Accordingly, basements are not anticipated for these structures. The new hotel building is expected to be multiple-story with steel frame or masonry with pre-cast plank type construction. The hotel building is also not expected to include a basement structure.

At this time the final building configurations and structure loads have not been established. The development plan currently anticipates that the building structures can generally be supported using conventional spread foundation systems, although it is understood that deep foundation systems could be necessary in some cases, depending on the actual structure loads and soil conditions present.

2.00 SUBSURFACE EXPLORATION

The subsurface exploration program completed to characterize the subsurface conditions consisted of a total of forty-nine (49) test borings, designated as B-1 through B-49. In addition, groundwater observation wells were installed in three (3) of the test borings (B-6, B-24 and B-48). The test borings and groundwater observation well installations were completed by SJB between December 3rd, 2013 and February 5, 2014. The approximate locations of the test borings with respect to an aerial photograph of the existing site are shown on Figure No. 2 and the approximate locations of the test borings with respect to the currently proposed conceptual site development plan are shown on Figure No. 3.

The proposed test boring locations were initially established on a site plan, along with location coordinates, prepared by Nussbaumer & Clarke, Inc. (N&C), which were provided to Empire through Mensch. The boring locations were established to provide general coverage over the project site. Using this plan and the location coordinates, SJB then staked the boring locations in the field using hand held global positioning satellite (gps) instrumentation and visual observations referenced to existing site features. The locations should be considered accurate only to the degree implied by the methodologies used.

The ground surface elevation at each test boring location was measured and recorded by SJB using laser survey level techniques. The elevations were referenced to the rim of an electrical manhole (benchmark established by SJB) located off the front of the existing golf cart storage building, located in the south center portion of the site. The approximate location of the benchmark is shown on Figure No. 2 and has an elevation El. datum of 602.38 feet, as measured and reported by N&C.

Thirty (30) borings were advanced to apparent bedrock refusal at depths ranging between 13.5 feet and 62.5 feet, with the remaining nineteen (19) boring advanced to a depths ranging between about 18 feet and 22 feet. Bedrock was cored in seven (7) of the test borings advanced to refusal (borings B-1, B-4, B-29, B-31, B-43, B-45 and B-47). The borings advanced to apparent bedrock refusal and the borings advanced to a depth of 18 to 22 feet (scheduled to be 20 feet) are designated on Figures No. 2 and No. 3.

The test borings were made using a Central Mine Equipment (CME) model 550X and a CME model 550SE rubber tire, all terrain drill rigs, using hollow stem auger and split spoon sampling techniques. Split spoon samples and Standard Penetration Tests (SPTs) were taken continuously from the ground surface to a depth of 12 feet or 16 feet and in intervals of five feet or less below the zone of continuous sampling until boring completion. The split spoon sampling and SPTs were completed in general accordance with *ASTM D 1586 - "Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils"*.

After reaching auger refusal at test boring locations B-1, B-4, B-29, B-31, B-43, B-45 and B-47 the refusal material encountered was cored using a NQ size double tube core barrel in accordance with *ASTM D 2113 – "Standard Practice for Rock core Drilling and Sampling of Rock for Site Investigation"*. Five (5) feet of bedrock was cored at each of these locations.

Groundwater observation wells were installed in test borings B-6, B-24 and B-48 to help assess groundwater levels on the site. The wells were installed with hollow stem auger drilling techniques in general accordance with *ASTM D5092 Standard Practice for Design and Installation of Ground Water Monitoring Wells in Aquifers.* The well installation consisted of a 2-inch diameter PVC well screen and riser pipe with sand filter, bentonite seal and soil backfill. A protective flush mount surface casing and surrounding concrete seal were installed at the surface of boring B-6 to finish the well installation. The wells installed at borings B-24 and B-48 were completed with a PVC stickup riser and cap, and without a protective surface casing. Additional details regarding the construction of the observation wells are shown on the Monitoring Well Completion Records presented following their respective test boring logs in Appendix A.

A geologist from SJB prepared the test boring logs based on visual observation of the recovered soil samples and bedrock core, along with review of the driller's field notes. The soil samples were described based on visual/manual estimation of the grain size distribution, along with characteristics such as color, relative density, consistency, moisture, etc. In addition the Unified Soil Classification System

(USCS) group symbols were also established and are presented on the logs for the soil types encountered. The recovered rock core samples were also described, including characteristics such as color, rock type, hardness, weathering, bedding thickness, core recovery and rock quality designation (RQD). The test boring logs are presented in Appendix A, along with general information and a key of terms and symbols used to prepare the logs.

3.00 LABORATORY TESTING PROGRAM

Selected recovered soil samples were tested in SJB's geotechnical testing laboratory to confirm the visual soil classifications and provide index properties to aid in our evaluations. The laboratory testing program included the following index tests:

1. Moisture content in accordance with *ASTM D 2216 – "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass"*.

2. Grain size distribution in general accordance with *ASTM C136 – "Standard Test Method for Particle-Size Analysis of Soils"*;

3. Liquid limit, plastic limit and plasticity index in accordance with *ASTM D 4318 – "Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils"*.

4. In addition, the samples tested for liquid limit, plastic limit and plasticity index were also tested for shrinkage limit in accordance with *ASTM D 427 – "Test Method for Shrinkage Factors of Soils by Mercury Method"*. Using the shrinkage test data and the moisture content data, Empire calculated the coefficient of linear extensibility (COLE factor) of the clay soils at the various measured moisture contents, to qualitatively evaluate their shrinkage potential. The COLE factors were determined following a procedure similar to those described in the *Soil Survey Investigation Report No. 42, Soil Survey Laboratory Methods Manual 1996, USDA, NRCS, NSSC.*

The soil samples tested for the above index properties, as well as a summary of the results, are presented on Table 1.

Composite soil samples were also prepared from test borings B-6 (samples S-2 through S-4, 2.0'-8.0'); B-34 (samples S-2 through S-5, 2.0'-10.0'); and B-45 (samples S-2 through S-5, 2.0'-10.0') and were tested for the following:

- Resistivity, redox, pH, moisture, and sulfides according to procedures established by the Ductile Iron Pipe Research Association (DIPRA test) to provide an indication of the corrosion potential of the on-site soils with regard to buried metallic conduits; and

- Sulfate and chloride concentration in the soils, with regard to potential impacts on buried concrete structures.

This laboratory test data is also presented in Appendix B, as well as summarized on Table 1.

4.00 EXISTING SITE INFORMATION

As part of our study Empire researched existing information concerning the geologic and flood plain conditions present in the Westwood Country Club site area. This included:

- USDA - Natural Resource Conservation Service - Soil Survey for Erie County (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx);

- NYSED – New York State Museum and Science Service - Surficial Geology and Bedrock Geology Maps (http://www.nysm.nysed.gov/gis/); and

- Erie County On-Line GIS Mapping System – FEMA Flood Plain Mapping (http://gis1.erie.gov/Geocortex/Essentials/Web/viewer.aspx?Site=FEMA&reloadkey=true).

4.10 SOIL SURVEY INFORMATION

The USDA – Erie County Soil Survey data indicate that the surficial soils (i.e. soils typically within the upper 5 feet of the existing ground surface) within the Westwood Country Club facility site consist predominately of "clay loam", "silt loam", and "loamy fine sand" type soils. These surficial soil types are similarly classified as CL, ML and SM group soils using the Unified Soil Classification System (USCS), respectively.

These soils typically consist of silty clay, clayey silt, non-plastic silt and silty fine sand and are of a medium-low to low permeability (i.e. poor draining). These soils are also considered to be highly moisture sensitive and have a relatively poor value (i.e. difficult to place and compact) as subgrade fill material to raise site grades beneath slab-on-grade and pavement construction. The locations of the various surficial soil types, as mapped by the Erie County Soil Survey, are presented in Appendix C1.

4.20 SURFICIAL AND BEDROCK GEOLOGY

Geologic maps prepared by the New York State Geological Survey indicate the surficial overburden soils present within the Westwood Country Club facility site consist predominately of glacial till deposits of clay, silt and bouldery clay, with glacial outwash deposits of sand and gravel along Ellicott Creek.

The geologic maps indicate the uppermost bedrock formation in this area is the upper (late) Silurian period, Camillus Shale formation of the Salina Geologic Group. This bedrock formation is characterized as medium hard, weathered to sound Shale rock, with occasional gypsum partings and seams and has a generally fair to good rock mass quality.

Excerpted portions of the surficial soil and bedrock geologic maps, along with applicable associated legends, are presented in Appendix C2.

4.30 FLOOD PLAIN MAPPING

Review of the FEMA flood plain mapping indicates the 500 year and 100 year flood plains from Ellicott Creek extend into the eastern portions of the Westwood Country Club facility site. The 500 year flood elevations range from El. 595 feet to El. 594 feet where it extends onto the site from the southern end to the center portion, and at about El. 593 feet where it extends onto the northern portion of the site.

The flood plain mapping obtained from the Erie County On-Line GIS Mapping System is presented in Appendix C3.

5.00 SUBSURFACE CONDITIONS

5.10 GENERAL SUBSURFACE CONDITIONS ENCOUNTERED

The test borings completed at the site encountered soil and bedrock conditions generally similar to those indicated by existing site information which was researched, as described above in Section 4.00. The stratigraphy encountered in the test borings consisted generally of surface topsoil, along with man placed fill or disturbed indigenous soils typically extending to depths ranging between about 2 feet and 5 feet, which are underlain by indigenous glacial till deposited silty clay, clayey silt, silt, and silty or clayey sand soils, overlying Shale Bedrock.

The consistency of the cohesive silty clay and clayey silt soils typically ranged between medium and hard, while the more granular silty or clayey sand soils and the non-plastic silt soils were typically of a firm to very compact relative density. Deeper soft to very soft clay soil deposits having SPT "N" values of less than 4 or "woh - weight of hammer" (i.e. the sample spoon was advanced with only the weight of the drop hammer and drill rods applied statically to the sample spoon), were encountered in only a few test borings (B-1, B-18, B-20 and B-25). Accordingly, significant deposits of wet, highly compressible, soft to very soft clays, as present in other portions of northern Amherst, are generally absent within this site.

Shale bedrock, as indicated by the auger refusal conditions, and confirmed by rock coring, was encountered at depths ranging between about 13.5 feet (boring B-10) and 62.5 feet (boring B-1), with corresponding elevations ranging between approximately El. 586.9 feet to El. 543.4 feet, with an average elevation of about El. 560.1 feet.

Groundwater levels measured in the groundwater observation wells (B-6, B-24 and B-48) ranged between depths of 0.6 feet, 8.2 feet and 2.4 feet bgs, respectively, during the site visit on April 1st, 2014.

The soil and bedrock stratigraphy encountered and the groundwater conditions observed are described in more detail in the following sections and on the test boring logs presented in Appendix A. Also included, is a table (Table 2) summarizing the surface topsoil depths, the depths and bottom elevation of the man-placed fill, the depth and elevation of auger refusal (i.e. apparent bedrock refusal), and the groundwater observations made in the test borings and the wells installed for this investigation.

5.20 SURFACE MATERIALS AND FILL SOILS

The driller noted a distinct topsoil layer at the ground surface of most of the test borings, with the exception of test borings B-21, B-27 and B-38. The topsoil thickness typically ranged between about 2-inches and 14-inches, based on the driller's measurements and interpretation of topsoil. These measurements are widely spaced and are subject to interpretation. Therefore, these measurements should not be solely relied on for construction quantity estimates.

Beneath the topsoil and at the ground surface of the remaining test borings, man placed fill and/or disturbed or reworked indigenous soils were encountered at most of the test boring locations. The fill soils consisted of red-brown, brown-black and black clayey silt and silty clay soils with occasional zones or inclusions of organics, cinders and wood. The fill, where present, was typically found to extend to depths ranging between about 2 feet and 5 feet bgs.

Most of the fill soils are similar in character to the indigenous soils and appear were most likely placed during past site grading associated with the country club development. It can be expected that fill soils will also be present, and will extend to the bottom of the existing foundations near and adjacent to the existing building structures and amenities as well as to the bottom of previous excavations for existing utility lines within the site.

5.30 INDIGENOUS SOILS

The indigenous soil deposits encountered beneath the surface materials and fill consisted predominately of glacial till deposited silty clay, clayey silt, silt and silty or clayey sand soils, which also contain some intermixed gravel, apparent occasional cobbles/boulders and shale fragments. These indigenous soil deposits were found to extend to the top of bedrock. The indigenous soils are classified as CL, CH, ML, SM-SC and SM group soils using the Unified Soil Classification System (ASTM D2488).

Standard Penetration Test (SPT) "N" values obtained in the indigenous silty clay and clayey silt soils ranged from "woh - weight of hammer" (i.e. the sample spoon was advanced with only the weight of the drop hammer and drill rods applied statically to the sample spoon), to "REF – sample spoon refusal" (i.e. 50 blows to advance the split spoon with 6-inches or less of penetration). The SPT "N" values indicate the consistency of the fine grained cohesive clayey silt and silty clay soils vary from very soft to hard, while the relative density of the more granular silty sand soils and non-plastic silt soils vary from loose to very compact.

Some limited zones of deeper soft to very soft clay soil deposits having SPT "N" values of less than 4 or "woh - weight of hammer" (i.e. the sample spoon was advanced with only the weight of the drop hammer and drill rods applied statically to the sample spoon), were encountered in only a few test borings (B-1, B-18, B-20 and B-25). Accordingly, significant deposits of soft to very soft clays, as present in other areas of northern of Amherst, are generally absent within this site. Some soft clay soils were also present in the upper reaches of a few of the test borings (B-8, B-9, B-11, B-19, and B-22).

5.40 BEDROCK

As discussed above, thirty (30) of the test borings were advanced through the overburden until auger refusal (presumed bedrock refusal) was encountered at depths ranging between about 13.5 feet (boring B-10) and 62.5 feet (boring B-1), with corresponding elevations ranging between approximately El. 586.9 feet to El. 543.4 feet. The borings, as well as the depth and elevation where auger refusal (presumed bedrock refusal) was encountered are summarized on Table 2. Within test borings B-7 and B-22 a zone of weathered Shale was encountered before reaching auger refusal.

Bedrock core samples were obtained from test borings B-1, B-4, B-29, B-31, B-43, B-45 and B-47 after reaching auger refusal. Five (5) feet of bedrock was cored at each of these locations. The bedrock core recovered consisted generally of gray, medium hard, sound, thinly bedded to bedded Shale Rock, with occasional partings, seams and layers of gypsum. Within test boring B-31, the recovered shale rock core was described as being partially slightly weathered and laminated.

The shale bedrock recovered is part of the Camillus Shale geologic formation. The core recoveries ranged between 100% and 50%. The rock quality designation (RQD) values ranged between 20% and 82% indicating the recovered rock cores have a varying rock mass quality ranging between "very poor" and "good".

5.50 GROUNDWATER CONDITIONS

Water level measurements were made in most of the test borings at the completion of overburden drilling and soil sampling. Freestanding water was encountered in borings B-1, B-4, B-5, B-9, B-14, B-20, B-21, B-25, B-26, B-29, B-36, B-37, B-40, B-43, B-45 and B-47 at depths ranging from 13.6 feet to 53.4 feet bgs. These water levels correspond to elevations ranging between El. 586.7 feet and El. 552.5 feet. Each of these borings were advanced to auger refusal (presumed bedrock refusal).

No freestanding water was recorded following the completion of overburden drilling and sampling, at the remaining test borings advanced to auger refusal or at the shallower test borings (i.e. test borings advanced to a depth of 18 to 22 feet and terminated). It is possible that in many cases within the deeper test borings, that groundwater may not have had sufficient time to accumulate and/or stabilize in the boring holes within the time that had elapsed from the completion of soil drilling operations and the time of the observations / measurements.

Following coring at boring locations B-4, B-43 and B-48, freestanding water was recorded at depths of 20.0 feet, 10.0 feet and 10.0 feet respectively below the existing ground surface. These depths correspond to elevations ranging between El. 581.5 feet and El. 583.2 feet. We note that water was added to these test borings to facilitate the rock coring. Water level measurements were not obtained at the completion of coring at the remaining rock core borings (B-1, B-29, B-31 and B-47).

A 2-inch diameter, PVC, groundwater observation well was installed in borings B-6 B-24 and B-48 following the completion of drilling. The wells installed at borings B-24 and B-48 extend to presumed top of bedrock (auger refusal) at depths of 41.3 feet and 31.0 feet, respectively. The well installed at boring B-6 is seated within the silty clay and clayey silt soils at a depth of 22.0 feet.

A geotechnical engineer visited the site on February 7th, February 17th, March 4th, and April 1st, 2014 to record the water level in the wells. The water level depths and corresponding elevations are as follows:

Groundwater Observation Well Water Level Depths and Elevations			
Boring / Well No.	Ground Surface El. (feet)	Water Level Depth (feet)	Water Level El. (feet)
February 7th, 2014			
B-6	603.1	1.1	602.0
B-24	598.6	30.1	568.5
B-48	595.8	3.6	592.2
February 17th, 2014			
B-6	603.1	2.1	601.0
B-24	598.6	13.1	585.5
B-48	595.8	4.5	591.3
March 4th, 2014			
B-6	603.1	4.4	598.7
B-24	598.6	8.1	590.5
B-48	595.8	3.5	592.3
April 1st, 2014			
B-6	603.1	0.6	602.5
B-24	598.6	8.2	590.4
B-48	595.8	2.4	593.4

The water levels observed and measured in the wells, particularly at boring locations B-6 and B-48, may in part be the result of wet surface conditions or perched water present in the upper soils. Based on the water levels obtained at the completion of coring in borings B-4, B-43 and B-48, as well as the readings obtained in borings B-9, B-20 and B-25 following completion soil sampling to auger refusal, and the level in well B-24 tends to suggest that a permanent groundwater table may be present at elevations in the range of about El 580 feet to El. 589 feet, although this is not confirmed by the other groundwater observation wells at this time. Continued monitoring of the water levels in the existing wells, particularly into the summer months, as well as the installation of additional wells is recommended to better confirm the depths / elevations of permanent groundwater conditions present on the site.

It also appears that zones of perched or trapped groundwater are present in the topsoil and fill soils at or near the ground surface, at various locations on the site, due to the relatively low permeability of the underlying soils present, and depending on site drainage conditions. Such conditions were observed during the subsurface exploration where areas of standing water and spongy surface conditions were present, hindering some of the drill rig access. These conditions can be particularly

more prevalent following heavy or extended periods of precipitation and during seasonally wet periods, and therefore should be anticipated with the new development site preparation. The clayey and silty fill and indigenous soils encountered are considered to be poor draining soils.

6.00 LABORATORY TEST RESULTS

6.10 SHRINKAGE / SWELL POTENTIAL OF CLAY SOILS

A total of thirteen (13) silty clay / clayey silt soil samples, obtained at various locations and depths as summarized on Table 1, were evaluated qualitatively for shrinkage potential using soil shrinkage and moisture content index test data from the laboratory testing program.

The range of moisture content, liquid limit, plastic limit, plasticity index and shrinkage limit of the clay type soil samples tested, were as follows:

Index Property	Range
Moisture Content	10.7 % to 28.1 %
Liquid Limit	20 % to 61 %
Plastic Limit	12 % to 25 %
Plasticity Index	8 to 37
Shrinkage Limit	12 % to 23 %

The plasticity indices indicate the clay soils vary between a low and high plasticity. Based on the moisture contents and the shrinkage test data, the COLE factors determined ranged from 0 to 0.034.

The laboratory test data and COLE factors calculated suggest that the silty clay soils encountered within the upper reaches of the site below the immediate surface soils, (i.e. within the anticipated depths of proposed spread foundations) are partially desiccated and have a generally non-existent to low potential susceptibility to shrinkage. Therefore, spread foundation settlement should generally be limited to normal consolidation settlement as a result of the compressive structural loads.

The following conditions were noted to support these conclusions.

1. The moisture content of the clay soil samples tested were either lower or just slightly above their shrinkage limit.

2. The COLE factors determined generally ranged from 0 to 0.025, with one sample slightly greater at 0.034.

COLE factors of 0 correlate to a non-existent shrinkage potential. COLE factors between 0 and 0.03 correlate to a low shrinkage potential. COLE factors of 0.03 to 0.06 correlate to a moderate shrinkage potential and COLE factors of about 0.06 and greater correlate to a high to very high shrinkage potential.

With regard to potential swelling, the clay soils would have to be in a loose condition and be inundated with water for long periods to cause saturation and potential swelling. Given the relatively medium stiff to hard nature of the indigenous clay soils and their inherent low permeability it is unlikely saturation and potential swelling of these soils would occur in an undisturbed state. We note, however the upper surficial clayey silt /silty clay fill soils are in a less dense condition and may be more susceptible to potential shrinkage and swelling, where they are inundated with poor draining surface water.

In addition, drying and re-wetting cycles occurring in clayey fill soils, if used to backfill the foundation walls, could result in soil swelling/shrinkage cycles that can exert additional lateral pressures acting on earth retaining foundation walls. Such action may cause cracking and distortion of the walls if not properly accounted for. Accordingly, to reduce risks associated with the potential for soil expansion and minimize the potential for additional lateral earth pressures to act on the walls, the backfill against any earth retaining structures (i.e. basement foundation walls, depressed crawl space walls, pit structures, etc,) should consist of a suitable non-plastic soil such as a granular sand and gravel backfill material or a crusher run stone Structural Fill material.

6.20 SOIL CORROSION AND SULFATE ATTACK POTENTIAL

Three (3) composite soil samples were prepared from the samples obtained from the upper reaches of test boring locations B-6, B-34 and B-45. The composite samples were tested for resistivity, redox, pH, and sulfides according to procedures established by the Ductile Iron Pipe Research Association (DIPRA). These samples were also tested for chlorides and sulfates.

This analytical laboratory test data is included in Appendix B and is also summarized in the following tables.

Summary of DIPRA Test Results							
Test Boring	Sample Depth (feet bgs)	Resistivity (ohm-cm)	Redox (mv)	ph	Sulfides	Moisture (%)	Total DIPRA Points
B-6	2 to 8	15,000	-35.2	7.0	Negative	9.5	6
B-34	2 to 10	11,500	-22.6	6.4	Negative	8.9	6
B-45	2 to 10	2,700	9.0	7.6	Negative	23.9	7

Based on the DIPRA publication "American National Standard for Polyethylene Encasement for Ductile Iron Pipe Systems", if the total DIPRA points exceed 10, the soil is considered corrosive to ductile iron pipe, and protection against exterior corrosion should be provided.

Based on the test results, the site soils tested appear to have a low corrosion potential to ductile iron waterline pipes and other buried metallic pipes/elements. Accordingly, cathodic protection or a suitable protective coating of metallic pipes and conduits, to resist potential corrosion, does not appear necessary.

Summary of Chloride and Sulfate Test Results			
Test Boring	Sample Depth (feet bgs)	Chloride (mg/kg)	Sulfate (mg/kg)
B-6	2 to 8	15	N.D.
B-34	2 to 10	10	N.D.
B-45	2 to 10	18	N.D.

N.D. – Non Detectable within test parameters.

Based on the sulfate concentrations, the soils, which make up these samples, are considered to have a negligible potential for sulfate exposure. Accordingly, a Type I-II Portland Cement appears will be acceptable for the concrete structure elements placed in these soils.

Refer to the laboratory test data included in Appendix B for more information.

7.00 PRELIMINARY GEOTECHNICAL CONSIDERATIONS AND RECOMMENDATIONS FOR SITE DEVELOPMENT

7.10 GENERAL CONSIDERATIONS

The following general considerations and recommendations are provided to assist with the permitting, planning and preliminary design for the proposed mixed use redevelopment project being considered on the site of the Westwood Country Club. This information is based on the recently completed geotechnical investigation, which included 49 test borings completed across the site to characterize the soil and bedrock conditions present, groundwater observations during drilling and from 3 installed wells to assess groundwater conditions present on the site, and laboratory testing to further characterize soil conditions. Additional investigations and further evaluations will be necessary, as discussed below, for final design once final building development plans and loading conditions, along with final site development plans, are established.

Topsoil, along with underlying man-placed fill or disturbed indigenous soils, were encountered at the surface of most of the test boring locations. The topsoil thickness typically ranged between about 2-inches and 14-inches, based on the driller's measurements and interpretation of topsoil. The fill, where present, was typically found to extend to depths ranging between about 2 feet and 5 feet bgs.

The indigenous soils encountered consist predominately of medium stiff to hard silty clay and clayey silt and firm to very compact silty or clayey sand deposits with some intermixed gravel, and occasional cobbles/boulders and shale fragments. These soils are non-organic, and are not considered to be highly compressible, nor highly susceptible to shrinkage, swelling, or liquefaction. Significant deposits of highly moist, soft to very soft clays, as present in other areas of northern Amherst and which have been problematic to residential foundation/structure movement and distress (i.e. basement foundation subsidence / settlement and lateral movement), appear to be generally absent within this site.

Accordingly, the indigenous soil conditions encountered in the test borings are generally considered suitable to support the anticipated residential and mixed use structure loads using conventional spread foundation systems. Spread foundations and any underlying Engineered Fill (i.e. compacted Structural Fill or suitable flowable backfill material), however, will need to bear on suitable indigenous soil

subgrades established below the upper existing man-placed fill and disturbed indigenous soils.

In a few cases (i.e. within borings B-9, B-11, B-19, B-21, B-22 and B-45) some limited zones of weaker soils were encountered which may impact the use of spread foundations from a structure bearing capacity and settlement stand point, particularly if a multiple-story more heavily loaded building structure would be proposed at or near these locations. Accordingly, these conditions possibly may require consideration of deep foundations (i.e. driven piles) for multiple-story more heavily loaded building structures at or near these locations.

The existing fill and indigenous soil subgrades are also considered to be generally suitable for basement, at-grade and garage slab-on-grade floor construction, with proper site preparation. The soils encountered are also considered generally suitable for construction of the proposed infrastructure, including the roadways, parking lots, storm and sanitary sewers, waterlines and retention pond structures.

Based on the water level observations made in the test borings, as well as in the groundwater observation wells, it appears that a permanent general groundwater zone (i.e. groundwater table) should generally not be encountered within the excavations for shallow spread foundations and shallow utility construction. The groundwater observations made during drilling and in well B-24 suggest that a permanent groundwater table may be present at elevations in the range of about El 580 feet to El. 589 feet, although this was not confirmed by all of the groundwater observation wells at this time.

Zones of perched or trapped groundwater are also present in the topsoil and upper fill soils at or near the ground surface, at various locations on the site, due to the relatively low permeability of the underlying soils present, and poor site drainage conditions. These conditions therefore will make site stripping and subgrade preparation difficult, particularly during wet periods.

Given, the relatively low to medium low permeability of the soils present, both permanent and perched groundwater seepage if encountered should be relatively slow and of low quantities. Accordingly, these conditions should not significantly impact basement and utility construction. It is anticipated that conventional sump and pump methods of dewatering should generally be sufficient to control surface water, as well as permanent and perched groundwater seepage conditions, should they be encountered.

Based on the subsurface conditions encountered, the overall site should be classified as Seismic Site Class "D" in accordance with Table 1613.5.2 of the Building Code of New York State - December 2010 (NYS Building Code). As previously stated, the soil conditions encountered are not considered to be susceptible to potential liquefaction in the case of a seismic event. Therefore, seismic design may be based on these criteria.

The following sections present additional and more detailed geotechnical considerations and recommendations to assist with permitting, planning, and preliminary design of the proposed site redevelopment project.

7.20 FOUNDATION SUPPORT

As stated above, the indigenous soil conditions encountered in the test borings are generally considered suitable to support the anticipated residential and mixed use structures using conventional spread foundation systems. Preliminarily, it is expected that spread foundations can be sized, based on net allowable bearing capacities in the range of about 2,000 to 4,000 pounds per square foot (psf) ±, depending on location, foundation bearing depths and actual structure loads.

Spread foundations should bear on suitable, undisturbed, indigenous soil bearing grades, after the removal of all fill soils and any unsuitable indigenous soft or wet soils. Alternatively, the foundations may also bear on Engineered Fill (i.e. compacted Structural Fill or flowable backfill), which is placed over the suitable indigenous soil bearing grades, following excavation and removal of fill soils and any unsuitable indigenous soils which are present below the design bearing grade elevation of the footings.

Suitable indigenous soil bearing subgrades should consist of stiff to hard silty clay and clayey silt soils or firm to very compact silty or clayey sand soils. Suitable bearing subgrade conditions were typically encountered in the test borings at depths ranging between about 2 feet and 5 feet bgs. At boring locations B-19 and B-22 suitable bearing subgrade conditions were deeper at about 10 feet and 6.5 feet, respectively.

In a few cases (i.e. within borings B-9, B-11, B-19, B-21, B-22 and B-45) zones of weaker soils were encountered which may impact the use of spread foundations. Accordingly, these conditions possibly may require consideration of a deep foundation system; particularly if multiple-story more heavily loaded building structures would be proposed at or near these locations.

Driven H-piles or pipe piles driven to refusal on the Shale bedrock appear would be the best suited deep foundation system option for the site conditions present. Zones of gypsum present in the Shale bedrock may require socketting of drilled piers in the bedrock in order to bear the piers on suitable bedrock below these zones. Therefore, it appears the use of drilled piers would be less favorable from both a constructability and economic standpoint.

For preliminary information, a driven HP12x53 H-pile, driven to refusal on the bedrock, would be expected to develop an axial compressive capacity in the range of about 100 to 120 tons ± per pile. Other pile sections can also be used, based on product availability and costs, which would provide higher or lower allowable axial capacities, based on the actual pile section.

7.30 BASEMENT STRUCTURE DESIGN CONSIDERATIONS

Basement structures should be designed for lateral earth pressures caused by the load of backfill against the wall and the surcharge effects from any permanent or temporary loads. In addition suitable foundation drainage should be provided to relieve potential hydrostatic pressure from developing against the basement walls and floors due to the possible presence of groundwater. In this case suitable damp proofing of the walls and floors should also be provided. Alternatively, the basement structures could also be designed to resist potential full hydrostatic pressure. In such case the basement structure should also be fully water proofed.

Where suitable foundation drainage is provided, the basement walls can be designed for “at rest” lateral earth pressure computed on the basis of an “equivalent fluid unit weight” of 70 pounds per cubic foot (pcf). This is based on the assumption that the wall backfill beyond the drainage system is a suitable well draining granular backfill material, such as a crusher run stone Structural Fill.

The use of the on-site clayey silt, silty clay and silty or clayey sand soils to backfill the basement walls is not recommended as they will be susceptible to potential swelling in a looser disturbed state, which could cause additional lateral pressures on the basement walls. The on-site soils could be used, however, to backfill non-earth retaining foundation walls provided they can be properly placed and compacted to a stable and well engineered condition.

The foundation drainage system should be properly designed, installed and maintained for long-term performance and should drain to a sump and pump system or a gravity drain relief point, which is not susceptible to potential backup.

The foundation drainage system should include a drainage/separation geotextile installed around drainage stone, which surrounds a slotted under-drain pipe. The drainage stone should be sized in accordance with the pipe slotting. A crushed aggregate conforming to NYSDOT Standard Specifications Section 703-02, Size Designation No. 1 (½-inch washed gravel or stone) is generally acceptable for slotted under-drain pipe. The foundation under-drain pipes should be set at a depth of about 1 foot below the top of the finish basement floor grade.

A pervious granular backfill (i.e. concrete sand or crusher run stone) or a suitable geosynthetic drainage composite (i.e. Miradrain, Grace Hydroduct, Delta MS, etc.) should be placed against the basement foundation wall, above the drainage system, to allow infiltration to the drainage system.

7.40 SLAB-ON-GRADE FLOOR CONSTRUCTION

The building floors can be constructed as slab-on-grade following proper subgrade preparation as outlined in Section 7.80. For preliminary design purposes, a minimum of 6-inches of Subbase Stone is recommended beneath the lightly loaded floor slabs (residential floors, lightly loaded office floors, etc.). A minimum 12-inch thick layer of Subbase Stone is recommended beneath more heavily loaded floor slabs (i.e. garage areas, storage areas, mechanical rooms, etc.). A suitable stabilization/separation geotextile, such as Mirafi 500X, should be placed over the existing soil or fill soil subgrades prior to placement of the Subbase Stone layer.

An imported suitable granular fill material is generally recommended to be used as subgrade fill to raise the site grades, beneath the Subbase Stone course for the slab-on-grade construction. The use of the soils from the site may be possible for the building pad site filling, provided the soil can be properly placed and compacted in a controlled manner, as discussed further in Section 7.80 below.

In order to limit potential post construction settlement, due to required site filling, we recommend the subgrade fill placement, in areas requiring more than about 2 to 3 feet of fill, be completed at least 1 to 2 months month in advance of the final subgrade preparation, Subbase Stone placement, and floor slab construction.

Preliminarily, the slab-on-grade floor slabs may be designed using a modulus of subgrade reaction of 150 pounds per cubic inch (pci) at the top of the subbase layer. It is recommended that the slab-on-grade be constructed such that it is not structurally connected to, or resting directly on, perimeter walls or column footings in order to limit differential settlement effects.

The above subbase stone thicknesses should not be considered sufficient for carrying construction vehicle loads. Therefore, contingencies should be planned for to temporarily increase the Subbase Stone thickness within the building pad areas to provide a suitable working surfaces to stage the construction, carry construction vehicle loads and protect the underlying subgrades. This will be particularly important when wet periods occur. The additional subbase stone material could then be removed and re-graded in preparation for the actual floor construction and/or re-used as foundation backfill or as pavement area subbase or as otherwise determined appropriate.

A moisture barrier is generally not considered warranted where the floor slabs are constructed at or above the final site grades, unless otherwise recommended by the finished flooring manufacturer. A suitable moisture barrier, however, is recommended beneath the below grade floor areas (i.e. basement areas) to reduce the potential for dampness.

7.50 SEISMIC DESIGN CONSIDERATIONS

Based on the subsurface conditions encountered in the test borings, the upper 100 feet of the site should be classified as Seismic Site Class "D" in accordance with the criteria presented on Table 1613.5.2 of the Building Code of New York State - December 2010 (NYS Building Code). The soil conditions encountered are generally not considered to be susceptible to potential liquefaction in the case of a seismic event. Therefore, seismic design may proceed based on these considerations.

The spectral response accelerations in the project area were obtained by Empire using the United States Geological Survey (USGS) web site application (https://geohazards.usgs.gov/secure/designmaps/us/). These accelerations were then adjusted, as recommended by the USGS, to obtain the 2% probability in 50 years mapping accelerations, as presented in the NYS Building Code.

Using the site location, the calculated spectral response accelerations for Site Class "B" soils are 0.221g for the short period (0.2 second) response (S_S) and 0.051g for the one second response These spectral response accelerations were then adjusted for the Seismic Site Class "D" soil profile determined for the project site.

Accordingly, the adjusted spectral response accelerations for Site Class "D" are as follows:

- Short Period Response (S_{MS}) - 0.354g
- 1 Second Period Response (S_{M1}) - 0.122g

The corresponding five percent damped design spectral response accelerations (S_{DS} and S_{D1}) are as follows:

- S_{DS} - 0.236g
- S_{D1} - 0.081g

It is possible that a seismic shear wave velocity study of the site may refine and possibly upgrade the seismic design site class. This may be particularly beneficial in the areas of the mixed use commercial and apartment buildings depending on the costs associated with seismic reinforcement of these structures. It should be understood, however, that there is no guarantee that an upgrade can be made if a seismic shear wave study is performed,

7.60 PAVEMENT DESIGN CONSIDERATIONS

The Town of Amherst requires a typical pavement section consisting of the following components for residential and commercial development roadways:

Town of Amherst Asphalt Concrete Pavement Section:

- 1.5 inches – Top Course
- 2.5 inches – Binder Course
- 4.0 inches – Base Course
- 11 inches – Subbase Stone Course

It is estimated that the existing subgrade soils will have a typical CBR value of about 2 to 3 ±. This correlates to a soil resilient modulus of about 3,500 psi, which has been used for our pavement design evaluations. The pavement sections were analyzed using the NYSDOT Thickness Design Manual for New and Reconstructed Pavement, along with the American Association of State Highway and Transportation Officials (AASHTO) "Interim Guide Method for Design of Flexible Pavements".

Based on our analyses, the Town of Amherst pavement section will provide approximately 1.2 million, 18-kip equivalent axle loads (EAL's) over its design life, provided the subgrades are prepared in accordance with the recommendations

presented in Section 7.80. This design life is considered to be within an acceptable range for this type of application.

We would recommend, however, the Town of Amherst pavement section also include a suitable stabilization/separation geotextile (i.e. Mirafi 600X or suitable equivalent). It may also be necessary to increase the subbase thickness in some areas to improve subgrade conditions in some areas, as well as to promote drainage to underdrains, etc. as discussed below.

Pavement design recommendations are also provided for two (2) flexible pavement structure types within the proposed mixed use development areas. These include the following:

- A heavy duty asphalt concrete pavement for the entrance, access drives and pavement areas, which will be subject to delivery truck traffic. (Heavy Duty Asphalt Concrete Pavement Structure); and
- A light duty asphalt concrete pavement for automobile / light SUV only parking areas (Light Duty Asphalt Concrete Pavement Structure).

  <u>Heavy Duty Asphalt Concrete Pavement:</u>

  - 1.5 inches – Top Course
  - 3.0 inches – Binder Course
  - 15 inches – Subbase Stone Course
  - Stabilization/Separation Geotextile
  - Prepared Subgrade

  <u>Light Duty Asphalt Concrete Pavement:</u>

  - 1.5 inches – Top Course
  - 2.0 inches – Binder Course
  - 10 inches – Subbase Stone Course
  - Stabilization/Separation Geotextile
  - Prepared Subgrade

Based on our analyses, the Heavy Duty and Light Duty pavement sections will provide approximately 350,000 and 45,000 18-kip equivalent axle loads (EAL's), respectively, over their design life.

The installation of underdrains and/or edge drains is recommended to drain the pavement subbase course and subgrades in order to limit the potential for frost action and improve pavement structure performance and design life. Alternatively, the pavement subbase course can also be allowed to daylight/drain to an adjacent perimeter drainage swale.

Proper grading of the pavement structure subgrades is also recommended Accumulation of water on pavement subgrades should be avoided by grading the subgrade to a slope of at least 2 percent to allow drainage to the underdrains or drainage swale.

The subbase stone course for the above pavement sections should not be considered sufficient for use as construction haul roads. Therefore, contingencies should be planned for to temporarily increase the Subbase Stone thickness or provide additional base stabilization / reinforcement within the areas that will be used as construction roads and to stage the construction.

7.70 UNDERGROUND UTILITY CONSTRUCTION

The generally medium stiff to hard clayey silt and silty clay and firm to very compact silty or clayey soils should provide generally suitable subgrade conditions for underground utility construction, including storm and sanitary sewers, water lines, gas lines and buried electrical / communication conduits. Accordingly, standard bedding materials and thicknesses can generally be used to support this infrastructure. It should be expected, however, that in some localized cases that subgrade undercuts and the placement of additional bedding material or subgrade stabilizing materials may be required to provide suitable and stable subgrades for the utility construction. Therefore, some contingencies should be planned for, should such localized conditions be encountered.

7.80 SUBGRADE PREPARATION FOR PAVEMENT AND SLAB-ON-GRADE CONSTRUCTION

The site preparation work should be performed during seasonal dry periods to minimize potential degradation of the subgrade soils and potential undercuts which may be required to establish a stable base for construction. It should be understood that the indigenous subgrade soils that will be exposed are sensitive and will degrade and lose strength when they are wet and disturbed by construction equipment traffic. Accordingly, efforts should be made to maintain the subgrades in a dry and stable condition at all times, and not permit excessive or heavy construction traffic directly over these soils.

It is noted that zones of perched or trapped groundwater are present in the topsoil and upper fill soils at or near the ground surface, at various locations on the site, due to the relatively low permeability of the underlying soils and poor site drainage conditions present. Such conditions occurred during the subsurface exploration where areas of standing water and spongy surface conditions were present, hindering some of the drill rig access, until the site became frozen in the later part of January and early February. These conditions therefore will make site stripping and subgrade preparation difficult, particularly during wet periods, and therefore should be anticipated.

Measures to improve site drainage should be implemented as necessary prior to commencing the site stripping and subgrade preparation work. Such measures, may include installation of drainage swales to intercept and divert surface runoff away from the construction areas, sloping of the subgrade and "sealing" of the surface with a smooth drum roller to promote runoff, and restricting construction equipment traffic from traveling directly over the subgrade surfaces, especially when they are wet. The placement of a suitable base material and underlying stabilization geotextile, beneath haul roads, and in construction staging areas, will help to protect the subgrades and minimize problems associated with subgrade degradation.

All existing structures, trees, stumps, vegetation, topsoil, organic soils, etc., and any other deleterious materials within the proposed building pad areas and pavement areas should be removed. Following stripping and removal of the surface materials (i.e. topsoil, asphalt pavement, concrete pads and structures, etc.), the exposed subgrades should be proof-rolled. The proof-rolling should be performed, prior to the overlying fill placement, using a smooth drum roller weighing at least 10 tons.

The subgrade proof-rolling should be done under the guidance of, and observed by qualified geotechnical engineering personnel. In some cases it may be necessary to waive the proof-rolling requirement if wet subgrades are present. This should be determined by the geotechnical engineer (i.e. Empire). Any undercuts, which may be required as the result of the proof-rolling, should be performed based on guidance and evaluation of the conditions by the geotechnical engineer. Resulting undercuts should be backfilled with a suitable material as recommended by the geotechnical engineer.

The placement of an initial lift of suitable oversized stone fill material (i.e. "surge stone", "shot rock", minus 6-inch crusher run stone, No.3 & No.4 Stone, etc.) encased in stabilization geotextile top and bottom, may be necessary in some cases

to help stabilize the subgrades prior to the subgrade fill placement, particularly if the existing subgrades are in a soft/wet condition.

The subgrade fill placement necessary to raise the site grades may proceed following preparation and acceptance of the existing soil subgrades.

The majority of the site filling and grading necessary to raise site grades should be performed sufficiently in advance of the foundation, pavement and utility construction. Therefore we recommend the subgrade fill placement, in areas requiring more than about 2 to 3 feet of fill, be completed at least 1 to 2 months in advance of the final subgrade preparation and subbase stone placement for floor slab and pavement construction.

The on-site soils could be used for constructing the fills for establishing the building pad and pavement areas, provided they can be properly placed and compacted in a controlled manner and to a stable well engineered condition, in accordance with our recommendations. It should be understood, however, that these soils will be very difficult to dry and work with. Therefore the use of imported granular fill materials will be better suited for building pad, roadway and parking lot fill areas. On-site soils used for filling within the building pad area and pavement areas must be free of all organics, and any soft, wet or otherwise deleterious material.

As stated above, the use of the fine grained on-site soils for site filling will be difficult to work with (i.e. dry for proper compaction), vs. an imported Suitable Granular Fill or Structural Fill material, particularly during seasonally inclement or wet weather. Efforts should be made to maintain the subgrades in a dry and stable condition at all times, and limit construction traffic directly over these soils, particularly if they become wet.

Subgrade fill placed to establish the building pad, roadway and parking lot areas, using the on-site soil material, should be compacted to a minimum of 95 percent of the maximum dry density as measured by the modified Proctor moisture-density relationship (ASTM D 1557). The subgrade fill should be placed in horizontal lifts that do not exceed a maximum loose lift thickness of 6 to 9 inches. The loose lift thickness should be reduced in conjunction with the compaction equipment used so that the required density is attained. On-site soil used for subgrade fill should have a moisture content within –3 % to +1 % of the optimum moisture content (determined by ASTM D 1557) when it is placed and compacted. On-site soils having moisture contents exceeding this range will require drying efforts to be implemented by the contractor.

The subgrade fill should be placed to a stable condition and should not "pump" or show signs of movement or significant deflection (i.e. unstable conditions) as it is being constructed. Any unsuitable conditions should be undercut and removed. The fill subgrades should also be properly graded, drained and protected from moisture and frost. Placement of fill over wet, soft, snow covered or frozen subgrades should not be permitted.

Suitable Granular Fill or Structural Fill as described below in Section 7.90, or other imported suitable granular soil materials are recommended as better suited for subgrade fill to raise the existing site grades for slab-on-grade and pavement construction. Empire, however, should be consulted regarding the acceptability of any off-site materials, which do not meet the requirements stated below for Suitable Granular Fill or Structural Fill. All fill placement and compaction should be closely monitored and tested on a "full-time" basis by qualified geotechnical engineering personnel.

7.90 STRUCTURAL FILL AND SUITABLE GRANULAR FILL MATERIALS

Structural Fill Material

Structural Fill (Subbase Stone) should consist of crusher run stone, which is free of clay, organics and friable or deleterious particles. The crusher stone should meet the requirements of New York State Department of Transportation, Standard Specifications, Item 304.12 – Type 2 Subbase, with the following gradation requirements.

Sieve Size Distribution	Percent Finer by Weight
2 inch	100
¼ inch	25-60
No. 40	5-40
No. 200	0-10

Suitable Granular Fill

Suitable Granukar Fill should be well graded from coarse to fine and classified as GW, GP, GM, SW, SP and SM soils using the Unified Soil Classification System (ASTM D-2487). It should have no more than 85- percent by weight material passing the No. 4 sieve, no more than 20- percent by weight material passing the No. 200 sieve and should be generally free of particles greater than 4-inches. It should also be

free of topsoil, asphalt, concrete rubble, wood, debris, clay and other deleterious materials.

Material meeting the requirements of New York State Department of Transportation, Standard Specifications, Item 203.07 – Select Granular Fill is acceptable for use as Suitable Granular Fill.

Placement and Compaction

Structural Fill and Suitable Granular Fill should be compacted to a minimum of 95 percent of the maximum dry density as measured by the modified Proctor test (ASTM D1557). Placement of the fill should not exceed a maximum loose lift thickness of 6 to 9 inches, with the exception of the subbase course beneath the slab-on-grade and pavement construction, which can be placed in a single lift not exceeding 15-inches. It may be necessary to reduce the loose lift thickness depending on the type of compaction equipment used so that the required density is attained. The fill should have a moisture content within two percent of the optimum moisture content at the time of compaction.

8.00 RECOMMENDATIONS FOR ADDITIONAL GEOTECHNICAL INVESTIGATIONS

As discussed above, it is recommended that additional explorations be completed for final site redevelopment design particularly in the mixed use town center and future senior housing building development areas

Preliminarily we would recommend that additional test borings in the mixed use town center and senior housing building development areas be performed to provide an approximate frequency of at least one (1) boring per about 3,000 to 4,000 square feet of building footprint, with no less than 4 borings per building. The recommended depth of these borings will be dependent on the building structure loads and foundation bearing depths. At least half of these borings, however, should be extended to bedrock, if a deep foundation system appears may be warranted.

Additional borings within the proposed residential areas should be made to provide a frequency of about one (1) boring per 4 to 5 residential units, with these borings extending to a depth of about 20 feet ±. Additional borings along the proposed roadway and parking lot areas should be made to provide a frequency of about one (1) boring per 400 linear feet of road and/or about one (1) boring per about 10,000 square feet of parking lot area. The roadway borings should extend at least 5 feet

beneath the anticipated utility inverts and the parking lot area borings should extend to a depth of about 6 feet.

Empire can be consulted to assist in planning the locations and scope of the additional explorations and evaluations that may be necessary for final design, based on the final development plans, building sizes and loads.

9.00 CONCLUDING REMARKS

This report was prepared to assist in evaluating the geotechnical characteristics of the subsurface conditions present at the Westwood Country Club site in Amherst, New York, with regard to the proposed mixed use redevelopment project being considered on the site. The report has been prepared for the exclusive use of Mensch Capital Partners, LLC and related parties, for specific application to this site and this project only.

The considerations and preliminary recommendations presented were prepared based on Empire Geo-Services, Inc.'s understanding of the proposed site redevelopment, as described herein, and through the application of generally accepted soils and foundation engineering practices. No warranties, expressed or implied are made by the conclusions, opinions, recommendations or services provided.

This report was prepared for site characterization and preliminary site development planning purposes only. It should not be considered as providing complete or sufficient subsurface information for final building foundation design and construction. Additional subsurface explorations and geotechnical engineering evaluations will be necessary based on the actual planned site development, including the building sizes, location, use and structural loads.

Additional information regarding the use and interpretation of this report is presented in Appendix D.

Sincerely,

EMPIRE GEO-SERVICES, INC.

John J. Danzer, P.E.
Senior Geotechnical Engineer

TABLES

TABLE 1

SUMMARY OF LABORATORY INDEX TESTS

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

Test Boring Number	Sample Number	Sample Depth	Moisture Content (%)	Grain Size Distribution			Atterberg Limits				COLE Factor	Shrinkage Potential	Soil Description	USCS Group Soil
				Gravel (%)	Sand (%)	Silt & Clay (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Shrinkage Limit (%)				
B-1	S-3	4' - 6'	14.6	5.2	27.0	67.8	20	12	8	12	0.015	Low	Red-Brown Silty Clay / Clayey Silt, some Sand, trace gravel	CL / ML
B-3	S-4	6' - 8'	14.8	2.0	14.8	83.2	24	13	11	13	0.010	Low	Red-Brown Silty Clay, little Sand, trace gravel	CL
B-7	S-6	10' - 12'	12.6	8.3	17.4	74.3	24	12	12	13	0	Non - Existent	Brown-Gray, Silty Clay, little Sand, Trace gravel	CL
B-12	S-3	4'- 6'	13.1	8.6	23.2	68.2	24	13	11	12	0.009	Low	Red-Brown Silty Clay, some Sand, trace gravel	CL
B-14	S-4	6' - 8'	10.7	7.9	22.0	70.1	23	12	11	17	0	Non-Existent	Red-Brown Silty Clay, some Sand, trace gravel	CL
B-20	S-5	10' - 12'	23.3	0.0	1.0	99.0	37	17	20	19	0.025	Low	Red-Brown Silty Clay, trace sand	CL
B-22	S-3	4' - 6'	26.5	0.0	0.8	99.2	52	22	30	23	0.018	Low	Red-Brown Silty Clay, trace sand	CH
B-30	S-5	8' - 10'	11.4	4.3	22	72.8							Red-Brown Clayey Silt, some Sand, trace gravel	ML
B-31	S-6	10' - 12'	10.7	9.1	21.6	69.3	23	13	10	12	0	Non-Existent	Orange-Brown Silty Clay, some Sand, trace gravel	CL
B-35	S-7	15' - 17'	8.7	11.8	29.4	58.8							Red-Brown Clayey Silt, some Sand, little Gravel	ML
B-38	S-2	2' - 4'	21.3	0.0	3.8	96.2	44	20	24	20	0.008	Low	Brown Silty Clay, trace sand	CL
B-40	S-4	6' - 8'	12.0	2.2	14.8	83	25	14	11	13	0	Non-Existent	Red-Brown Silty Clay, little Sand, trace gravel	CL
B-44	S-3	4' - 6'	21.3	0.0	2.2	97.8	59	22	37	22	0	Non-Existent	Red-Brown Silty Clay, trace sand	CH
B-46	S-3	4' - 6'	28.1	0.0	0.8	99.2	61	25	36	22	0.034	Low-Medium	Red-Brown Silty Clay, trace sand	CH
B-48	S-5	8' - 10'	11.8	3.8	19.1	77.1	23	13	10	14	0	Non-Existent	Red-Brown Silty Clay, little Sand, trace gravel	CL
COMPOSITE SAMPLES											DIPRA Points	Chlorides / Sulfates (ppm)		
B-6	S-2 to S-4	2' - 8'	4.5 to 11.3	5.8	14.9	79.3					6	15 / ND	Red-Brown Silty Clay, little Sand, trace gravel	ML / CL
B-34	S-2 to S-5	2' - 10'	5.9 to 12.0	7.8	10.7	81.5					6	10 / ND	Red-Brown Silty Clay, little Sand, trace gravel	ML / CL
B-45	S-2 to S-5	2' - 10'	20.2 to 28.6	4.5	1.7	93.8					7	18 / ND	Red-Brown Silty Clay, trace sand	CL

TABLE 2 (SHEET 1 OF 3)

SUMMARY OF SUBSURFACE CONDITIONS

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

Boring Number	Ground Surface El. (feet)	Total Boring Depth (feet)	Surface Material	Fill Depth (feet)	Bottom of Fill El. (feet)	Auger Refusal Depth (feet)	Auger Refusal El. (feet)	Depth of Freestanding Water in Boring (feet)	El. of Freestanding Water in Boring (feet)	Depth to Groundwater in Well (feet)	El. of Groundwater in Well (feet)
B-1	605.9	67.5	Topsoil	2.0	603.9	62.5	543.4	53.4	552.5		
B-2	603.7	20.0	12" - Topsoil	2.0	601.7	N.E.	N.E.	N.E.	N.E.		
B-3	603.1	20.0	12" - Topsoil	2.0	601.1	N.E.	N.E.	N.E.	N.E.		
B-4	601.5	53.5	3" - Topsoil	2.0	599.5	48.5	553.0	47.0	554.5		
B-5	603.2	32.7	2" - Topsoil	2.0	601.2	32.7	570.5	16.5	586.7		
B-6 w/Well	603.1	22.0	14" - Topsoil	2.0	601.1	N.E.	N.E.	N.E.	N.E.	0.6	602.5
B-7	603.0	47.6	8" - Topsoil	N.E.	N.E.	47.6	555.4	N.E.	N.E		
B-8	602.8	47.5	2" - Topsoil	N.E.	N.E.	47.5	555.3	N.E.	N.E.		
B-9	602.4	44.0	3" - Topsoil	2.0	600.4	44.0	558.4	22.0	580.4		
B-10 / 10A	600.4	13.5	3" - Topsoil	2.0	598.4	13.5	586.9	N.E.	N.E.		
B-11	601.7	45.7	4" - Topsoil	2.0	599.7	45.7	556.0	N.E.	N.E.		
B-12	599.1	20.0	4" - Topsoil	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.		
B-13	599.1	21.0	10" - Topsoil	2.0	597.1	N.E.	N.E.	N.E.	N.E.		
B-14	602.9	47.7	10" - Topsoil	2.0	600.9	47.7	555.2	38.2	564.7		
B-15	602.9	20.0	3.5" - Topsoil	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.		
B-16	599.5	20.0	6" - Topsoil	2.0	597.5	N.E.	N.E.	N.E.	N.E.		
B-17	598.2	22.0	Topsoil	2.0	596.2	N.E.	N.E.	N.E.	N.E.		

Boring Advanced to Auger Refusal

Boring Scheduled to be Advanced to 20 feet and Terminated

Boring Advanced 5 feet into Bedrock with Rock Coring

Groundwater Observation Well Installed in Boring. Water Level on April 1st, 2014

N.E. - Not Encountered N.E.B.C. - Not Encountered Before Water Added to Boring to Facilitate Rock Coring N.D. - Not Determined

Empire Geo-Services, Inc.
5167 South Park Avenue
Hamburg, New York 14075

TABLE 2 (SHEET 2 OF 3)

SUMMARY OF SUBSURFACE CONDITIONS

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

Boring Number	Ground Surface El. (feet)	Total Boring Depth (feet)	Surface Material	Fill Depth (feet)	Bottom of Fill El. (feet)	Auger Refusal Depth (feet)	Auger Refusal El. (feet)	Depth of Freestanding Water in Boring (feet)	El. of Freestanding Water in Boring (feet)	Depth to Groundwater in Well (feet)	El. of Groundwater in Well (feet)
B-18	588.5	35.0	3" - Topsoil	4.0	584.5	35.0	553.5	N.E.	N.E.		
B-19	592.3	20.0	Topsoil	2.0	590.3	N.E.	N.E.	N.E.	N.E.		
B-20	597.0	43.5	Topsoil	2.0	595.0	43.5	553.5	16.5	580.5		
B-21	598.2	41.5	Native Soil	N.E.	N.E.	41.5	556.7	39.0	559.2		
B-22	599.1	44.1	11" - Topsoil	N.E.	N.E.	44.1	555.0	N.E.	N.E.		
B-23	596.8	22.0	11" - Topsoil	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.		
B-24 w/Well	598.6	41.3	Topsoil	4.0	594.6	41.3	557.3	N.E.	N.E	8.2	588.6
B-25	594.8	40.2	4" - Topsoil	2.0	592.8	40.2	554.6	13.6	581.2		
B-26	594.1	40.8	Topsoil	2.0	592.1	40.8	553.3	33.5	560.6		
B-27	594.3	22.0	Fill	2.0	592.3	N.E.	N.E.	N.E.	N.E.		
B-28	593.2	20.0	6" - Topsoil	2.0	591.2	N.E.	N.E.	N.E.	N.E.		
B-29	594.5	38.5	3" - Topsoil	2.0	592.5	33.5	561.0	19.3	575.2		
B-30	594.8	20.0	8" - Topsoil	4.0	590.8	N.E.	N.E.	N.E.	N.E.		
B-31	592.5	43.5	6" - Topsoil	N.E.	N.E.	38.5	554.0	N.E.B.C.	N.E.B.C.		
B-32	594.0	30.5	3" - Topsoil	4.0	590.0	30.5	563.5	N.E.	N.E.		
B-33	592.9	20.0	Topsoil	2.0	590.9	N.E.	N.E.	N.E.	N.E.		
B-34	593.4	31.4	12" - Topsoil	2.0	591.4	31.4	562.0	N.E.	N.E.		

Boring Advanced to Refusal

Boring Scheduled to be Advanced to 20 feet and Terminated

Boring Advanced 5 feet into Bedrock with Rock Coring

Groundwater Observation Well Installed in Boring. Water Level on April 1st, 2014.

N.E. - Not Encountered N.E.B.C. - Not Encountered Before Water Added to Boring to Facilitate Rock Coring N.D. - Not Determined

Empire Geo-Services, Inc.
5167 South Park Avenue
Hamburg, New York 14075

TABLE 2 (SHEET 3 OF 3)

SUMMARY OF SUBSURFACE CONDITIONS

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

Boring Number	Ground Surface El. (feet)	Total Boring Depth (feet)	Surface Material	Fill Depth (feet)	Bottom of Fill El. (feet)	Auger Refusal Depth (feet)	Auger Refusal El. (feet)	Depth of Freestanding Water in Boring (feet)	El. of Freestanding Water in Boring (feet)	Depth to Groundwater in Well (feet)	El. of Groundwater in Well (feet)
B-35	593.0	32.5	7" - Topsoil	N.E.	N.E.	32.5	560.5	N.E.	N.E.		
B-36	593.3	31.0	3" - Topsoil	2.0	591.3	31.0	562.3	28.0	565.3		
B-37	592.1	22.5	8" - Topsoil	4.0	588.1	22.5	569.6	20.0	572.1		
B-38	592.4	24.0	Fill	2.0	590.4	24.0	568.4	N.E.	N.E.		
B-39	592.0	18.1	4" - Topsoil	2.0	590.0	N.E.	N.E.	N.E.	N.E.		
B-40	588.9	22.0	Topsoil	5.0	583.9	22.0	566.9	19.0	569.9		
B-41	590.3	20.0	3" - Topsoil	2.0	588.3	N.E.	N.E.	N.E.	N.E		
B-42	601.1	22.0	13" - Topsoil	2.0	599.1	N.E.	N.E.	N.E.	N.E.		
B-43	593.2	35.0	6" - Topsoil	2.0	591.2	30.0	563.2	20.0	573.2		
B-44	592.7	18.7	6" - Topsoil	2.0	590.7	N.E.	N.E.	N.E.	N.E.		
B-45	591.9	29.5	7" - Topsoil	2.0	589.9	24.5	567.4	15.0	576.9		
B-46	591.6	20.0	Topsoil	2.0	589.6	N.E.	N.E.	N.E.	N.E.		
B-47	594.9	39.0	6" - Topsoil	2.0	592.9	34.0	560.9	20.0	574.9		
B-48	595.8	31.0	3" - Topsoil	2.0	593.8	31.0	564.8	N.E.	N.E.	2.4	593.4
B-49	593.5	20.0	5" - Topsoil	2.0	591.5	N.E.	N.E.	N.E.	N.E.		

Boring Advanced to Refusal

Boring Scheduled to be Advanced to 20 feet and Terminated

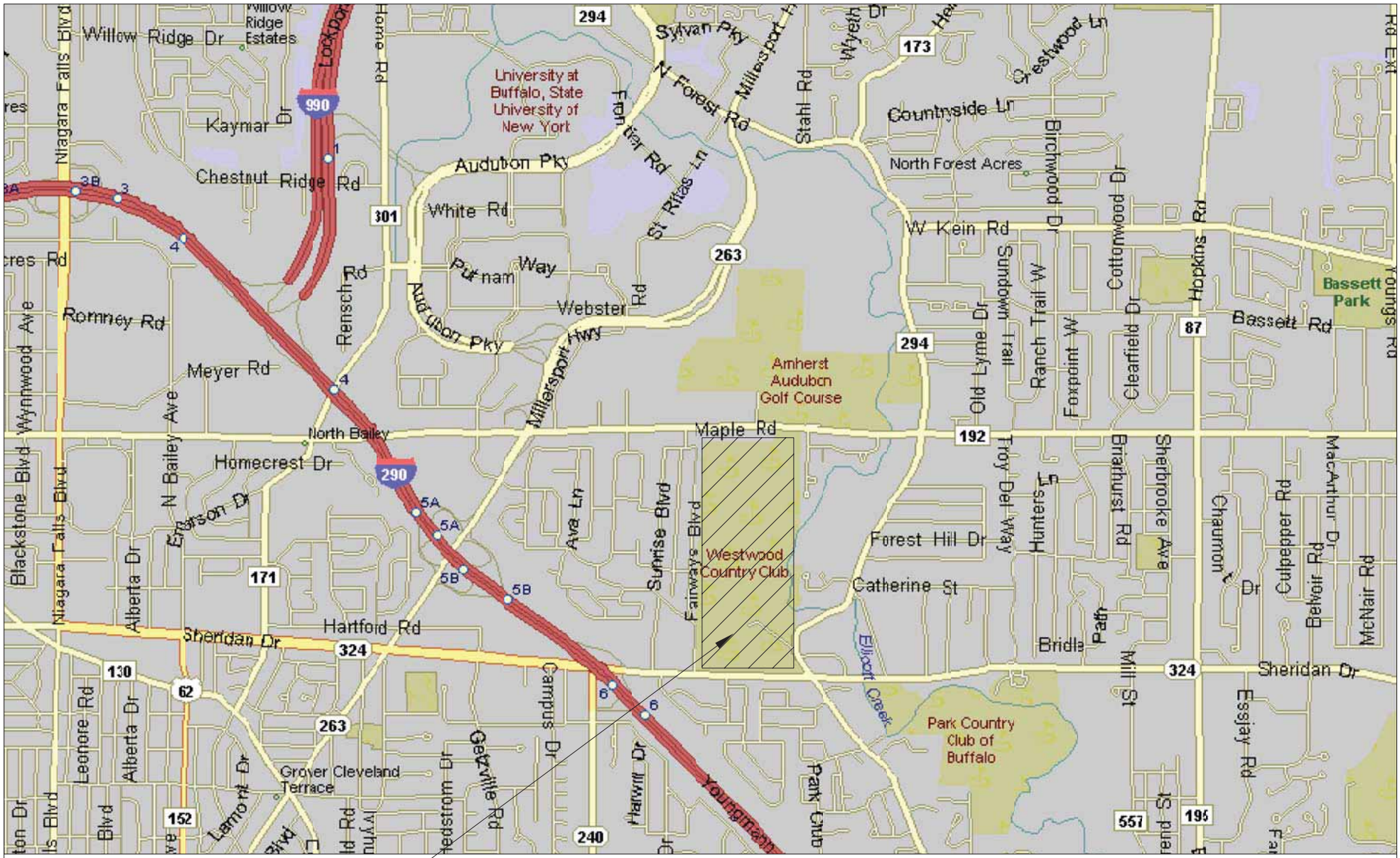
Boring Advanced 5 feet into Bedrock with Rock Coring

Groundwater Observation Well Installed in Boring. Water Level on April 1st, 2014.

N.E. - Not Encountered N.E.B.C. - Not Encountered Before Water Added to Boring to Facilitate Rock Coring N.D. - Not Determined

Empire Geo-Services, Inc.
5167 South Park Avenue
Hamburg, New York 14075

FIGURES



APPROXIMATE PROJECT SITE LOCATION

N

NOTE:
SITE LOCATION PLAN DEVELOPED
FROM MICROSOFT STREETS & TRIPS 2006

EMPIRE GEO SERVICES INC
a subsidiary of SJB Services, Inc.

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

SITE LOCATION PLAN

DR BY: EDG	SCALE: NTS	PROJ NO.: BE-13-192
CHKD BY: JJD	DATE: 12/18/13	FIGURE NO: 1



LEGEND:

B-5 INDICATES APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING ADVANCED TO AUGER REFUSAL (PRESUMED BEDROCK REFUSAL).

B-6 INDICATES APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING ADVANCED TO AUGER REFUSAL, WITH GROUNDWATER OBSERVATION WELL INSTALLATION.

B-1 INDICATES APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING ADVANCED TO AUGER REFUSAL, WITH FIVE (5) FEET OF ROCK CORE.

B-2 INDICATES APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING PLANNED TO BE ADVANCED TO TWENTY (20) FEET AND TERMINATED.

B.M. APPROXIMATE LOCATION OF BENCHMARK ESTABLIHSED BY SJB SERVICES, INC. TOP OF EXISTING ELECTRICAL MANHOLE RIM. BENCHMARK ELEVATION = 602.38 FEET AS ESTABLISHED AND REPORTED BY NUSSBAUMER & CLARKE, INC.

NOTE:

FIGURE DEVELOPED FROM DRAWING PROVIDED BY MENSCH CAPITAL PARTNERS, LLC.

EMPIRE GEO SERVICES INC
a subsidiary of SJB Services, Inc.

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

SUBSURFACE EXPLORATION PLAN
EXISTING SITE CONDITIONS

DR BY: EDG	APPROX. SCALE: NTS	DATE: 04/23/14
CHKD BY: JJD	PROJ NO.: BE-13-192	FIGURE NO: 2



LEGEND:

WESTWOOD COMMONS:

A.	OFFICE:	200,000 SQFT.
B.	RESIDENTIAL:	72 UNITS
C.	HOTEL:	130 KEYS
D.	MULTI-FAMILY:	280 UNITS
D.	NEIGHBORHOOD BUSINESS/OFFICE:	15,000 SQFT.
E.	LAKE EDGE TOWNHOMES / MULTI-FAMILY:	37 UNITS
F.	RIVER'S EDGE MULTI-FAMILY APARTMENTS:	56 UNITS
G.	EVENT SPACE	1.2 ACRES
H.	EXISTING CLUBHOUSE	

WESTWOOD RESIDENTIAL:

I.	PATIO HOME LOTS:	108 UNITS
J.	LARGER LOTS - SINGLE FAMILY	46 UNITS
K	TOWNHOMES:	90 UNITS
L.	SENIOR LIVING FACILITY	ASSISTED LIVING 200 / INDEPENDENT 96

NOTES:

1. TOTAL PARKING COUNT IN THE WESTWOOD COMMONS AREA: 2,180 STALLS.
2. WESTWOOD PARKWAY WIDTH: 80 FT.
3. STANDARD ROADWAY WIDTH: 50 FT.

DENOTES PEDESTRIAN TRAILS (2ML)

NOTE:

FIGURE DEVELOPED FROM DRAWING PROVIDED BY MENSCH CAPITAL PARTNERS, LLC.

EMPIRE GEO SERVICES INC
a subsidiary of SJB Services, Inc.

PROPOSED WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
NORTH FOREST ROAD
AMHERST, NEW YORK

SUBSURFACE EXPLORATION PLAN PROPOSED SITE DEVELOPMENT	DR BY: EDG/WMA	APPROX. SCALE: NTS	DATE: 04/23/14
	CHKD BY: JJD	PROJ NO.: BE-13-192	FIGURE NO: 3

APPENDIX A

TEST BORING LOGS

DATE
START 12/3/2013
FINISH 12/3/2013
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-1
SURF. ELEV 605.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	WOH	1			TOPSOIL	
		3	6		4	Red-Brown Clayey SILT, tr.-little f-c Sand (moist, FILL)	WOH = Weight of
	2	7	9			Red-Brown Silty CLAY / Clayey Silt, some f-c Sand,	Hammer and Rods
		12	17		21	tr.gravel (moist, v.stiff, CL-ML)	
5	3	5	5				
		7	12		12	(stiff)	
	4	13	23				
		36	39		59	Contains some-and f-c Sand (hard)	
	5	9	16				
10		24	32		40	Becomes Brown	
	6	9	22				
		26	32		48	Contains tr.-little f-c Gravel	
15							
	7	8	13			Becomes Brown-Gray	
		18	22		31		
20							
	8	6	10			(v.stiff)	
		13	19		23		
25							
	9	8	10				
		13	18		23		
30							
	10	7	10				
		14	19		24		
35							
	11	6	7				
		9	15		16		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. KOSKE

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/3/2013
FINISH 12/3/2013
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-1
SURF. ELEV 605.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	7	7			(stiff)	
		8	12		15		
45	13	3	3			Brown-Gray Silty CLAY, tr.sand	
		3	4		6	(moist-wet, medium, CL)	
50	14	1	2			Becomes Red-Brown (soft)	
		1	2		3		
55	15	3	1				
		4	6		5		
60	16	50/0.1			REF		REF = Sample Spoon Refusal
							NQ '2' Size Rock Core
65						Gray SHALE Rock, medium hard, sound, bedded.	RUN #1: 62.5' - 67.5' REC = 96% RQD = 82%
70						Boring Complete at 67.5'	Free standing water recorded at 53.4' prior to coring.
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. KOSKE

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/17/2013
FINISH 12/17/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-2
SURF. ELEV 603.7' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 12" Topsoil
		5	6		8	Red-Brown and Black Silty CLAY, tr.sand (moist, FILL)	
	2	5	4			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		7	8		11		
5	3	4	7			(v.stiff)	
		22	25		29		
	4	8	9			Brown Clayey SILT, tr.-little f-c Sand (moist, v.stiff, ML)	
		19	23		28		
	5	7	8			Brown Silty CLAY, tr.sand (moist, v.stiff, CL)	
10		10	12		18		
	6	5	10				
		11	14		21		
15							
	7	5	7			Becomes Brown-Gray, contains little-some f-c Sand	
		15	16		22		
	8	8	8			Brown-Gray Clayey SILT, some f-c Sand, tr.gravel	
20		17	20		25	(moist, v.stiff, ML)	
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/17/2013
FINISH 12/17/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-3
SURF. ELEV 603.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	Driller notes approx. 12" Topsoil
		2	3		3	Red-Brown and Black Silty CLAY, tr.sand (moist, FILL)	
	2	5	6			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		6	9		12		
5	3	7	8			(v.stiff)	
		8	11		16		
	4	10	12				
		11	14		23		
	5	10	12			Becomes Brown-Gray, contains little f-c Sand, tr.gravel	
10		14	17		26		
	6	15	17	50/0.3	REF	Contains tr.boulder fragments (hard)	REF = Sample Spoon Refusal
15							
	7	12	11			(v.stiff)	
		15	14		26		
20							
	8	15	10				No Recovery Sample #8
		12	16		22		
						Boring Complete at 22.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/28/2014
FINISH 1/30/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-4
SURF. ELEV 601.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	Driller notes approx. 3" Topsoil
		5	5		8	Red-Brown and Black Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	4	3				
		4	6		7	Red-Brown Silty CLAY, tr.sand (moist, medium, CL)	
5	3	5	6			Brown Clayey SILT, tr.-little f-c Sand (moist, stiff, ML)	
		7	9		13		
	4	5	8			(v.stiff)	
		10	14		18		
	5	16	23			(hard)	
10		19	21		42		
	6	12	21				
		25	26		46		
15							
	7	5	9			Brown-Gray Silty CLAY, little-some f-c Sand, tr.gravel (moist, v.stiff, CL)	
		11	13		20		
20							
	8	6	10			Brown-Gray Clayey SILT, little f-c Sand (moist, v.stiff, ML)	
		13	19		23		
25							
	9	5	7				
		10	17		17		
30							
	10	5	6			Contains some f-c Sand, tr.-little f-c Gravel	
		12	14		18		
35							
	11	4	8				
		14	16		22		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/28/2014
FINISH 1/30/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-4
SURF. ELEV 601.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	6	10				
		13	15		23		
45							
	13	8	14			Gray-Brown f-m SAND, some-and Silt, tr.-little f-c Gravel (moist, compact, SM)	
		26	37		40		NQ '2' Size Rock Core
50						Gray SHALE Rock, medium hard, sound, thinly bedded to bedded, numerous gypsum partings and seams.	RUN #1: 48.5' - 53.5' REC = 75% RQD = 40% 1
55						Boring Complete at 53.5'	Free standing water recorded at 47.0' prior to coring. Free standing water recorded at 20.0' after coring.
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/15/2014
FINISH 1/15/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-5
SURF. ELEV 603.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	3			TOPSOIL	Driller notes approx. 2" Topsoil
		6	7		9	Brown-Black Clayey SILT, tr.sand, tr.organics (moist-wet, FILL)	
	2	5	6				
		7	8		13	Red-Brown Silty CLAY, tr.sand (moist-wet, stiff, CL)	
5	3	7	9			Becomes Brown (v.stiff)	
		11	15		20		
	4	14	17				
		19	15		36	Contains occasional Silt seams (hard)	
	5	4	8			Red-Brown Clayey SILT, little-some f-c Sand, tr.gravel	
10		6	7		14	(moist, stiff, ML)	
	6	11	12			(v.stiff)	
		10	12		22		
15							
	7	24	11				No Recovery Sample #7
		12	7		23		
20							
	8	15	11			Becomes Brown-Gray, contains some f-c Sand	
		10	18		21		
25							
	9	15	17			Brown-Gray Silty CLAY, little f-c Sand, tr.gravel	
		21	24		38	(moist, hard, CL)	
30							
	10	15	18			Brown-Gray Clayey SILT, some f-c Sand, tr.gravel	
		50	50/0.4		68	(moist, hard, ML)	
						Boring Complete with Sample Spoon Refusal at 31.9' and Auger Refusal at 32.7'	Free standing water recovery at 16.5' at boring completion.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/5/2013
FINISH 12/5/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-6
SURF. ELEV 603.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	2			TOPSOIL	Driller notes approx. 14" Topsoil
		1	2		3	Red-Brown Clayey SILT, little f-c Sand (moist, FILL)	
	2	3	2			Red-Brown Silty CLAY, tr.sand (moist, medium, CL)	
		4	4		6		
5	3	4	5			Red-Brown Clayey SILT, tr.-little f-c Sand (moist, stiff, ML)	
		6	8		11		
	4	7	9				
		11	12		20	(v.stiff)	
	5	6	7				
10		6	9		13	(stiff)	
	6	7	8				
		7	11		15		
15							
	7	4	4			Brown-Gray Silty CLAY and f-c Sand, tr.gravel	
		5	7		9	(moist, stiff, CL)	
20							No free standing water noted at boring completion
	8	8	8			Brown-Gray Clayey SILT and f-c Sand, tr.gravel	
		11	12		19	(moist, v.stiff, ML)	
						Boring Complete at 22.0'	2" PVC Groundwater Observation Well installed at boring completion. Refer to installation log for details.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

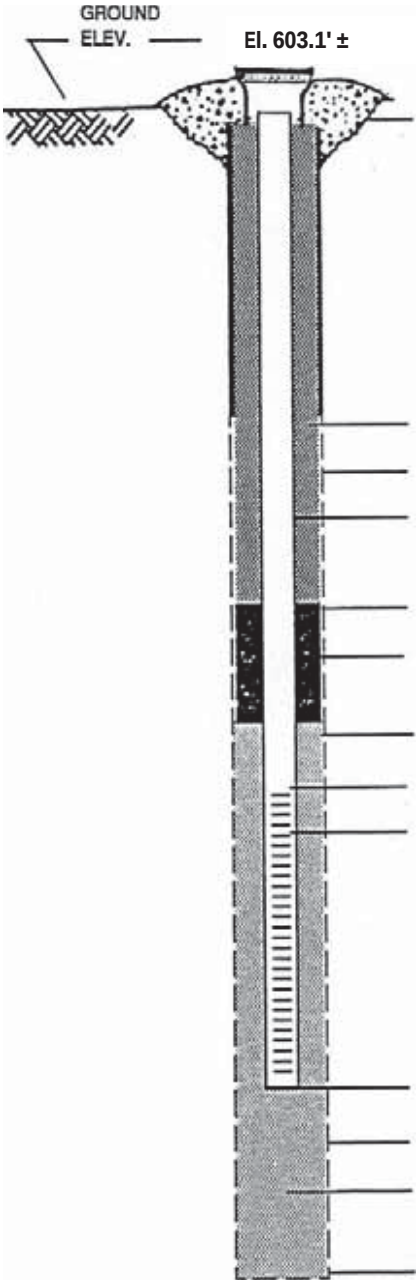
DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

MONITORING WELL COMPLETION RECORD

WELL NUMBER: B-6	
PROJECT NAME: WESTWOOD CC	DRILLING METHOD: HOLLOW STEM AUGERS
PROJECT NUMBER: BE-13-192	GEOLOGIST: N/A
DRILLER: T. FARRELL	INSTALLATION DATE(S): 12/5/2013



TYPE OF SURFACE SEAL:	CONCRETE PAD WITH FLUSH MOUNT SURFACE CASING
TYPE OF BACKFILL:	AUGER CUTTINGS
BOREHOLE DIAMETER:	8" ±
I.D. OF RISER PIPE:	2.0"
TYPE OF RISER PIPE:	PVC
DEPTH OF SEAL:	5.0' El. 598.1' ±
TYPE OF SEAL:	BENTONITE CHIPS
DEPTH OF SAND PACK:	8.0' El. 595.1' ±
DEPTH OF TOP OF SCREEN:	10.0' El. 593.1' ±
TYPE OF SCREEN:	PVC
SLOT SIZE X LENGTH:	.010 X 10.0'
I.D. OF SCREEN:	2.0"
TYPE OF SAND PACK:	MORIE "O" FILTER SAND
DEPTH BOTTOM OF SCREEN:	20.0' El. 583.1' ±
DEPTH BOTTOM OF SAND PACK:	20.0' El. 583.1' ±
TYPE OF BACKFILL BELOW OBSERVATION WELL:	FILTER SAND
ELEVATION/ DEPTH OF HOLE:	22.0' El 581.1' ±

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-7
SURF. ELEV 603.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	4	2			TOPSOIL	Driller notes approx. 8" Topsoil
		3	2		5	Brown Silty CLAY, tr.sand (moist, medium, CL)	
	2	3	3				
		3	5		6		
5	3	7	11			Red-Brown Clayey SILT, little f-c Sand, tr.gravel,	
		13	10		24	tr.boulder fragments (moist, v.stiff, ML)	
	4	10	8				
		5	5		13	(stiff)	
	5	7	8				
10		7	11		15	Becomes Brown	
	6	8	9			Brown-Gray Silty CLAY, tr.-little f-c Sand, tr.gravel	
		13	15		22	(moist-wet, v.stiff, CL)	
15							
	7	7	4				
		6	7		10	(stiff)	
20							
	8	6	5				No Recovery Sample #8
		7	6		12		
25							
	9	6	8			Brown-Gray Clayey SILT, little-some, f-c Sand, tr.gravel	
		8	12		16	(moist, v.stiff, ML)	
30							
	10	6	8			(stiff)	
		7	14		15		
35							
	11	10	12			(v.stiff)	
		9	5		21		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-7
SURF. ELEV 603.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	4	5			Gray Highly Weathered SHALE Rock (wet)	
		3	7		8		
45	13	5	4				
		3	8		7		
	14	50/0.1			REF		
						Boring Complete with Sample Spoon Refusal at 47.5' and Auger Refusal at 47.6'	No free standing water encountered at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/14/2014
FINISH 1/14/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-8
SURF. ELEV 602.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	Driller notes approx. 2" Topsoil
		2	3		3	Brown Silty CLAY, tr.sand (moist-wet, soft, CL)	
	2	6	7			Becomes Red-Brown and Gray (moist, stiff)	
		5	5		12		
5	3	5	4			Becomes Brown	
		7	9		11		
	4	15	16			(hard)	
		17	19		33		
	5	5	5			Contains occasional Silt partings and seams (stiff)	
10		7	9		12		
	6	6	7			Red-Brown Clayey SILT, little f-c Sand, tr.gravel	
		7	7		14	(moist, stiff, ML)	
15							
	7	9	8			Brown Silty CLAY, little f-c Sand, tr.gravel	
		8	10		16	(moist, v.stiff, CL)	
20							
	8	7	12			Brown-Gray Clayey SILT, little f-c Sand, tr.gravel	
		16	14		28	(moist, v.stiff, ML)	
25							
	9	7	15			Contains some f-c Sand	
		14	12		29		
30							
	10	12	17			(hard)	
		28	27		45		
35							
	11	16	17				
		23	25		40		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/14/2014
FINISH 1/14/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-8
SURF. ELEV 602.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	13	17				No Recovery Sample #12
		16	15		33		
45	13	13	21			Contains occasional Shale fragments	
		38	32		59		
50						Boring Complete with Auger Refusal at 47.5'	No free standing water encountered at boring completion.
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/27/2014
FINISH 1/27/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-9
SURF. ELEV 602.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 3" Topsoil
		2	2		4	Brown-Black Silty CLAY, tr.sand, tr.organics (moist-wet, FILL)	
	2	2	3				
		3	4		6	Red-Brown Silty CLAY, tr.sand, occasional Silt partings (moist, medium, CL)	
5	3	4	7				
		9	15		16	(v.stiff)	
	4	5	8				
		10	14		18		
	5	4	5			(moist-wet, stiff)	
10		8	8		13		
	6	4	4				
		5	6		9		
15	7	2	2			Red-Brown Clayey SILT, some f-m Sand	
		2	3		4	(moist-wet, medium, ML)	
20	8	9	12			Contains tr.gravel (moist, v.stiff)	
		14	16		26		
25	9	14	16			(hard)	
		15	17		31		
30	10	14	19			Gray-Brown f-c SAND, some-and Silt, tr.gravel	
		20	22		39	(moist, compact, SM)	
35	11	13	15				
		17	19		32		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/27/2014
FINISH 1/27/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-9
SURF. ELEV 602.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	14	19			Brown-Gray f-m SAND and Silt, tr.gravel	
		21	23		40	(moist, compact, SM)	
45						Boring Complete with Auger Refusal at 44.0'	Free standing water recorded at 22.0' at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/27/2014
FINISH 1/27/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-10
SURF. ELEV 600.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 3" Topsoil
		3	3		5	Black Organic Clayey SILT, little f-c Sand (moist, FILL)	
	2	4	5			Red-Brown Clayey SILT, little f-c Sand, tr.gravel	
		7	6		12	(moist, stiff, ML)	
5	3	12	11				
		11	12		22		
	4	8	10				
		13	12		23		
	5	12	5				
10		15	17		20		
	6	5	14				
		17	15		31	(hard)	
15						Boring Complete with Auger Refusal at 13.5'	No free standing water encountered at boring completion.
20							
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/27/2014
FINISH 1/27/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-10A
SURF. ELEV 600.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
5						OVERBURDEN SOILS	Boring B-10A is a continuation of Boring B-10. Driller notes moving 7' north and augering to refusal.
10							
15						Boring Complete with Auger Refusal at 11.7'	No free standing water encountered at boring completion.
20							
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/6/2013
FINISH 12/6/2013
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-11
SURF. ELEV 601.7' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 4" Topsoil
		3	2		5	Black CINDERS, little Silt (moist, FILL)	
	2	2	3			Red-Brown Silty CLAY, tr.sand (moist, medium, CL)	
		4	4		7		
5	3	4	4			Red-Brown Clayey SILT, tr.sand (moist, stiff, ML)	
		5	5		9		
	4	5	6			Becomes Brown	
		5	6		11		
	5	2	3			Brown Silty CLAY, tr.sand (moist-wet, medium, CL)	
10		2	3		5		
	6	3	3				
		4	5		7		
15							
	7	1	2			Contains some f-c Sand	
		2	3		4		
20							
	8	2	2			Contains tr.sand, tr.gravel	
		3	4		5		
25							
	9	8	9			Brown-Orange Clayey SILT, little f-c Sand, tr.gravel	
		12	13		21	(moist, v.stiff, ML)	
30							
	10	4	3			(wet, medium)	
		4	5		7		
35							
	11	2	1				
		3	1		4		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/6/2013
FINISH 12/6/2013
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-11
SURF. ELEV 601.7' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	4	4			Contains some-and f-c SAND (stiff)	
		8	12		12		
45	13	21	50/0.2		REF	Gray SHALE Rock fragments (moist)	
						Boring Complete with Sample Spoon and Auger Refusal at 45.7'	No free standing water reading obtained at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/26/2014
FINISH 1/26/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-12
SURF. ELEV 599.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 4" Topsoil
		3	4		5	Red-Brown Silty CLAY, little f-c Sand (moist, medium, CL)	
	2	3	5			(stiff)	
		4	6		9		
5	3	5	7			Contains some f-c Sand, tr.gravel (v.stiff)	
		10	13		17		
	4	4	9				
		12	15		21		
	5	6	21			Becomes Brown-Gray, contains tr.gravel (hard)	
10		33	30		54		
	6	10	19				
		36	37		55		
15							
	7	13	28			Brown-Gray f-m SAND and Clayey Silt, tr.gravel (moist, v.compact, SC-SM)	
		36	38		64		
	8	22	36				
20		34	39		70		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/16/2013
FINISH 12/16/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-13
SURF. ELEV 599.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	2			TOPSOIL	Driller notes approx. 10" Topsoil
		2	3		4	Red-Brown Silty CLAY, tr.sand (moist, FILL)	
	2	3	5			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		7	7		12		
5	3	5	7			Red-Brown Clayey SILT, tr.sand (moist, stiff, ML)	
		8	12		15		
	4	4	2			Brown Fine SAND, some Silt, occasional Silt seams	
		3	2		5	(moist-wet, v.loose, SM)	
	5	4	8			Brown Silty CLAY, tr.sand (moist-wet, v.stiff, CL)	
10		8	8		16		
	6	5	6			Red-Brown Clayey SILT, little f-c Sand (moist, stiff, ML)	
		6	10		12		
15							
	7	3	7				
		6	8		13		
20	8	7	8				
		7	10		15		
						Boring Complete at 21.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/5/2013
FINISH 12/5/2013
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-14
SURF. ELEV 602.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	3			TOPSOIL	Driller notes approx. 10" Topsoil
		4	9		7	Red-Brown and Black Clayey SILT, little f-c Sand, tr.gravel (moist, FILL)	
	2	12	6				
		8	10		14	Red-Brown Silty CLAY, tr.-little f-c Sand	
5	3	8	7			(moist, stiff, CL)	
		10	11		17	Contains some f-c Sand, tr.gravel (v.stiff)	
	4	9	10				
		9	11		19		
	5	9	12				
10		11	15		23		
	6	10	14				
		15	18		29		
15							
	7	4	5			(moist-wet, stiff, CL)	
		6	8		11		
20							
	8	6	7			(v.stiff)	
		11	15		18		
25							
	9	12	14			Brown-Gray f-c SAND and Clayey Silt, little f-c Gravel (moist, firm, SC-SM)	
		8	13		22		
30							
	10	15	10				Poor Recovery Sample #10
		9	12		19		
35							
	11	12	13			Red-Brown Silty CLAY, tr.sand (moist-wet, v.stiff, CL)	
		15	16		28		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/5/2013
FINISH 12/5/2013
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-14
SURF. ELEV 602.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	6	10				
		13	14		23		
45	13	13	18			Brown-Gray SILT and Fine Sand, tr.gravel (moist, compact, ML)	
		20	23		38		
	14	50/0.1			REF		
50						Boring Complete with Sample Spoon Refusal at 47.5' and Auger Refusal at 47.7'	Free standing water recorded at 38.2' at boring completion.
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. KOSKE

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-15
SURF. ELEV 602.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	Driller notes approx. 3.5" Topsoil
		5	6		8	Red-Brown Clayey SILT, little f-c Sand	
	2	6	11			(moist, medium, ML)	
		12	14		23	(v.stiff)	
5	3	11	12			Becomes Brown	
		12	16		24		
	4	14	18			Contains tr.gravel (hard)	
		23	24		41		
	5	9	12			(v.stiff)	
10		14	16		26		
	6	12	14				
		11	16		25		
15							
	7	5	9				
		15	16		24		
	8	17	21			Contains some f-c Sand (hard)	
20		26	30		47		
						Boring Complete at 20.0'	No free standing water enountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-16
SURF. ELEV 599.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	WOH	3			TOPSOIL	Driller notes approx. 6" Topsoil
		4	4		7	Red-Brown Clayey SILT, little-some f-c Sand, tr.gravel (moist, FILL)	
	2	12	11				
		12	16		23	Red-Brown Clayey SILT, tr.-little f-c Sand	WOH = Weight of Hammer and Rods
5	3	10	11			(moist, v.stiff, ML)	
		18	17		29		
	4	16	25				
		27	33		52	Contains little f-c Gravel (hard)	
	5	11	18				
10		22	24		40		
	6	10	14				
		19	23		33		
15							
	7	5	10			(moist-wet, v.stiff)	
		10	12		20		
	8	15	21			Red-Brown Silty CLAY, tr.-little f-c Sand	
20		22	18		43	(moist, hard, CL)	
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-17
SURF. ELEV 598.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	2			TOPSOIL	
		1	2		3	Brown-Black Silty CLAY, tr.sand, tr.organics (wet, FILL)	
	2	4	3			Gray-Brown f-c SAND and Silt (wet, FILL)	
		4	3		7		
5	3	4	6			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		5	6		11		
	4	8	7			Red-Brown Clayey SILT, little f-c Sand, tr.gravel	
		8	11		15	(moist, stiff, ML)	
	5	6	11			Red-Brown Silty CLAY, tr.sand (moist, hard, CL)	
10		20	16		31		
	6	12	14				
		20	22		34		
15							
	7	10	10			(v.stiff)	
		12	15		22		
20							
	8	11	16			Brown-Gray Clayey SILT, some f-c Sand, tr.gravel	
		15	20		31	(moist, hard, ML)	
						Boring Complete at 22.0'	No free standing water reading obtained at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/20/2014
FINISH 1/20/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-18
SURF. ELEV 588.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 3" Topsoil
		3	3		6	Brown-Black Silty CLAY, tr.sand, tr.organics	
	2	5	6			(moist, FILL)	
		5	7		11		
5	3	3	5			Red-Brown Silty CLAY, tr.-little f-c Sand	
		5	4		10	(moist-wet, stiff, CL)	
	4	7	11			Brown-Gray Clayey SILT, some f-c Sand, tr.gravel	
		14	12		25	(moist, v.stiff, ML)	
	5	7	11				
10		12	15		23		
	6	8	8				Poor Recovery Sample #6
		10	14		18		
15							
	7	14	15			(hard)	
		17	21		32		
20							
	8	5	7				
		34	50/0.4		41		
25							
	9	4	8			Brown-Gray Silty CLAY, some f-c Sand, tr.gravel	
		12	14		20	(moist-wet, v.stiff, CL)	
30							
	10	1	1			Becomes Red-Brown (wet, medium)	
		3	2		4		
35							
						Boring Complete with Auger Refusal at 35.0'	No free standing water reading obtained at boring completion.
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE :

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-19
SURF. ELEV 592.3' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	
		2	4		4	Black-Brown Clayey SILT, some f-c Sand (moist, FILL)	
	2	2	2			Yellow-Brown Silty CLAY, little Fine Sand	
		2	2		4	(moist-wet, medium, CL)	
5	3	3	3			Yellow-Brown Fine SAND, little-some Silt	
		2	2		5	(moist-wet, v.loose, SM)	
	4	2	2				
		3	2		5		
	5	2	2			Red-Brown Silty CLAY, little f-c Sand, tr.gravel	
10		4	5		6	(moist-wet, medium, CL)	
	6	4	6			(stiff)	
		5	7		11		
15							
	7	7	8			Red-Brown f-m SAND, some-and Silt, little f-c Gravel	
		12	14		20	(moist, firm, SM)	
	8	10	11			Contains tr.clay	
20		13	11		24		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/21/2014
FINISH 1/21/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-20
SURF. ELEV 597.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	6	3			TOPSOIL	
		5	3		8	Black-Brown Clayey SILT, tr.sand, tr.organics	
	2	5	5			(moist-wet, FILL)	
		5	5		10	Red-Brown Clayey SILT, tr.sand (moist, stiff, ML)	
5	3	5	8				
		7	6		15		
	4	8	10			Red-Brown Silty CLAY, tr.sand (moist, v.stiff, CL)	
		12	8		22		
	5	6	6			Becomes Brown (stiff)	
10		6	6		12		
	6	3	4				
		5	6		9		
15							
	7	4	7			Brown-Gray Clayey SILT, little-some f-c Sand, tr.gravel	
		8	12		15	(moist, stiff, ML)	
20							
	8	12	13			(v.stiff)	
		15	14		28		
25							
	9	7	11				
		12	12		23		
30							
	10	3	7				
		12	13		19		
35							
	11	WOH/2.0			WOH	Brown-Gray Silty CLAY, tr.sand (moist-wet, v.soft, CL)	WOH = Weight of Hammer and Rods
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/21/2014
FINISH 1/21/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-20
SURF. ELEV 597.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	WOH/2.0			WOH	Gray Fine SAND, some-and Silt, tr.gravel (wet, v.loose, SM)	WOH = Weight of Hammer and Rods
45						Boring Complete with Auger Refusal at 43.5'	Free standing water recorded at 16.5' at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/21/2014
FINISH 1/21/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-21
SURF. ELEV 598.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			Red-Brown Silty CLAY, tr.sand (moist, medium CL)	
		3	2		4		
	2	3	3				Poor Recovery Sample #2 and #3
		3	4		6		
5	3	6	9			Red-Brown Clayey SILT, little f-c Sand	
		12	12		21	(moist, v.stiff, ML)	
	4	9	6			Contains tr.gravel	
		12	17		18		
	5	25	24			(hard)	
10		35	37		59		
	6	34	50/0.1		REF		REF = Sample Spoon Refusal
15							
	7	9	15			Becomes Brown	
		31	38		46		
20							
	8	3	2			Brown Silty CLAY, tr.sand (moist-wet, medium, CL)	
		3	3		5		
25							
	9	1	1			Becomes Red-Brown (v.soft)	
		1	1		2		
30							
	10	3	4			(stiff)	
		5	8		9		
35							
	11	12	23			Becomes Brown-Gray (hard)	
		22	28		45		
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/21/2014
FINISH 1/21/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-21
SURF. ELEV 598.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	31	46	50/0.4	REF	Brown-Gray f-c SAND and Silt, little f-c Gravel (moist, v.compact, SM)	
45						Boring Complete with Sample Spoon Refusal at 41.4' and Auger Refusal at 41.5'	Free standing water recorded at 39.0' at boring completion. REF = Sample Spoon Refusal
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-22
SURF. ELEV 599.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	WOH	1			TOPSOIL	Driller notes approx. 11" Topsoil
		1	2		2	Brown Silty CLAY, tr.sand (moist, v.soft, CL-CH)	
	2	2	2			(medium)	
		3	3		5		WOH = Weight of Hammer and Rods
5	3	4	3				
		4	5		7	Becomes Red-Brown	
	4	4	5				
		5	5		10	(stiff, CL)	
	5	4	7				
10		8	7		15	Contains "and" f-c Sand, tr.gravel	
	6	12	7				No Recovery Sample #6 and #7
		8	8		15		
15							
	7	13	8				
		9	10		17		
20							
	8	4	5			Contains tr.-little f-c Sand	
		4	6		9		
25							
	9	3	4			(medium)	
		4	4		8		
30							
	10	2	3			Becomes Brown	
		2	3		5		
35							
	11	5	6			Brown f-c SAND and Clayey Silt, little f-c Gravel	
		7	7		13	(moist, firm, SC-SM)	
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-22
SURF. ELEV 599.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	37	42	50/0.3	REF	Gray Highly Weathered SHALE Rock (wet)	
45						Boring Complete with Sample Spoon Refusal at 41.3' and Auger Refusal at 44.1'	No free standing water reading obtained at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-23
SURF. ELEV 596.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	3			TOPSOIL	Driller notes approx. 11" Topsoil
		3	3		6	Brown Silty CLAY, tr.sand (moist, medium, CL)	
	2	3	2				
		4	5		6		
5	3	2	4			Becomes Red-Brown, Contains occasional Silt seams	
		5	5		9	(stiff)	
	4	5	6			Red-Brown Clayey SILT, tr.sand, tr.gravel	
		7	6		13	(moist, stiff, ML)	
	5	7	8				
10		7	9		15		
	6	8	7				
		10	10		17	(v.stiff)	
15							
	7	7	10			Becomes Brown-Gray	
		12	14		22		
20							
	8	11	10			Gray-Brown f-m SAND and Clayey Silt, tr.gravel	
		11	14		21	(moist, firm, SC-SM)	
						Boring Complete at 22.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/22/2014
FINISH 1/22/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-24
SURF. ELEV 598.6' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	
		1	1		2	Black-Brown Clayey SILT, little f-c Sand, tr.gravel	
	2	2	2			(moist, FILL)	
		3	2		5	Contains tr.wood fragments	
5	3	5	4			Red-Brown and Gray Silty CLAY, tr.sand, occasional	
		4	5		8	Silt partings (moist, medium, CL)	
	4	9	9			(v.stiff)	
		9	8		18		
	5	10	7			Red-Brown Clayey SILT, tr.sand, occasional Fine Sand	
10		9	9		16	lenses (moist, v.stiff, ML)	
	6	10	12			Contains tr.gravel	
		15	15		27		
15							
	7	4	7			Brown-Gray Silty CLAY, little-some f-c Sand, tr.gravel	
		14	11		21	(moist, v.stiff, CL)	
20							
	8	6	15			(hard)	
		17	22		32		
25							
	9	10	14				
		17	20		31		
30							
	10	3	3			(medium)	
		4	5		7		
35							
	11	14	17			Brown-Gray f-m SAND, some-and Silt, tr.gravel	
		21	28		38	(moist, compact, SM)	
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/22/2014
FINISH 1/22/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-24
SURF. ELEV 598.6' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	47	50	50/0.2	REF	(v.compact)	
						Boring Complete with Sample Spoon Refusal at 41.2' and Auger Refusal at 41.3'	No free standing water reading obtained at boring completion. 2" PVC Groundwater Observation Well installed at boring completion. Refer to installation log for details.
45							
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

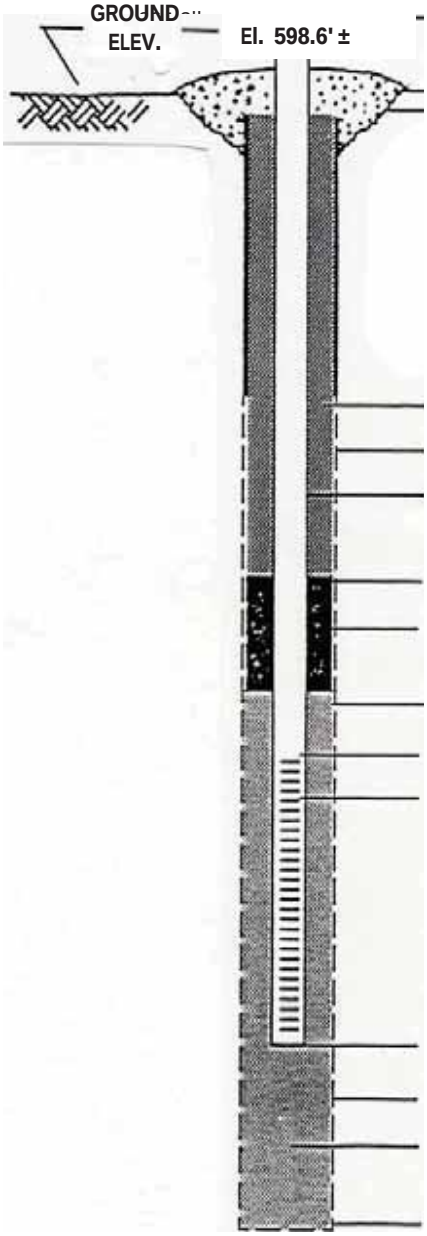
DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

MONITORING WELL COMPLETION RECORD

WELL NUMBER: B-24	
PROJECT NAME: WESTWOOD CC	DRILLING METHOD: HOLLOW STEM AUGERS
PROJECT NUMBER: BE-13-192	GEOLOGIST: N/A
DRILLER: A. JAKUBCZAK	INSTALLATION DATE(S): 1/22/2014



RISER STICK-UP:	0.7' El. 599.3' ±
TYPE OF SURFACE SEAL:	NONE
TYPE OF BACKFILL:	AUGER CUTTINGS
BOREHOLE DIAMETER:	8" ±
I.D. OF RISER PIPE:	2.0"
TYPE OF RISER PIPE:	PVC
DEPTH OF SEAL:	32.0' El. 566.6' ±
TYPE OF SEAL:	BENTONITE CHIPS
DEPTH OF SAND PACK:	34.0' El. 564.6' ±
DEPTH OF TOP OF SCREEN:	36.0' El. 562.6' ±
TYPE OF SCREEN:	PVC
SLOT SIZE X LENGTH:	.010 X 5.0'
I.D. OF SCREEN:	2.0"
TYPE OF SAND PACK:	MORIE "O" FILTER SAND
DEPTH BOTTOM OF SCREEN:	41.0' El. 557.6' ±
DEPTH BOTTOM OF SAND PACK:	41.0' El. 557.6' ±
TYPE OF BACKFILL BELOW OBSERVATION WELL:	N/A
ELEVATION/ DEPTH OF HOLE:	41.0' El. 557.6' ±

DATE
START 1/22/2014
FINISH 1/22/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-25
SURF. ELEV 594.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	Driller notes approx. 4" Topsoil.
		3	7		4	Red-Brown Clayey SILT, tr.-little f-c Sand (moist, FILL)	
	2	4	5			Red-Brown Clayey SILT, little-some f-c Sand, tr.gravel	
		9	9		14	(moist, stiff, ML)	
5	3	5	9				
		11	12		20	(v.stiff)	
	4	9	7				
		10	11		17		
	5	10	12				
10		11	11		23	Contains little f-c Sand	
	6	6	10				
		12	14		22		
15							
	7	12	14				
		16	17		30		
20							
	8	7	11				
		13	17		24		
25							
	9	10	13			Contains occasional boulder fragments	
		12	15		25		
30							
	10	2	6			Brown-Gray Silty CLAY, tr.sand (moist-wet, stiff, CL)	
		6	6		12		
35							
	11	WOH/2.0			WOH	Becomes Red-Brown (v.soft)	WOH = Weight of Hammer and Rods
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/22/2014
FINISH 1/22/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-25
SURF. ELEV 594.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	50/0.2			REF	Gray-Black Weathered SHALE Rock (moist-wet)	
						Boring Complete with Sample Spoon Refusal and Auger Refusal at 40.2'	Free standing water recorded at 13.6' at boring completion.
							REF = Sample Spoon Refusal
45							
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-26
SURF. ELEV 594.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	
		2	3		3	Brown-Black Organic Clayey SILT, little Fine Sand (wet, FILL)	
	2	4	5				
		7	6		12	Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
5	3	4	7			Contains occasional Silt partings	
		8	7		15		
	4	11	11			(v.stiff)	
		10	5		21		
	5	7	5			(stiff)	
10		10	9		15		
	6	2	4			Brown Clayey SILT, little f-c Sand, tr.gravel	
		7	8		11	(moist, stiff, ML)	
15							
	7	5	8			Brown Silty CLAY, little f-c Sand (moist, v.stiff, CL)	
		13	14		21		
20							
	8	6	10			Brown Clayey SILT, little-some f-c Sand, tr.gravel	
		11	11		21	(moist, v.stiff, ML)	
25							
	9	8	11			Becomes Brown-Gray	
		12	14		23		
30							
	10	WOH	3			Red-Brown and Gray Silty CLAY, tr.sand	WOH = Weight of
		6	6		9	(moist, stiff, CL)	Hammer and Rods
35							
	11	8	11			Brown-Gray f-m SAND and Silt, tr.-little f-c Gravel	
		13	10		24	(moist, firm, SM)	
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-26
SURF. ELEV 594.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	12	6	50/0.3		REF	Contains little SILT, tr.shale	
						Boring Complete with Sample Spoon Refusal and Auger Refusal at 40.8'	Free standing water recorded at 33.5' at boring completion.
45							REF = Sample Spoon Refusal
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-27
SURF. ELEV 594.3' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			Brown-Black Silty CLAY, tr.sand (moist, FILL)	
		1	2		2		
	2	2	3			Brown Silty CLAY, tr.sand (moist, medium, CL)	
		2	2		5		
5	3	3	3			Becomes Red-Brown	
		4	7		7		
	4	4	5			(stiff)	
		7	7		12		
	5	6	7			(v.stiff)	
10		11	11		18		
	6	9	9				
		11	14		20		
15							
	7	12	16			Becomes Brown-Gray, contains little f-c Sand (hard)	
		20	26		36		
20							
	8	14	22			Brown-Gray Clayey SILT, some-and f-c Sand	
		26	27		48	(moist, hard, ML)	
						Boring Complete at 22.0'	No free standing water reading obtained at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-28
SURF. ELEV 593.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	4			TOPSOIL	Driller notes approx. 6" Topsoil
		5	4		9	Brown-Black Clayey SILT, tr.sand, tr.organics (moist, FILL)	
	2	4	6				
		5	7		11	Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
5	3	3	9			Red-Brown Clayey SILT, little f-c Sand, tr.gravel	
		14	15		23	(moist, v.stiff, ML)	
	4	5	12				
		16	19		28		
	5	6	19				
10		25	27		44	(hard)	
	6	9	17				
		23	29		40		
15							
	7	6	13			Becomes Brown-Gray (v.stiff)	
		16	20		29		
	8	9	12			Red-Brown Silty CLAY, tr.sand (moist, v.stiff, CL)	
20		15	19		27		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 2/5/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-29
SURF. ELEV 594.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 3" Topsoil
		2	2		4	Brown-Black Clayey SILT, tr.sand, tr.organics (moist, FILL)	
	2	3	4				
		5	9		9	Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
5	3	3	5				
		9	9		14		
	4	8	11			Red-Brown Clayey SILT, little-some f-c Sand, tr.gravel	
		13	15		24	(moist, v.stiff, ML)	
	5	15	16			(hard)	
10		18	18		34		
	6	7	12			(v.stiff)	
		14	16		26		
15							
	7	15	14				
		16	17		30		
20							
	8	8	30			Gay-Brown f-m SAND, some-and Silt, little f-c Gravel	
		38	36		68	(moist, v.compact, SM)	
25							
	9	10	17			Gray Fine SAND, some Silt (moist-wet, compact, SM)	
		28	25		45		
30							Free standing water recorded at 19.3' prior to coring. NQ '2' Size Rock Core
	10	15	25			Gray-Brown f-m SAND, some-and Silt, little f-c Gravel	
		24	27		49	(moist, compact, SM)	
35						Gray Shale Rock, medium hard, sound, thinly bedded to bedded, occasional gypsum partings.	RUN #1: 33.5' - 38.5' REC = 82% RQD = 42%
40						Boring Complete at 38.5'	

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-30
SURF. ELEV 594.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	Driller notes approx. 8" Topsoil
		3	5		6	Red-Brown Silty CLAY, tr.sand (moist, FILL)	
	2	5	6				
		9	10		15		
5	3	7	9			Red-Brown Clayey SILT, tr.sand (moist, v.stiff, ML)	
		12	15		21		
	4	6	11				
		15	16		26		
	5	9	17			Contains little-some f-c Sand (hard)	
10		18	22		35		
	6	10	15			(v.stiff)	
		14	19		29		
15							
	7	5	11				
		15	15		26		
	8	15	7				
20		10	12		17		
25						Boring Complete at 20.0'	No free standing water encountered at boring completion.
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-31
SURF. ELEV 592.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 6"
		3	5		6	Orange-Brown mottled Silty CLAY, tr.sand	Topsoil
	2	4	5			(moist, medium, CL)	
		6	7		11	Orange-Brown and Gray Silty CLAY, some Fine Sand	
5	3	4	10			(moist, stiff, CL)	
		11	22		21	Becomes Red-Brown, contains tr.sand (v.stiff)	
	4	6	10				
		13	19		23		
	5	16	50/0.3		REF	Contains little f-c Sand, tr.gravel, tr.boulder fragments	REF = Sample Spoon
10						(hard)	Refusal
	6	10	15			Contains some f-c Sand	
		23	26		38		
15							
	7	9	20				No Recovery Sample #7
		21	23		41		
20							
	8	6	9			Becomes Brown-Gray (v.stiff)	
		15	17		24		
25							
	9	5	4			Contains some f-c Sand (stiff)	
		7	11		11		
30							
	10	1	3			Brown Silty CLAY, tr.sand, numerous Silt partings and	
		8	10		11	seams (moist-wet, stiff, CL)	
35							
	11	23	31	50/0.4	REF	Brown f-c SAND and Silt, tr.gravel, tr.shale	
						(moist, v.compact, SM)	
							NQ '2' Size Rock Core
40							RUN #1: 38.5' - 43.5'

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2014
FINISH 1/17/2014
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-31
SURF. ELEV 592.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
						Gray SHALE Rock, medium hard, slightly weathered to sound, laminated to bedded, occasional gypsum partings and seams	REC = 75% RQD = Approx. 25%
45						Boring Complete at 43.5'	No free standing water reading obtained at boring completion.
50							
55							
60							
65							
70							
75							
80							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/31/2014
FINISH 1/31/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-32
SURF. ELEV 594.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 3" Topsoil
		2	2		5	Brown-Black Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	4	3				
		3	5		6		
5	3	5	8			Red-Brown Clayey SILT, tr.sand (moist v.stiff, ML)	
		10	13		18		
	4	6	7				
		9	10		16		
	5	8	10			(moist-wet)	
10		11	12		21		
	6	7	10			Contains tr.gravel	
		13	15		23		
15							
	7	6	12			Becomes Brown	
		12	16		24		
20							
	8	5	7			Brown Silty CLAY, tr.sand (moist-wet, v.stiff, CL)	
		11	10		18		
25							
	9	17	28			Brown-Gray f-m SAND and Silt, tr.gravel (moist, v.compact, SM)	
		27	29		55		REF = Sample Spoon Refusal
30							
	10	50/0.4			REF	Gray-Brown SHALE Rock fragments (moist)	
						Boring Complete with Sample Spoon Refusal at 30.4' and Auger Refusal at 30.5'	No free standing water encountered at boring completion.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/24/2014
FINISH 1/24/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-33
SURF. ELEV 592.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	1			TOPSOIL	
		1	1		2	Red-Brown and Black Clayey SILT, little f-c Sand	
	2	6	5			(moist, FILL)	
		5	5		10	Brown Silty CLAY, tr.sand (moist, stiff, CL)	
5	3	2	4			Red-Brown f-c SAND, some-and Silt, tr.gravel	
		7	7		11	(moist-wet, firm, SM)	
	4	10	10			Red-Brown Clayey SILT, some-and f-c Sand, little f-c	
		12	13		22	Gravel (moist, v.stiff, ML)	
	5	11	13				
10		12	14		25	Contains little f-c Sand	
	6	8	11				
		12	15		23		
15							
	7	8	14				
		13	13		27		
	8	22	34				
20		38	27		72	Becomes Brown (hard)	
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/12/2013
FINISH 12/12/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-34
SURF. ELEV 593.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	3			TOPSOIL	Driller notes approx. 12" Topsoil
		4	4		7	Red-Brown and Black Silty CLAY, tr.sand (moist, FILL)	
	2	11	4			Brown Clayey SILT, tr.sand (moist, stiff, ML)	
		5	6		9		
5	3	6	8			Red-Brown Silty CLAY, tr.sand, occasional Silt	
		7	7		15	partings (moist, stiff, CL)	
	4	10	7			Red-Brown Clayey SILT, tr.-little f-c Sand, tr.gravel	
		8	12		15	(moist, stiff, ML)	
	5	10	12				
10		13	13		25	(v.stiff)	
	6	15	10				
		12	15		22		
15							
	7	11	12			Gray-Brown f-c SAND and Clayey Silt, little f-c Gravel	
		15	17		27	(moist, firm, SC-SM)	
20							
	8	7	7				
		15	18		22		
25							
	9	41	50/0.3		REF	Brown-Gray f-m SAND and Silt, tr.gravel	REF = Sample Spoon Refusal
						(moist, v.compact, SM)	
30							
	10	50/0.4			REF		
						Boring Complete with Sample Spoon Refusal and Auger Refusal at 31.4'	No free standing water encountered at boring completion.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/13/2013
FINISH 12/13/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-35
SURF. ELEV 593.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	3			TOPSOIL	Driller notes approx. 7" Topsoil
		3	2		6	Orange-Brown and Gray Mottled Clayey SILT, tr.sand (moist, medium, ML)	
	2	3	3				
		4	5		7	Becomes Brown	
5	3	7	8			Red-Brown Silty CLAY, tr.sand (moist, v.stiff, CL)	
		11	11		19		
	4	10	10				
		9	11		19		
	5	6	10			Red-Brown Clayey SILT, little f-c Sand (moist, v.stiff, ML)	
10		11	13		21		
	6	7	12				
		14	16		26		
15							
	7	11	13			Contains some f-c Sand, little Gravel	
		15	15		28		
20							
	8	50/0.4			REF	Red-Brown f-m SAND and Silt, tr.gravel (moist, v.compact, SM)	No Recovery Sample #8
							REF = Sample Spoon Refusal
25							
	9	39	50/0.1		REF	Becomes Brown-Gray, contains tr.boulder fragments (v.compact)	
30							
	10	50/0.2			REF		
						Boring Complete with Sample Spoon Refusal at 30.2' and Auger Refusal at 32.5'	No free standing water reading obtained at boring completion.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/30/2014
FINISH 1/30/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-36
SURF. ELEV 593.3' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	Driller notes approx. 3" Topsoil
		3	3		6	Brown Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	6	6			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		7	8		13		
5	3	5	6				
		5	7		11		
	4	7	7				
		8	7		15		
	5	6	5			Red-Brown Clayey SILT, tr.-little f-c Sand	
10		8	12		13	(moist, stiff, ML)	
	6	12	15			(hard)	
		17	19		32		
15							
	7	15	17			Becomes Brown	
		21	18		38		
20							
	8	5	5			Brown-Gray f-m SAND, some-and Silt, tr.gravel	
		7	31		12	(moist, firm, SM)	
25							
	9	18	21			(compact)	
		27	41		48		REF = Sample Spoon Refusal
30							
	10	50/0.4			REF	Brown-Gray SHALE Rock fragements (wet)	
						Boring Complete with Sample Spoon Refusal at 30.4' and Auger Refusal at 31.0'	Free standing water recorded at 28.0' at boring completion.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/16/2014
FINISH 1/17/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-37
SURF. ELEV 592.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	2			TOPSOIL	Driller notes approx. 8" Topsoil
		3	4		5	Brown-Black Silty CLAY, tr.sand (moist, FILL)	
	2	4	4				
		5	6		9		
5	3	3	6			Red-Brown Silty CLAY, tr.sand, occasional Silt	
		8	12		14	partings (moist, stiff, CL)	
	4	10	12			Red-Brown Clayey SILT, tr.sand (moist, v.stiff, ML)	
		15	17		27		
	5	9	14			Contains some f-c Sand (hard)	
10		17	18		31		
	6	10	13			(v.stiff)	
		15	14		28		
15							
	7	29	50/0.4		REF	Gray-Brown f-m SAND and Silt, tr.gravel, tr.boulder fragments (moist, v.compact, SM)	REF = Sample Spoon Refusal
20							
	8	50/0.4			REF		No Recovery Sample #9
	9	50/0.0			REF		
						Boring Complete with Sample Spoon and Auger Refusal at 22.5'	Free standing water recorded at 20.0' at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/23/2014
FINISH 1/23/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-38
SURF. ELEV 592.4' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			Black-Brown Clayey SILT, little f-c Sand, tr.gravel	
		3	3		6	(moist, FILL)	
	2	2	4			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		5	5		9		
5	3	3	5			(moist-wet)	
		8	12		13		
	4	13	14			(v.stiff)	
		13	15		27		
	5	17	14				
10		7	10		21		
	6	2	4				
		6	7		10		
15	7	5	17			Brown-Gray Clayey SILT, some f-c Sand, tr.gravel	
		26	24		43	(moist, hard, ML)	
20	8	8	17			Brown-Gray f-c SAND, some-and Silt, tr.gravel	
		21	19		38	(moist, compact, SM)	
25						Boring Complete with Auger Refusal at 24.0'	No free standing water encountered at boring completion.
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/16/2014
FINISH 1/16/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-39
SURF. ELEV 592.0' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 4" Topsoil
		2	3		5	Brown-Black Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	7	9				
		10	10		19	Brown Silty CLAY, tr.sand (moist, v.stiff, CL)	
5	3	6	7				
		10	8		17	Becomes Red-Brown	
	4	4	7				
		8	9		15	(stiff)	
	5	10	9			Contains occasional Silt seams (v.stiff)	
10		8	9		17		
	6	4	5			Red-Brown f-c SAND and Silt, tr.gravel	
		5	9		10	(moist-wet, loose, SM)	
							REF = Sample Spoon Refusal
15							
	7	21	38			Brown-Gray f-m SAND and Silt, tr.gravel, tr.boulder	
		41	49		79	fragments (moist, v.compact, SM)	
	8	50/0.1			REF		
20						Boring Complete at 18.1'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/29/2014
FINISH 1/29/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-40
SURF. ELEV 588.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	
		2	2		5	Black Organic Silty CLAY, tr.sand (moist, FILL)	
	2	3	3			Becomes Red-Brown	
		6	7		9		
5	3	4	7				No Recovery Sample #3
		10	11		17		
	4	8	8			Red-Brown Silty CLAY, tr.-little f-c Sand	
		7	10		15	(moist, stiff, CL)	
	5	17	15			(hard)	
10		16	18		31		
	6	15	18			Red-Brown f-m SAND and Silt, tr.gravel	
		21	19		39	(moist, compact, SM)	
15							
	7	18	21			Becomes Brown-Gray	
		27	33		48		
20							
	8	22	23			(v.compact)	
		35	50/0.4		58		
25						Boring Complete with Sample Spoon Refusal at 21.9' and Auger Refusal at 22.0'	Free standing water recorded at 19.0' at boring completion.
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/28/2014
FINISH 1/28/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-41
SURF. ELEV 590.3' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	4	5			TOPSOIL	Driller notes approx. 3" Topsoil
		7	10		12	Brown Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	5	4			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		5	4		9		
5	3	5	5			Contains occasional Silt partings	
		7	6		12		
	4	14	9			(v.stiff)	
		7	8		16		
	5	4	5			(moist-wet, stiff)	
10		5	7		10		
	6	3	4			Contains little f-c Sand, tr.gravel	
		5	8		9		
15							
	7	17	31			Brown-Gray f-m SAND, some-and Silt, tr.gravel	
		47	50/0.3		78	(moist, v.compact, SM)	
	8	18	28				
20		35	44		63		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 12/17/2013
FINISH 12/17/2013
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-42
SURF. ELEV 601.1' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	1			TOPSOIL	Driller notes approx. 13"
		3	3		4	Black Clayey SILT, little Fine Sand (moist, FILL)	Topsoil
	2	5	6			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		7	9		13		
5	3	9	8			(v.stiff)	
		8	10		16		
	4	12	8				No Recovery Sample #4
		9	9		17		
	5	8	11				
10		12	13		23	(moist-wet)	
	6	10	10				
		12	12		22		
15							
	7	9	9				
		10	10		19	Becomes Red-Brown, contains little f-c Sand	
20							
	8	8	9				
		8	12		17		
						Boring Complete at 22.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: T. FARRELL

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/30/2014
FINISH 1/31/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-43
SURF. ELEV 593.2' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	4			TOPSOIL	Driller notes approx. 6" Topsoil
		5	6		9	Black Organic Clayey SILT, little f-c Sand (moist, FILL)	
	2	4	6			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		7	7		13		
5	3	5	8			Becomes Red-Brown (v.stiff)	
		10	12		18		
	4	6	6			(stiff)	
		9	14		15		
	5	2	6			Red-Brown Clayey SILT, little-some f-c Sand, tr.-little	
10		7	11		13	f-c Gravel (moist, stiff, ML)	
	6	5	5				
		8	9		13		
15							
	7	6	27			Becomes Brown-Gray (hard)	
		48	50		75		
20							
	8	8	13			Contains little f-c Sand (v.stiff)	
		12	15		25		
25							
	9	10	12				
		16	17		28		Free standing water recorded at 20.0' prior to coring.
30							NQ '2' Size Rock Core
						Gray SHALE Rock, medium hard, sound, thinly bedded to bedded, grades predominantly gypsum at approximately 34.0'	RUN #1: 30.0' - 35.0' REC = 60% RQD = 40%
35							
						Boring Complete at 35.0'	Free standing water recorded at 10.0' after coring.
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/16/2014
FINISH 1/16/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-44
SURF. ELEV 592.7' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 6" Topsoil
		4	7		7	Red-Brown and Black Silty CLAY, tr.sand (moist, FILL)	
	2	7	8			Red-Brown Clayey SILT, tr.sand, occasional Fine Sand	
		4	10		12	lenses (moist, stiff, ML)	
5	3	5	8			Red-Brown Silty CLAY, tr.sand (moist, v.stiff, CL-CH)	
		10	12		18		
	4	11	14				
		17	8		31	Contains occasional Silt seams (hard)	
	5	11	10			(v.stiff)	
10		8	10		18		
	6	20	14				Poor Recovery Sample #6
		15	17		29		
15							
	7	18	40			Brown-Gray f-m SAND, some Silt, tr.gravel, tr.boulder	REF = Sample Spoon
		39	42		79	fragments (moist, v.compact, SM)	Refusal
	8	44	50/0.2		REF		
20						Boring Complete with Sample Spoon Refusal at 18.7'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550SE

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 2/4/2014
FINISH 2/4/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-45
SURF. ELEV 591.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	3	3			TOPSOIL	Driller notes approx. 7" Topsoil
		5	5		8	Brown-Black Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	4	5			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		6	9		11		
5	3	3	6				
		9	10		15		
	4	5	8			(v.stiff)	
		12	15		20		
	5	3	4			(wet, medium)	
10		4	3		8		
	6	3	3				
		4	5		7		
15							
	7	4	4				
		4	5		8		
20							REF = Sample Spoon Refusal
	8	50/0.4			REF	Gray f-m SAND, some-and Silt, tr.gravel (moist, SM)	
25	9	50/0.0			REF		NQ '2' Size Rock Core
						Gray SHALE Rock, medium hard, sound, thinly bedded to bedded, occasionally gypsum seams.	RUN #1: 24.5' - 29.5' REC = Approx. 50% RQD = Approx. 20%
30						Boring Complete at 29.5'	Free standing water recorded at 15.0' prior to coring. Free standing water recorded at 10.0' after coring.
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/28/2014
FINISH 1/28/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-46
SURF. ELEV 591.6' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	4	4			TOPSOIL	
		4	4		8	Black Organic Silty CLAY, tr.sand (moist, FILL)	
	2	4	6			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL-CH)	
		7	8		13		
5	3	7	7				
		6	7		13		
	4	11	10			(v.stiff)	
		12	13		22		
	5	11	13			Contains tr.gravel	
10		12	11		25		
	6	2	4			(moist-wet, medium)	
		4	4		8		
15							
	7	10	20			Red-Brown f-m SAND and Silt, tr.gravel	
		38	33		58	(moist, v.compact, SM)	
	8	21	33				
20		42	44		75		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: S. WOLKIEWICZ

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/31/2014
FINISH 2/3/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-47
SURF. ELEV 594.9' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	4	5			TOPSOIL	Driller notes approx. 6" Topsoil
		6	6		11	Red-Brown Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	3	7			Red-Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		8	10		15		
5	3	5	5			Red-Brown Clayey SILT, little f-c Sand, tr.gravel	
		9	12		14	(moist, stiff, ML)	
	4	4	8			(v.stiff)	
		10	14		18		
	5	6	10			Red-Brown Silty CLAY, tr.-little f-c Sand, tr.gravel	
10		20	23		30	(moist, v.stiff, CL)	
	6	8	15			Red-Brown Clayey SILT, tr.-little f-c Sand	
		25	29		40	(moist, hard, ML)	
15							
	7	15	19				
		31	25		50		
20							
	8	12	21				
		26	29		47		
25							
	9	17	22			Contains some f-c Sand	
		24	24		46		REF = Sample Spoon Refusal
30							
	10	12	42	50/0.3	REF	Gray f-c SAND, some Silt, tr.gravel, tr.shale	
						(moist, v.compact, SM)	Free standing water recorded at 20.0' prior to coring.
35							
						Gray SHALE Rock, medium hard, sound, thinly bedded to bedded, grade to predominantly gypsum at approximately 36.5'	RUN #1: 34.0' - 39.0' REC = 100% RQD = 64%
40						Boring Complete at 39.0'	

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 2/3/2014
FINISH 2/3/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-48
SURF. ELEV 595.8' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	1	2			TOPSOIL	Driller notes approx. 3" Topsoil
		5	5		7	Brown Silty CLAY, tr.sand, tr.organics (moist, FILL)	
	2	3	4			Brown Silty CLAY, tr.sand (moist, stiff, CL)	
		5	6		9		
5	3	4	13			Becomes Red-Brown, contains occasional Silt partings	
		16	17		29	(v.stiff)	
	4	6	10			Red-Brown Silty CLAY, little f-c Sand, tr.gravel	
		18	18		28	(moist, v.stiff, CL)	
	5	3	13				
10		24	26		37		
	6	5	15			(hard)	
		27	30		42		
15							
	7	7	18			Becomes Brown-Gray	
		26	28		44		
20							
	8	6	11				
		28	30		39		
25							
	9	4	10			Contains little-some f-c Sand (v.stiff)	
		19	25		29		REF = Sample Spoon Refusal
30						Brown-Gray f-c SAND and Silt, tr.gravel, tr.shale	
	10	16	50/0.4		REF	(moist, SM)	
						Boring Complete with Sample Spoon Refusal at 30.9' and Auger Refusal at 31.0'	No free standing water encountered at boring completion.
35							2" PVC groundwater observation well installed at boring completion. Refer to installation log for details.
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

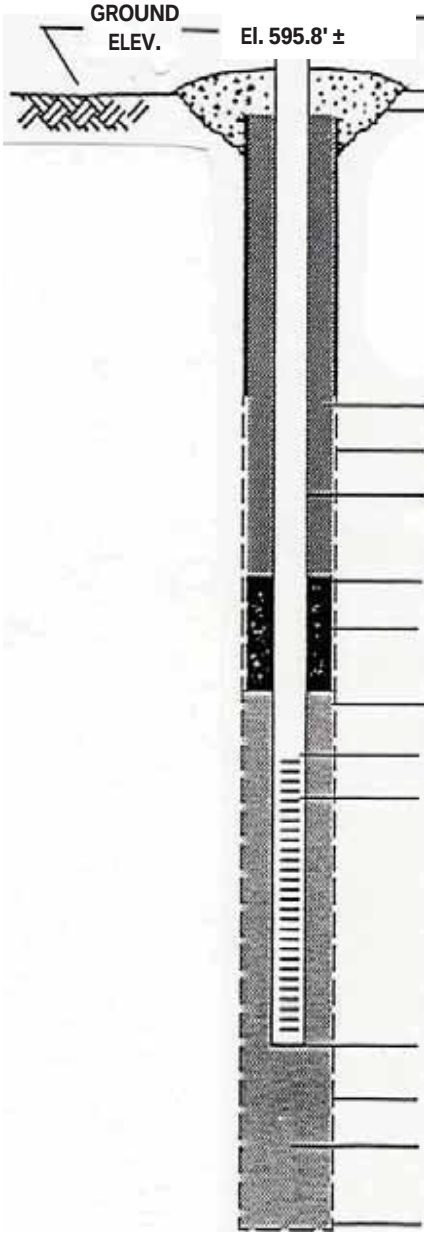
DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

MONITORING WELL COMPLETION RECORD

WELL NUMBER: B-48	
PROJECT NAME: WESTWOOD CC	DRILLING METHOD: ASTM D1586 USING HSA
PROJECT NUMBER: BE-13-192	GEOLOGIST: N/A
DRILLER: A. JAKUBCZAK	INSTALLATION DATE(S): 2/3/2014



RISER STICK-UP:	0.9' El. 596.7' ±
TYPE OF SURFACE SEAL:	NONE
TYPE OF BACKFILL:	AUGER CUTTINGS
BOREHOLE DIAMETER:	+/- 8"
I.D. OF RISER PIPE:	2.0"
TYPE OF RISER PIPE:	PVC
DEPTH OF SEAL:	22.0' El. 573.8' ±
TYPE OF SEAL:	BENTONITE CHIPS
DEPTH OF SAND PACK:	24.0' El. 571.8' ±
DEPTH OF TOP OF SCREEN:	25.0' El. 570.8' ±
TYPE OF SCREEN:	PVC
SLOT SIZE X LENGTH:	.010 X 5.0'
I.D. OF SCREEN:	2.0"
TYPE OF SAND PACK:	MORIE "O" FILTER SAND
DEPTH BOTTOM OF SCREEN:	30.0' El. 565.8' ±
DEPTH BOTTOM OF SAND PACK:	30.0' El. 565.8' ±
TYPE OF BACKFILL BELOW OBSERVATION WELL:	NATIVE SOILS
ELEVATION/ AUGERED DEPTH:	31.0' El. 564.8' ±

DATE
START 2/4/2014
FINISH 2/4/2014
SHEET 1 OF 1

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-49
SURF. ELEV 593.5' ±
G.W. DEPTH See Notes

PROJECT: PROPOSED IMPROVEMENTS
PROJ. NO.: BE-13-192
LOCATION: WESTWOOD COUNTRY CLUB
AMHERST, NEW YORK

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	1	2	3			TOPSOIL	Driller notes approx. 5" Topsoil
		4	4		7	Black Organic Clayey SILT, tr.-little f-c Sand (moist-wet, FILL)	
	2	3	5				
		5	7		10	Brown-Black Silty CLAY, tr.sand (moist, FILL)	
5	3	5	9			Red-Brown Clayey SILT, tr.sand (moist, v.stiff, ML)	
		10	13		19		
	4	4	12				
		14	16		26		
	5	6	9			Becomes Brown-Gray	
10		16	17		25		
	6	5	14			Contains tr.gravel (hard)	
		18	21		32		
15							
	7	8	12				
		20	27		32		
	8	10	16				
20		28	31		44		
						Boring Complete at 20.0'	No free standing water encountered at boring completion.
25							
30							
35							
40							

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: A. JAKUBCZAK

DRILL RIG TYPE : CME-550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

APPENDIX B

LABORATORY TEST DATA

Western New York Office
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

Attached are the results of laboratory testing conducted on various samples from the above referenced project. Mr. John Danzer, representing Empire –Geo Services, Inc, chose samples contained in this report.

The testing conducted was as follows:

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil & Rock

ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Samples were received at the SJB Services, Inc. laboratory on January 21, 2014 where they were processed for testing.

If the reviewer should have any questions concerning this report, please do not hesitate to contact our office at any time.

SJB Services, Inc.

Paul Gregorczyk
Laboratory Manager

Western New York Office
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-033
SAMPLE LOCATION: B-1, S-3: 4' – 6'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
14.6 %	20	12	8

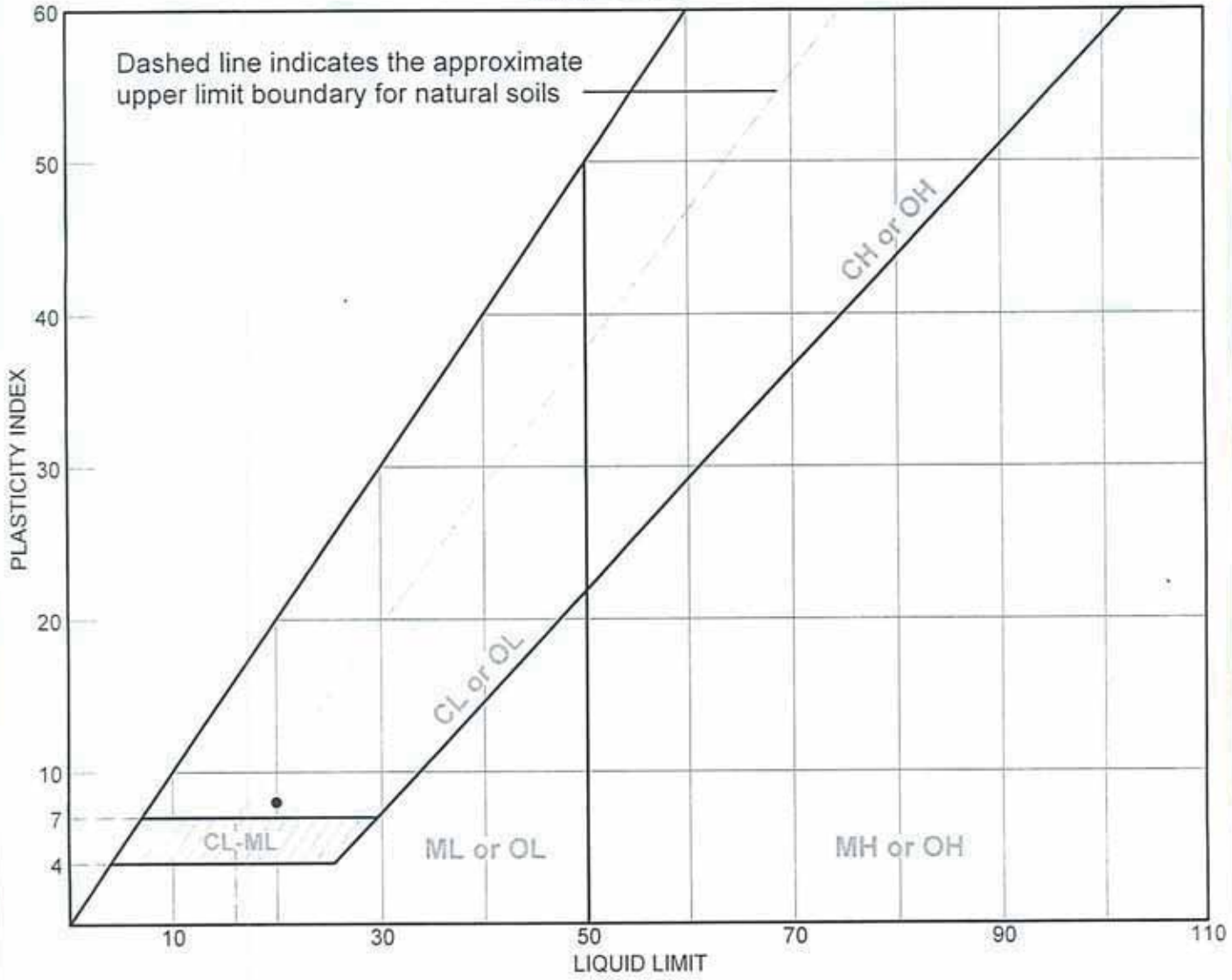
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 27.7 %
Value of Shrinkage Limit = 12
Value of Shrinkage Ratio = 2.02

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
¾"	100.0
½"	98.4
3/8"	97.6
¼"	95.8
#4	94.8
#10	91.9
#20	88.6
#40	85.2
#100	76.8
#200	57.8

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

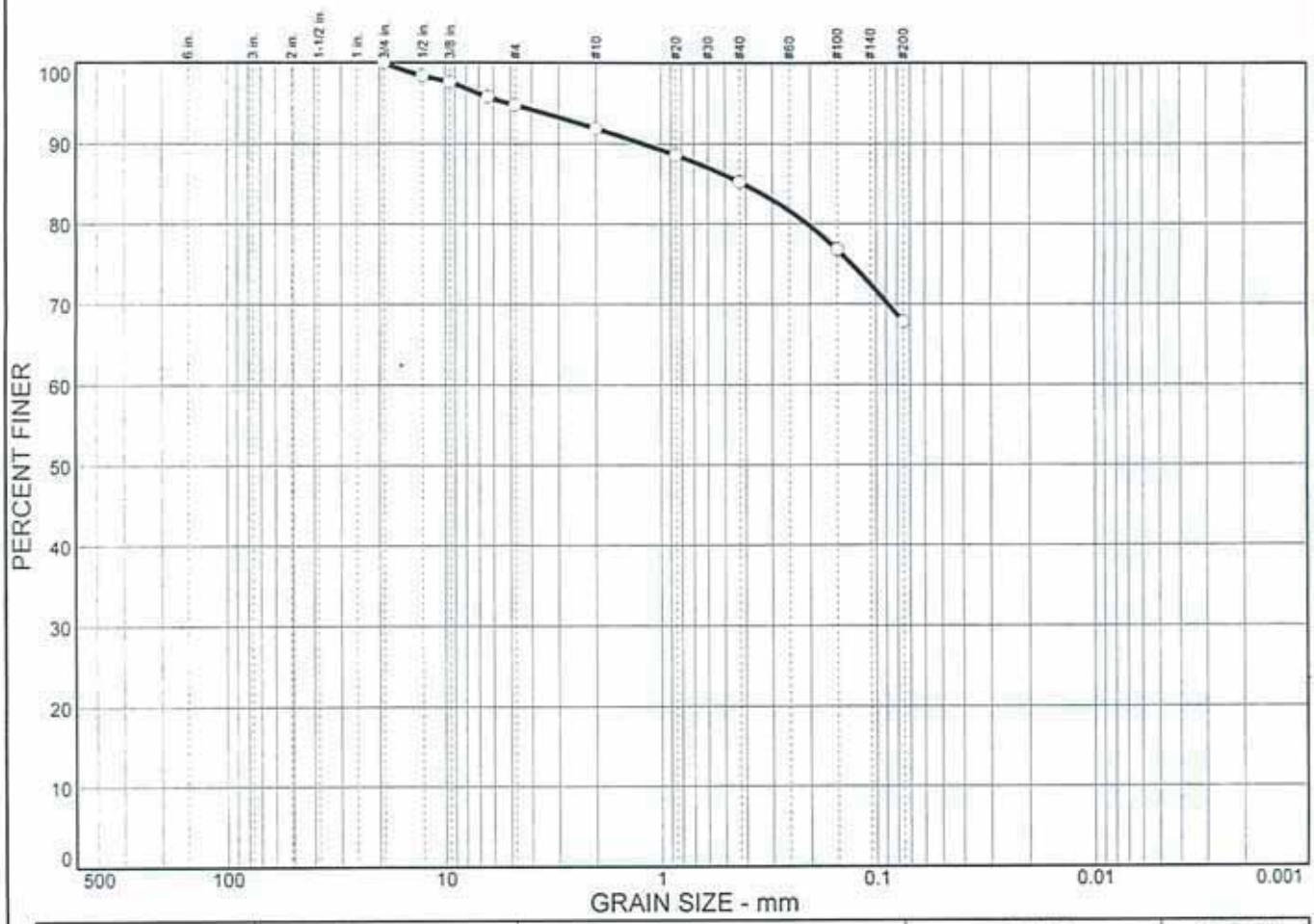


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-1	S-3	4' - 6'	14.6 %	12	20	8	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	5.2	27.0	67.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	98.4		
.375 in.	97.6		
.25 in.	95.8		
#4	94.8		
#10	91.9		
#20	88.6		
#40	85.2		
#100	76.8		
#200	67.8		

* (no specification provided)

Soil Description

B-1, S-3: 4' - 6'

Atterberg Limits

PL= 12 LL= 20 PI= 8

Coefficients

D_{85}= 0.411 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-033

Sample No.: S-3 **Source of Sample:** B-1 **Date:** 1-29-14
Location: B-1, S-3: 4' - 6' **Elev./Depth:** 4' - 6'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

Western New York Office
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-034
SAMPLE LOCATION: B-3, S-4: 6' – 8'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
14.8 %	24	13	11

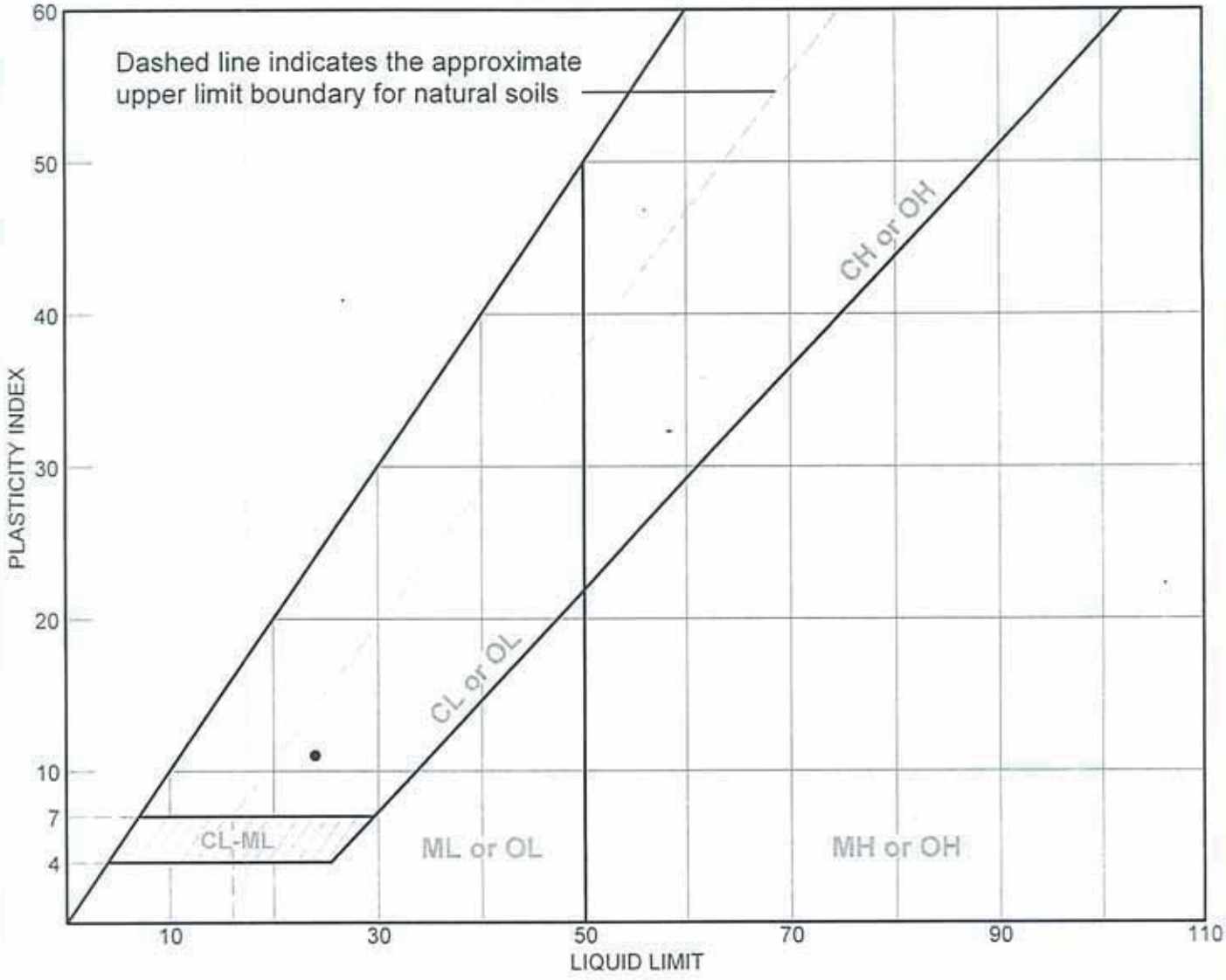
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 32.3 %
Value of Shrinkage Limit = 13
Value of Shrinkage Ratio = 1.94

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
½"	100.0
3/8"	98.8
¼"	98.3
#4	98.0
#10	97.2
#20	95.6
#40	94.0
#100	89.5
#200	83.2

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

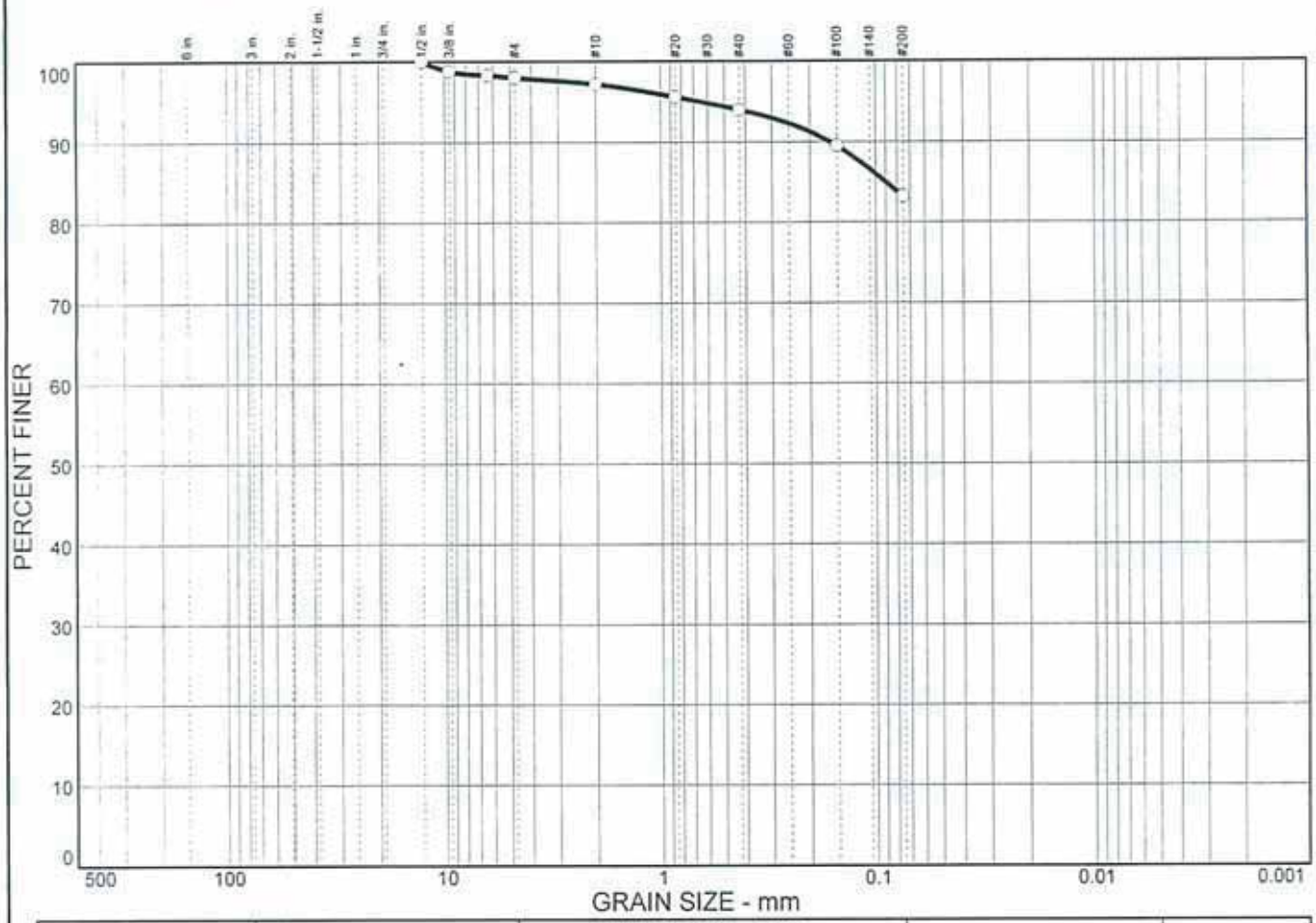


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-3	S-4	6' - 8'	14.8 %	13	24	11	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	2.0	14.8	83.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5 in.	100.0		
.375 in.	98.8		
.25 in.	98.3		
#4	98.0		
#10	97.2		
#20	95.6		
#40	94.0		
#100	89.5		
#200	83.2		

* (no specification provided)

Soil Description

B-3, S-4: 6' - 8'

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{85}= 0.0899 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-034

Sample No.: S-4 **Source of Sample:** B-3 **Date:** 1-29-14
Location: B-3, S-4: 6' - 8' **Elev./Depth:** 6' - 8'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-039
SAMPLE LOCATION: B-7, S-6: 10' – 12'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
12.6 %	24	12	12

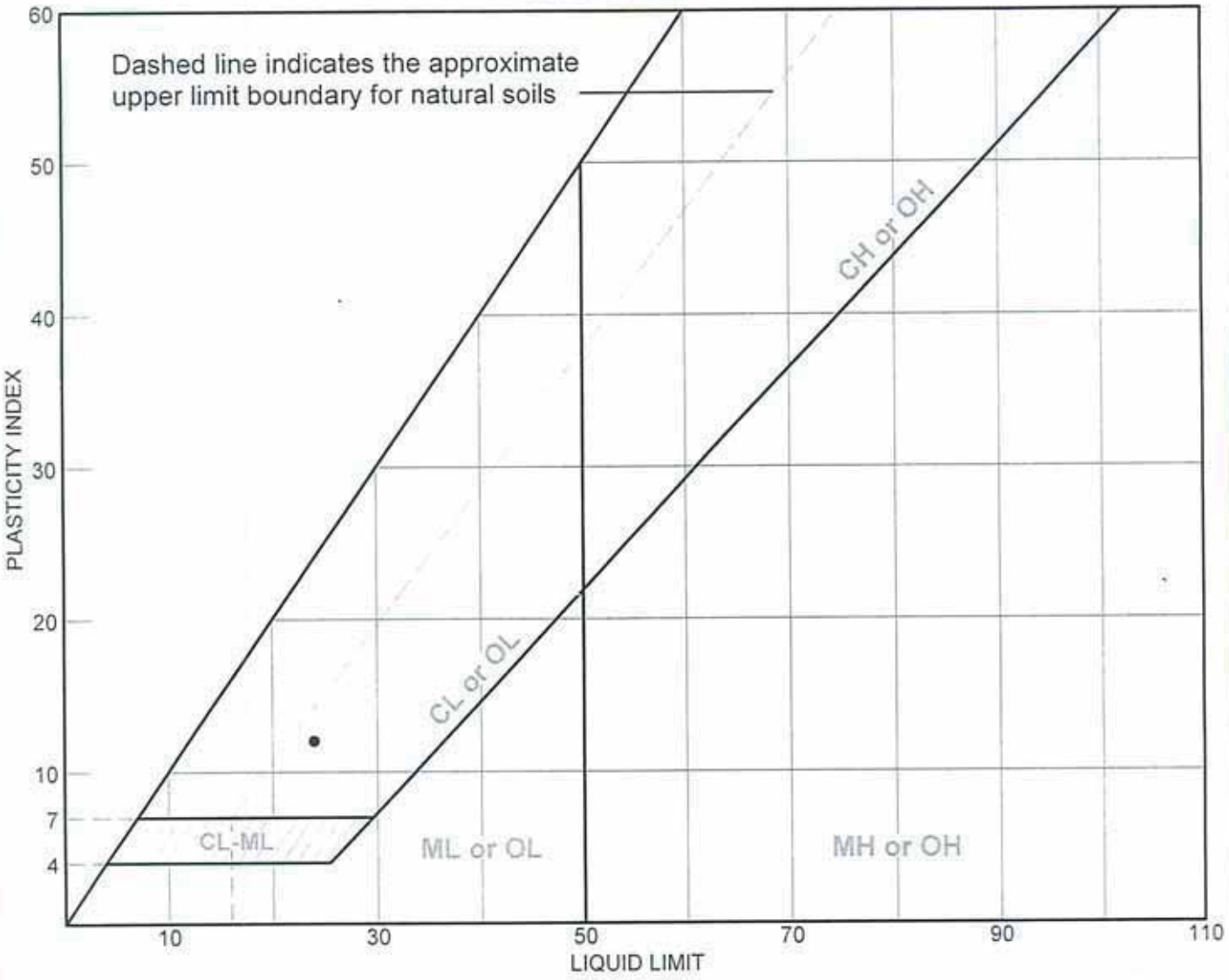
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 37.9 %
Value of Shrinkage Limit = 13
Value of Shrinkage Ratio = 1.93

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
¾"	100.0
½"	97.2
⅜"	95.9
¼"	92.5
#4	91.7
#10	89.1
#20	86.8
#40	85.0
#100	80.2
#200	74.3

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

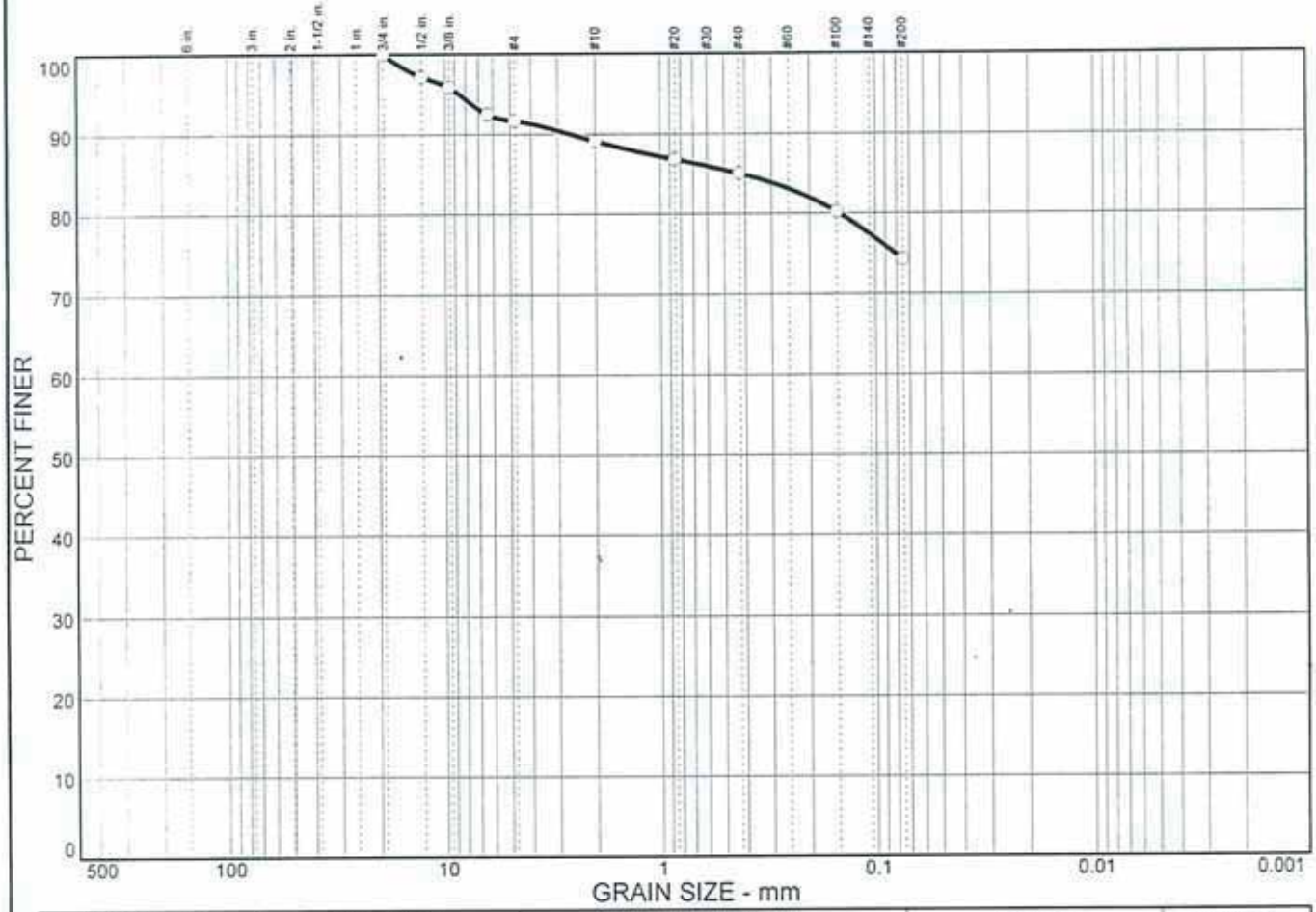


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-7	S-6	10' - 12'	12.6 %	12	24	12	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	8.3	17.4	74.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	97.2		
.375 in.	95.9		
.25 in.	92.5		
#4	91.7		
#10	89.1		
#20	86.8		
#40	85.0		
#100	80.2		
#200	74.3		

* (no specification provided)

Soil Description

B-7, S-6: 10' - 12'

Atterberg Limits

PL= 12 LL= 24 PI= 12

Coefficients

D_{85}= 0.425 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-039

Sample No.: S-6 **Source of Sample:** B-7 **Date:** 1-29-14
Location: B-7, S-6: 10' - 12' **Elev./Depth:** 10' - 12'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

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Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-040
SAMPLE LOCATION: B-14, S-4: 6' – 8'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
10.7 %	23	12	11

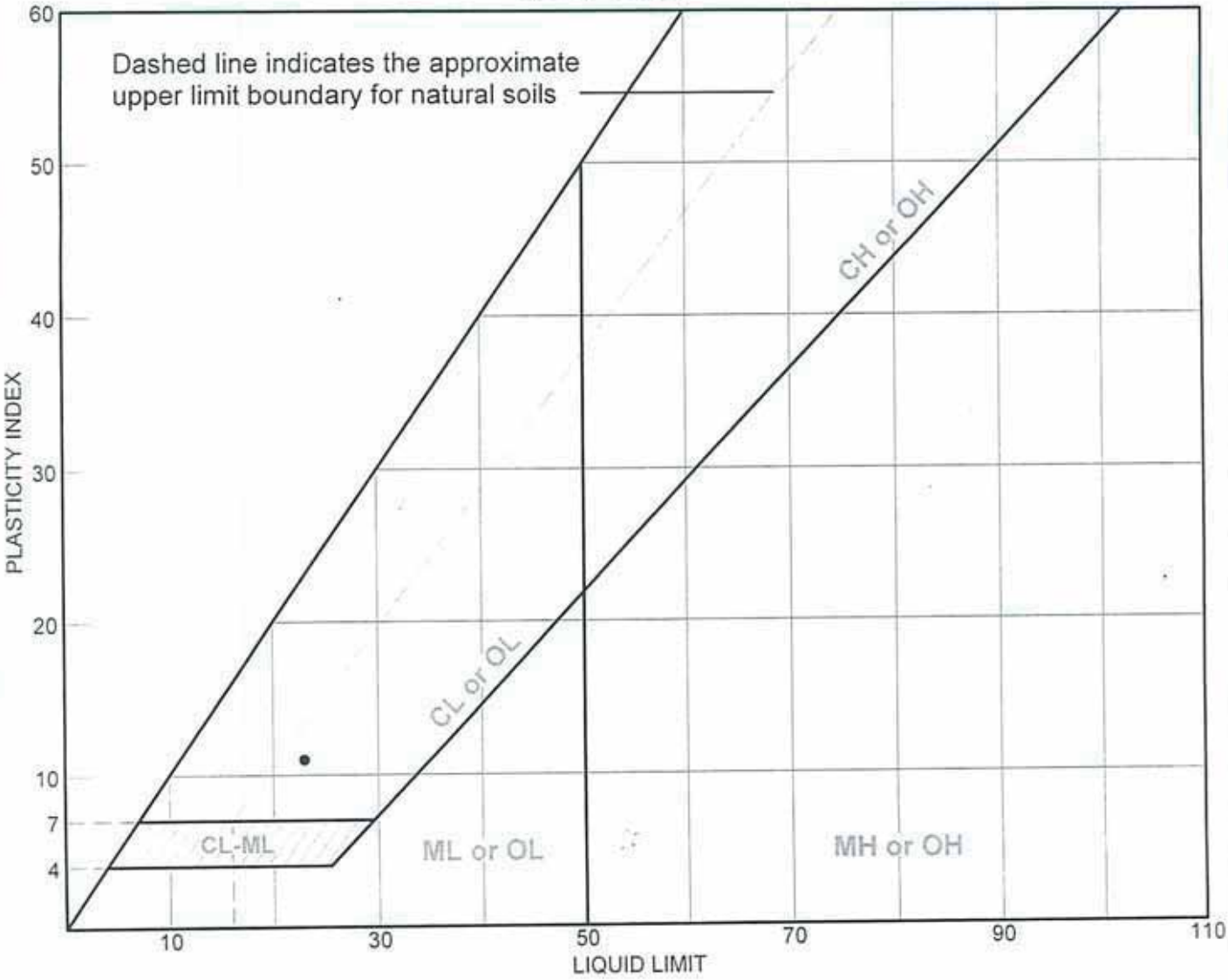
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 32.9 %
Value of Shrinkage Limit = 17
Value of Shrinkage Ratio = 1.93

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
¾"	100.0
½"	97.0
⅜"	95.3
¼"	93.2
#4	92.1
#10	89.4
#20	86.5
#40	84.1
#100	77.6
#200	70.1

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-14	S-4	6' - 8'	10.7 %	12	23	11	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	7.9	22.0	70.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	97.0		
.375 in.	95.3		
.25 in.	93.2		
#4	92.1		
#10	89.4		
#20	86.5		
#40	84.1		
#100	77.6		
#200	70.1		

* (no specification provided)

Soil Description

B-14, S-4: 6' - 8'

Atterberg Limits

PL= 12 LL= 23 PI= 11

Coefficients

D_{85}= 0.541 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=*

Remarks

SAMPLE NUMBER: 13-040

Sample No.: S-4 **Source of Sample:** B-14 **Date:** 1-29-14
Location: B-14, S-4: 6' - 8' **Elev./Depth:** 6' - 8'

SJB SERVICES, INC.

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-041
SAMPLE LOCATION: B-22, S-3: 4' – 6'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
26.5 %	52	22	30

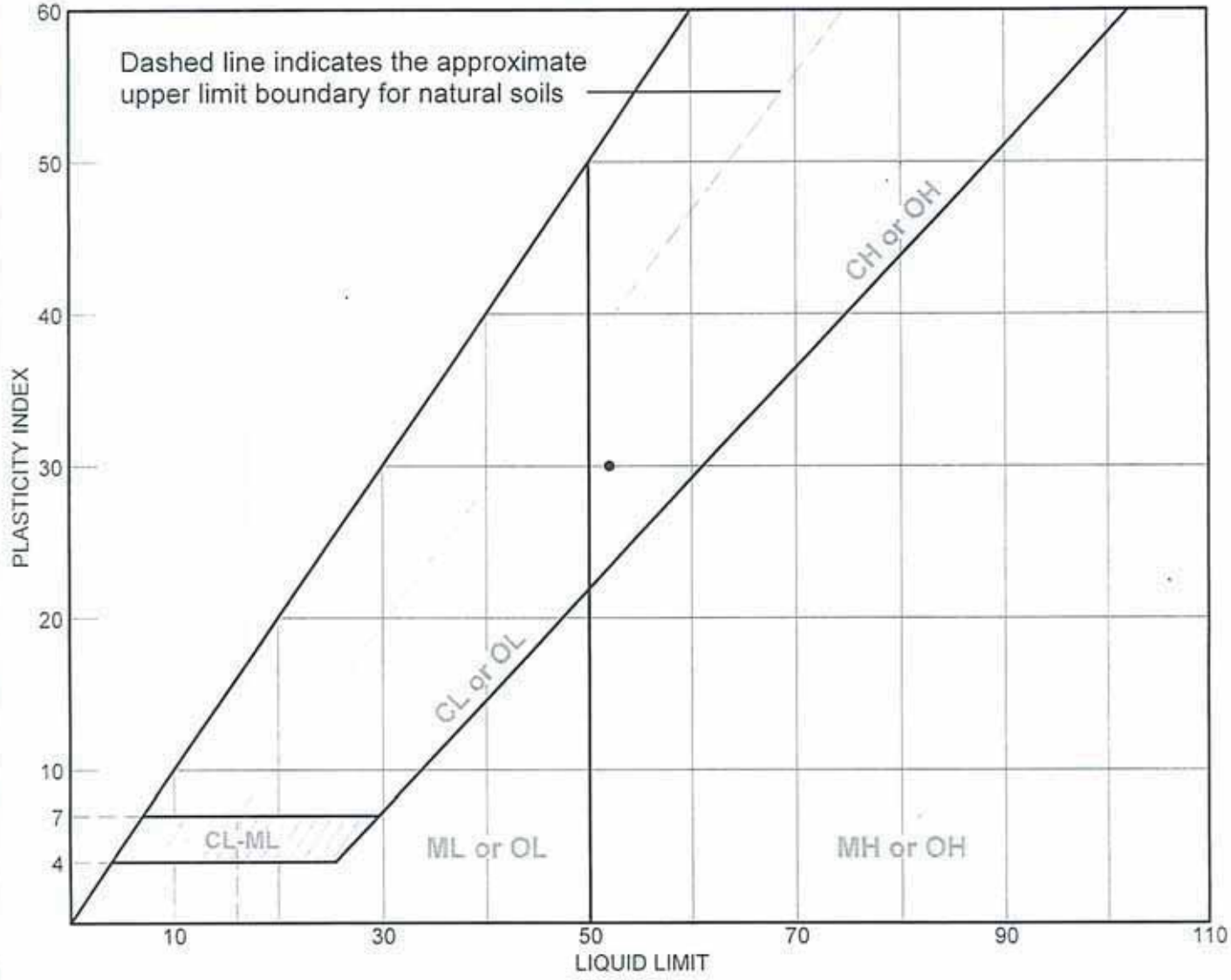
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 64.8 %
Value of Shrinkage Limit = 23
Value of Shrinkage Ratio = 1.69

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
#4	100.0
#10	100.0
#20	99.9
#40	99.8
#100	99.5
#200	99.2

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

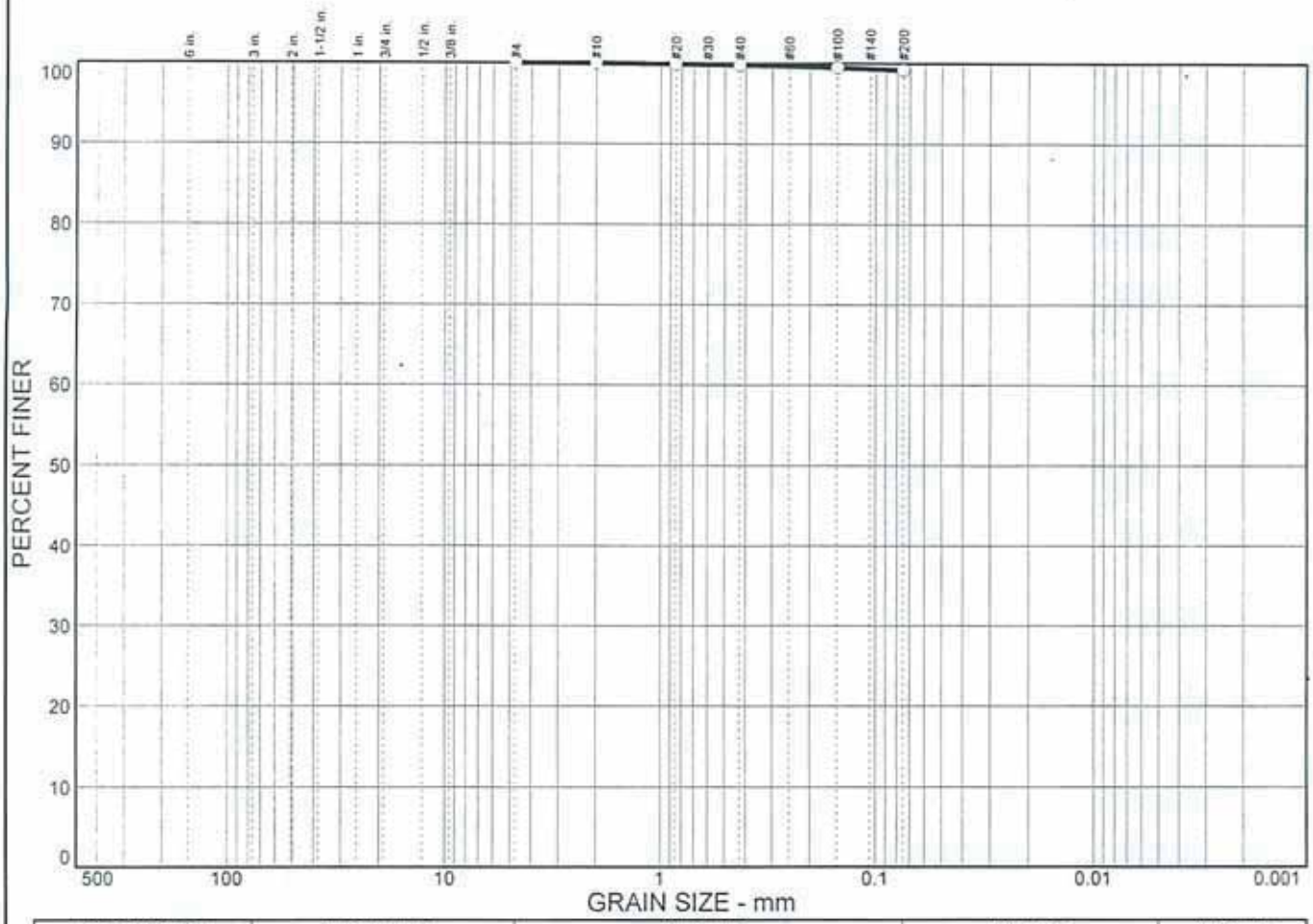


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-22	S-3	4' - 6'	26.5 %	22	52	30	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	0.8	99.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.8		
#100	99.5		
#200	99.2		

* (no specification provided)

Soil Description

B-22, S-3: 4' - 6'

Atterberg Limits

PL= 22 LL= 52 PI= 30

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-041

Sample No.: S-3 **Source of Sample:** B-22 **Date:** 1-29-14
Location: B-22, S-3: 4' - 6' **Elev./Depth:** 4' - 6'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
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Project No: BE-13-192

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **January 29, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-1

SAMPLE NUMBER: 14-047
SAMPLE LOCATION: B-35, S-7: 15' – 17'

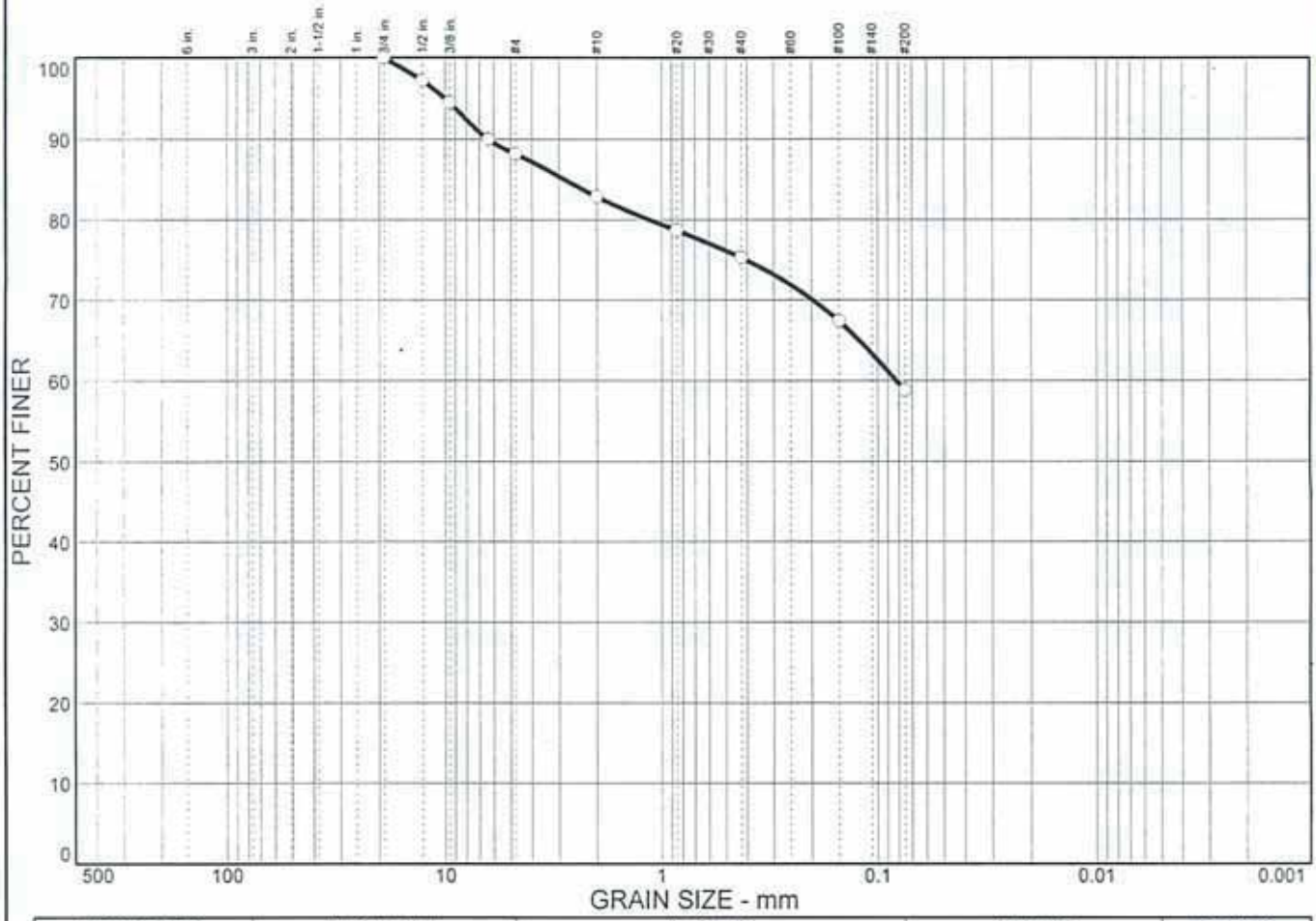
ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock

Moisture Content: 8.7 %

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
¾"	100.0
½"	97.2
3/8"	94.5
¼"	90.0
#4	88.2
#10	82.9
#20	78.7
#40	75.3
#100	67.4
#200	58.8

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	11.8	29.4	58.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	97.2		
.375 in.	94.5		
.25 in.	90.0		
#4	88.2		
#10	82.9		
#20	78.7		
#40	75.3		
#100	67.4		
#200	58.8		

* (no specification provided)

Soil Description

B-35, S-7: 15' - 17'

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 2.81 D_{60}= 0.0821 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-047

Sample No.: S-7 **Source of Sample:** B-35 **Date:** 1-29-14
Location: B-35, S-7: 15' - 17' **Elev./Depth:** 15' - 17'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 6, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

Attached are the results of laboratory testing conducted on various samples from the above referenced project. Mr. John Danzer, representing Empire –Geo Services, Inc, chose samples contained in this report.

The testing conducted was as follows:

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil & Rock

ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Samples were received at the SJB Services, Inc. laboratory on January 27, 2014 where they were processed for testing.

If the reviewer should have any questions concerning this report, please do not hesitate to contact our office at any time.

SJB Services, Inc.

Paul Gregorczyk
Laboratory Manager

Western New York Office
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 6, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-098
SAMPLE LOCATION: B-20, S-5: 8' – 10'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
23.3 %	37	17	20

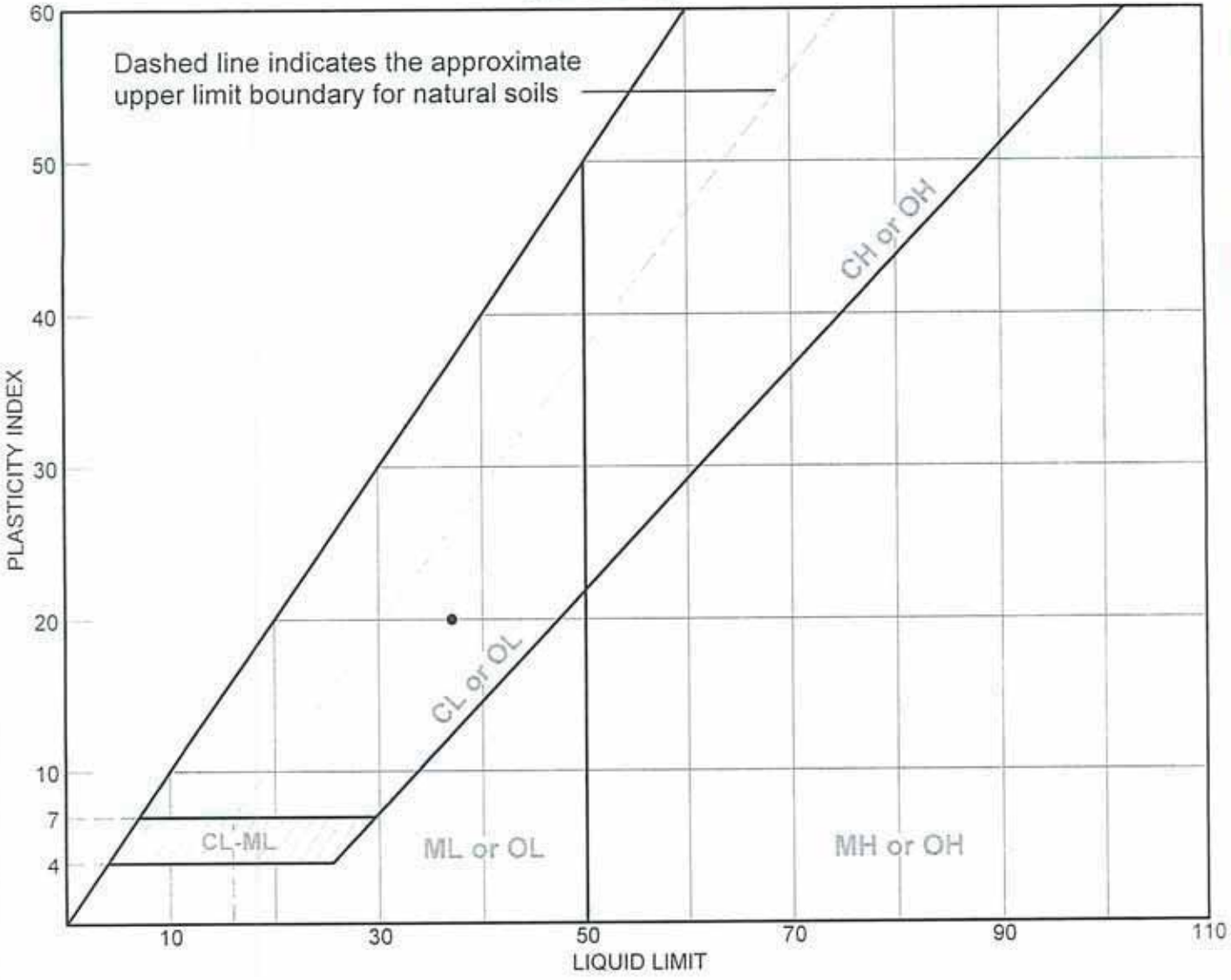
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 51.6 %
Value of Shrinkage Limit = 19
Value of Shrinkage Ratio = 1.81

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
#4	100.0
#10	99.8
#20	99.7
#40	99.5
#100	99.3
#200	99.0

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

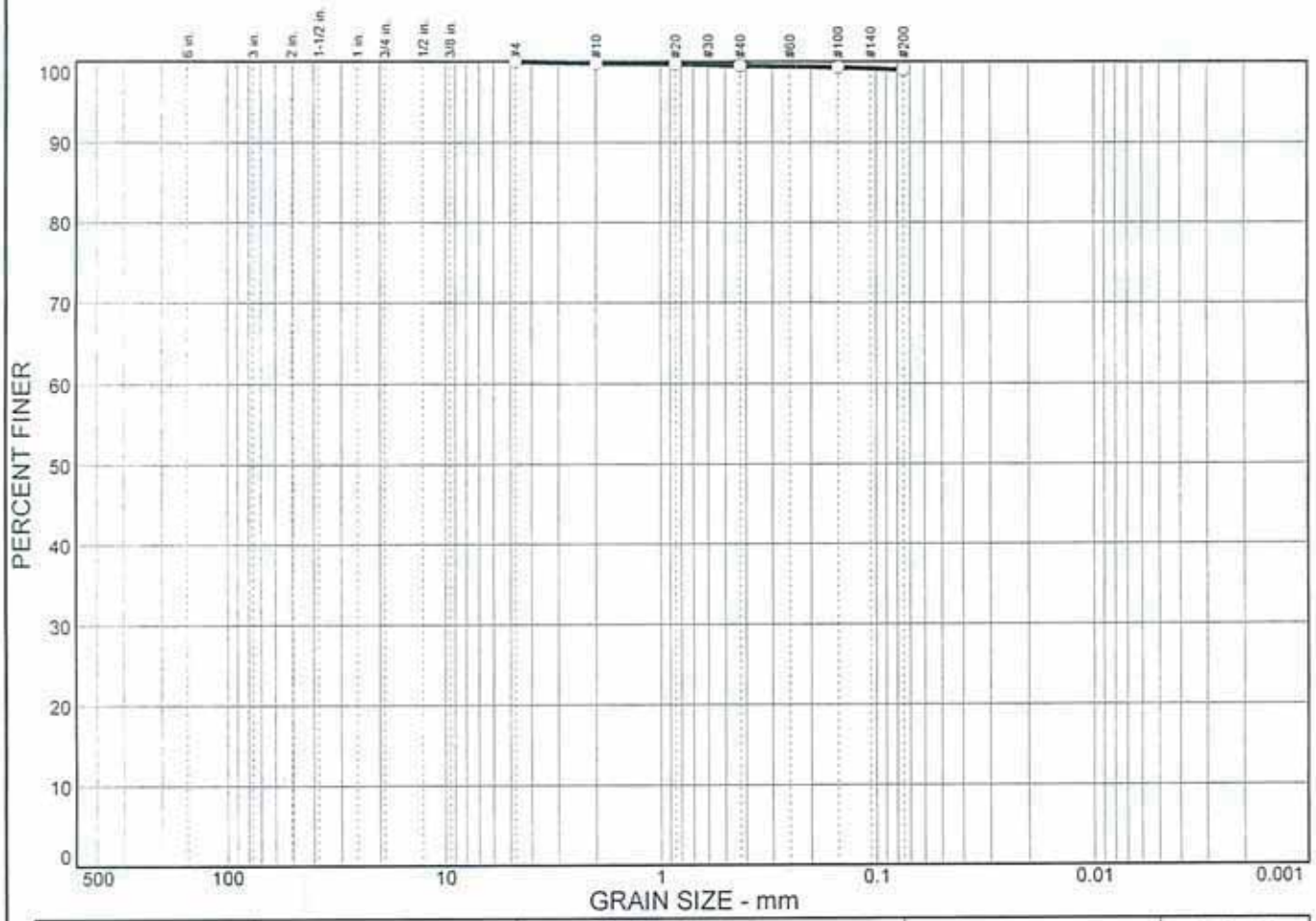


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-20	S-5	8' - 10'	23.3 %	17	37	20	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	1.0	99.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#20	99.7		
#40	99.5		
#100	99.3		
#200	99.0		

* (no specification provided)

Soil Description

B-20, S-5: 8' - 10'

Atterberg Limits

PL= 17 LL= 37 PI= 20

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-098

Sample No.: S-5 **Source of Sample:** B-20 **Date:** 2-6-14
Location: B-20, S-5: 8' - 10' **Elev./Depth:** 8' - 10'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 6, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-099
SAMPLE LOCATION: B-30, S-5: 8' – 10'

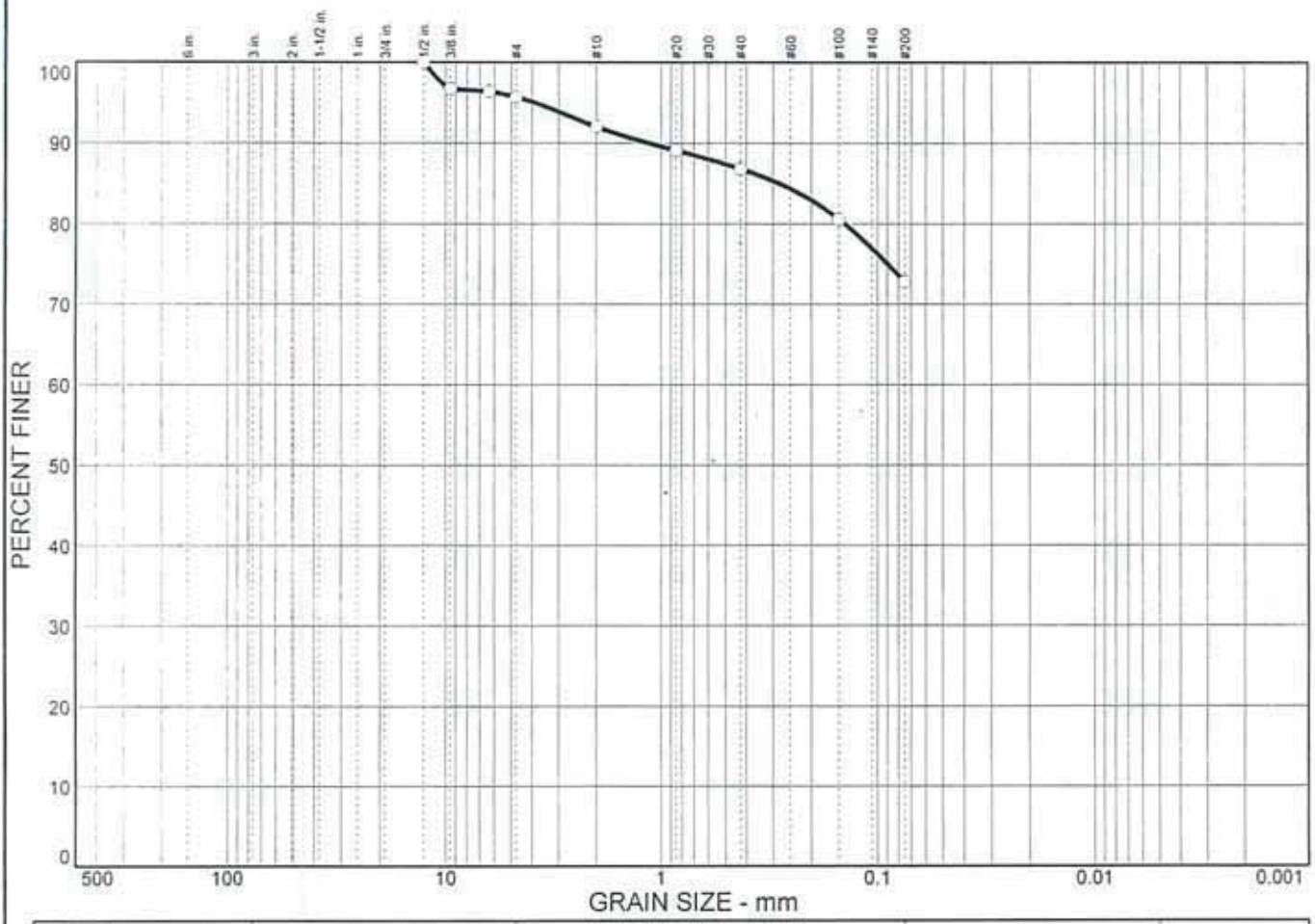
ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content = 11.4 %

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
½"	100.0
3/8"	96.7
¼"	96.4
#4	95.7
#10	92.0
#20	89.1
#40	86.8
#100	80.6
#200	72.8

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	4.3	22.9	72.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5 in.	100.0		
.375 in.	96.7		
.25 in.	96.4		
#4	95.7		
#10	92.0		
#20	89.1		
#40	86.8		
#100	80.6		
#200	72.8		

* (no specification provided)

Soil Description

B-30, S-5: 8' - 10'

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.282 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-099

Sample No.: S-5 **Source of Sample:** B-30 **Date:** 2-6-14
Location: B-30, S-5: 8' - 10' **Elev./Depth:** 8' - 10'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

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Fax: (716) 649-8051

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 6, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-100
SAMPLE LOCATION: B-44, S-3: 4' – 6'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
21.3 %	59	22	37

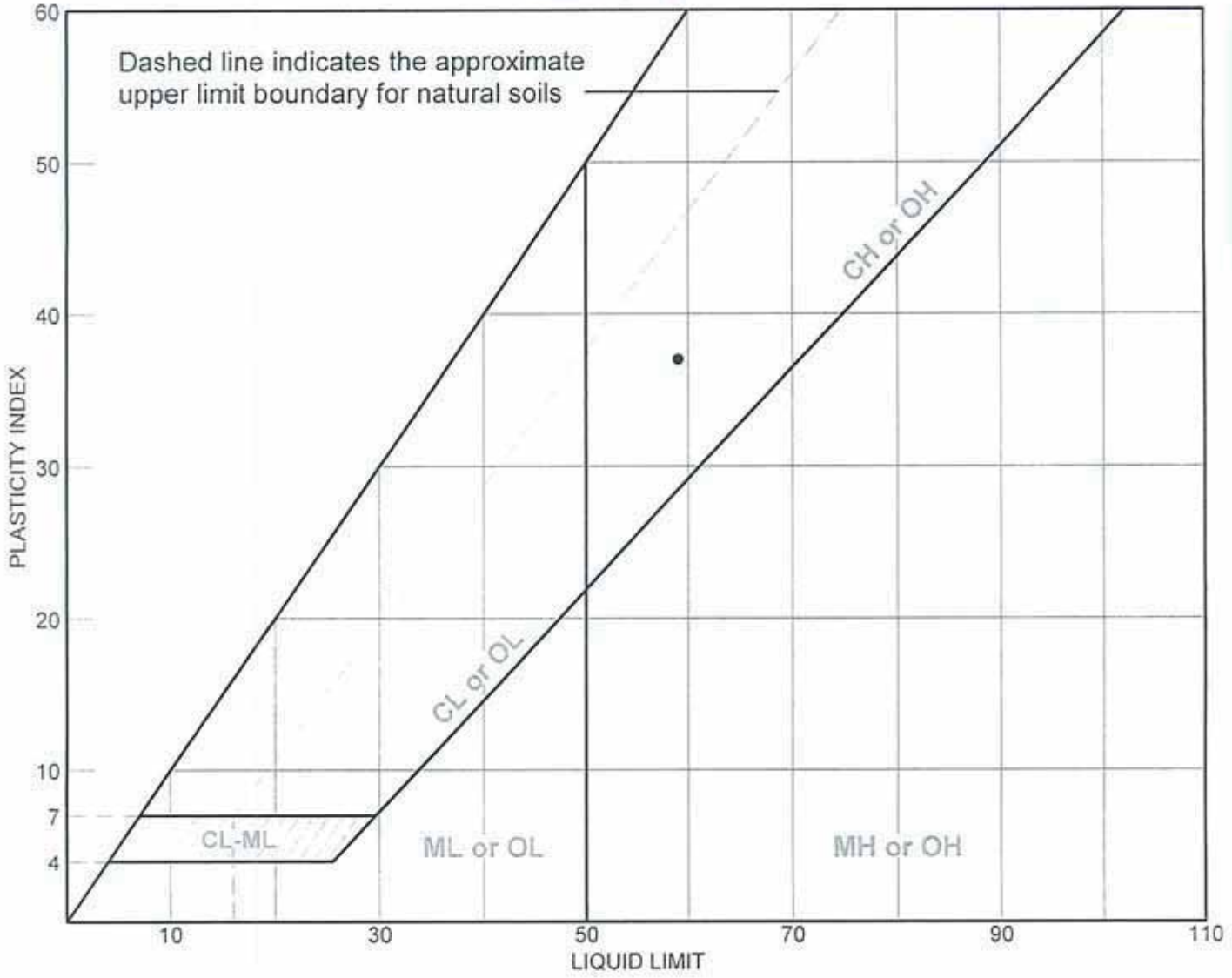
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 72.6 %
Value of Shrinkage Limit = 22
Value of Shrinkage Ratio = 1.69

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
#4	100.0
#10	100.0
#20	99.8
#40	99.6
#100	99.0
#200	97.8

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

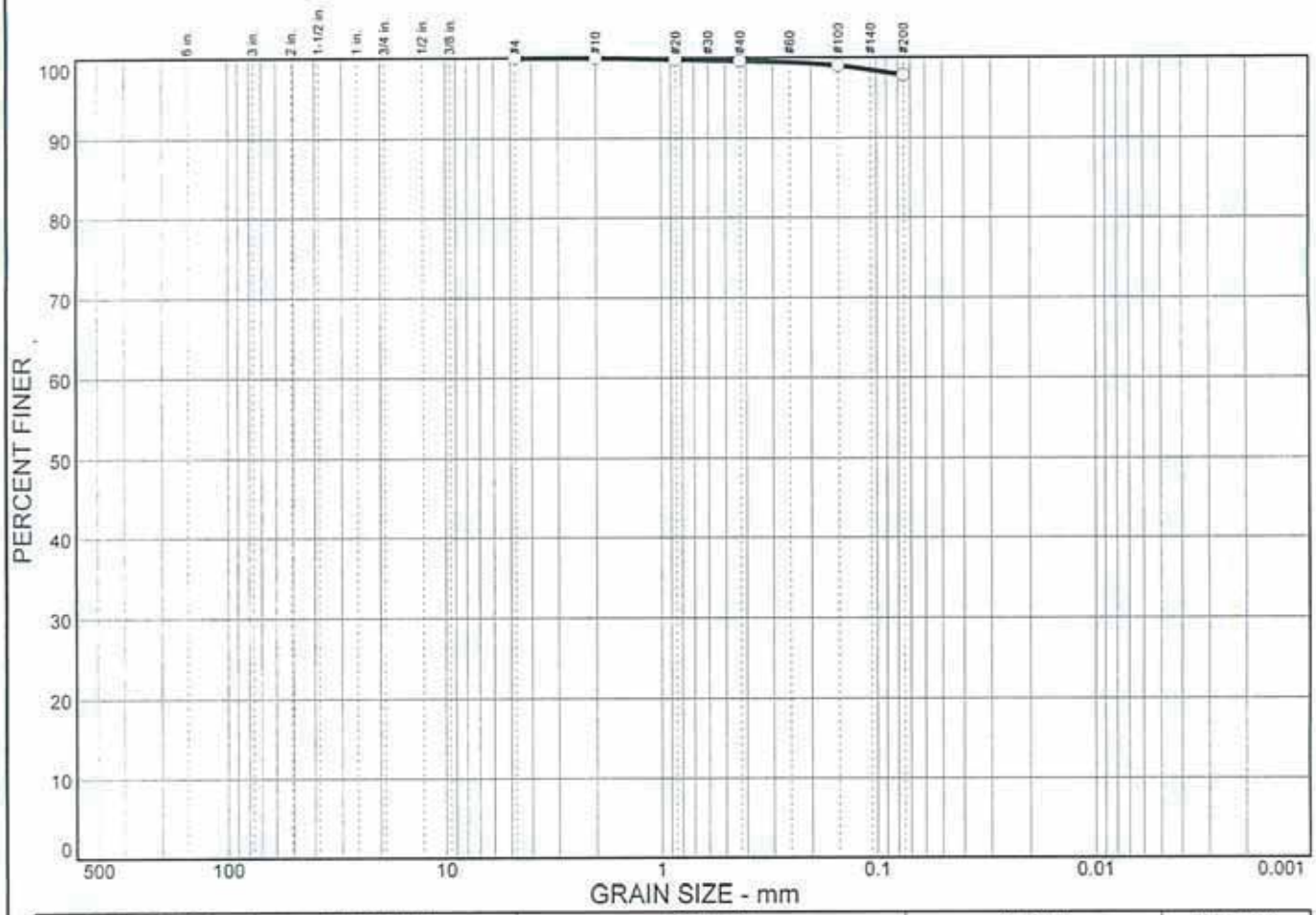


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-44	S-3	4' - 6'	21.3 %	22	59	37	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	2.2	97.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#20	99.8		
#40	99.6		
#100	99.0		
#200	97.8		

* (no specification provided)

Soil Description

B-44, S-3: 4' - 6'

Atterberg Limits

PL= 22 LL= 59 PI= 37

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-100

Sample No.: S-3 **Source of Sample:** B-44 **Date:** 2-6-14
Location: B-44, S-3: 4' - 6' **Elev./Depth:** 4' - 6'

SJB SERVICES, INC.

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Project No: BE-13-192

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-3

Attached are the results of laboratory testing conducted on various samples from the above referenced project. Mr. John Danzer, representing Empire –Geo Services, Inc, chose samples contained in this report.

The testing conducted was as follows:

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil & Rock

ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Samples were received at the SJB Services, Inc. laboratory on February 7, 2014 where they were processed for testing.

If the reviewer should have any questions concerning this report, please do not hesitate to contact our office at any time.

SJB Services, Inc.

Paul Gregorczyk
Laboratory Manager

Western New York Office
5167 South Park Avenue
Hamburg, NY 14075
Phone: (716) 649-8110
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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-3

SAMPLE NUMBER: 14-122
SAMPLE LOCATION: B-12, S-3: 4 – 6'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
13.1 %	24	13	11

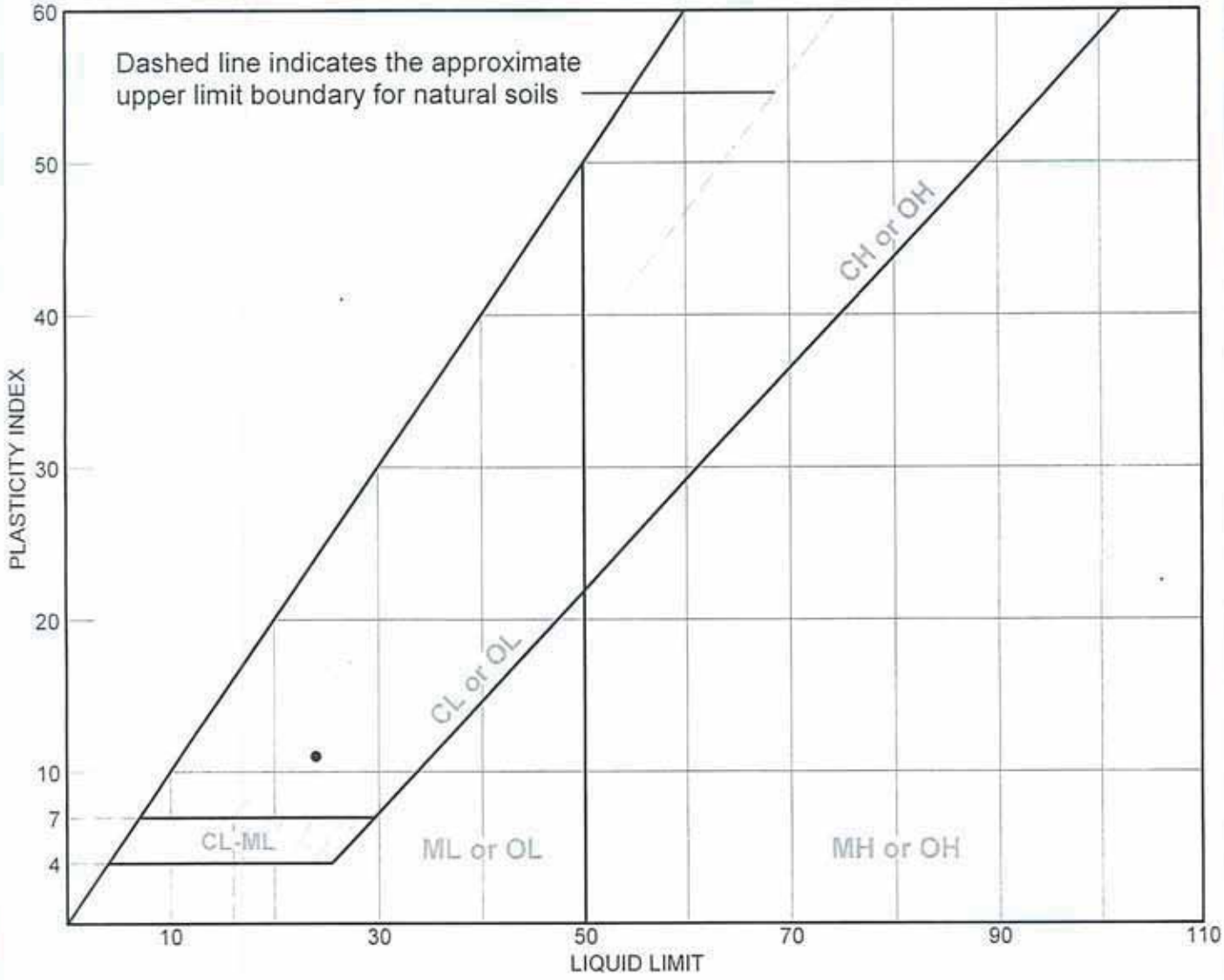
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 28.5 %
Value of Shrinkage Limit = 12
Value of Shrinkage Ratio = 1.98

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
½"	100.0
3/8"	98.0
¼"	93.5
#4	91.4
#10	87.6
#20	84.5
#40	82.1
#100	75.7
#200	68.2

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

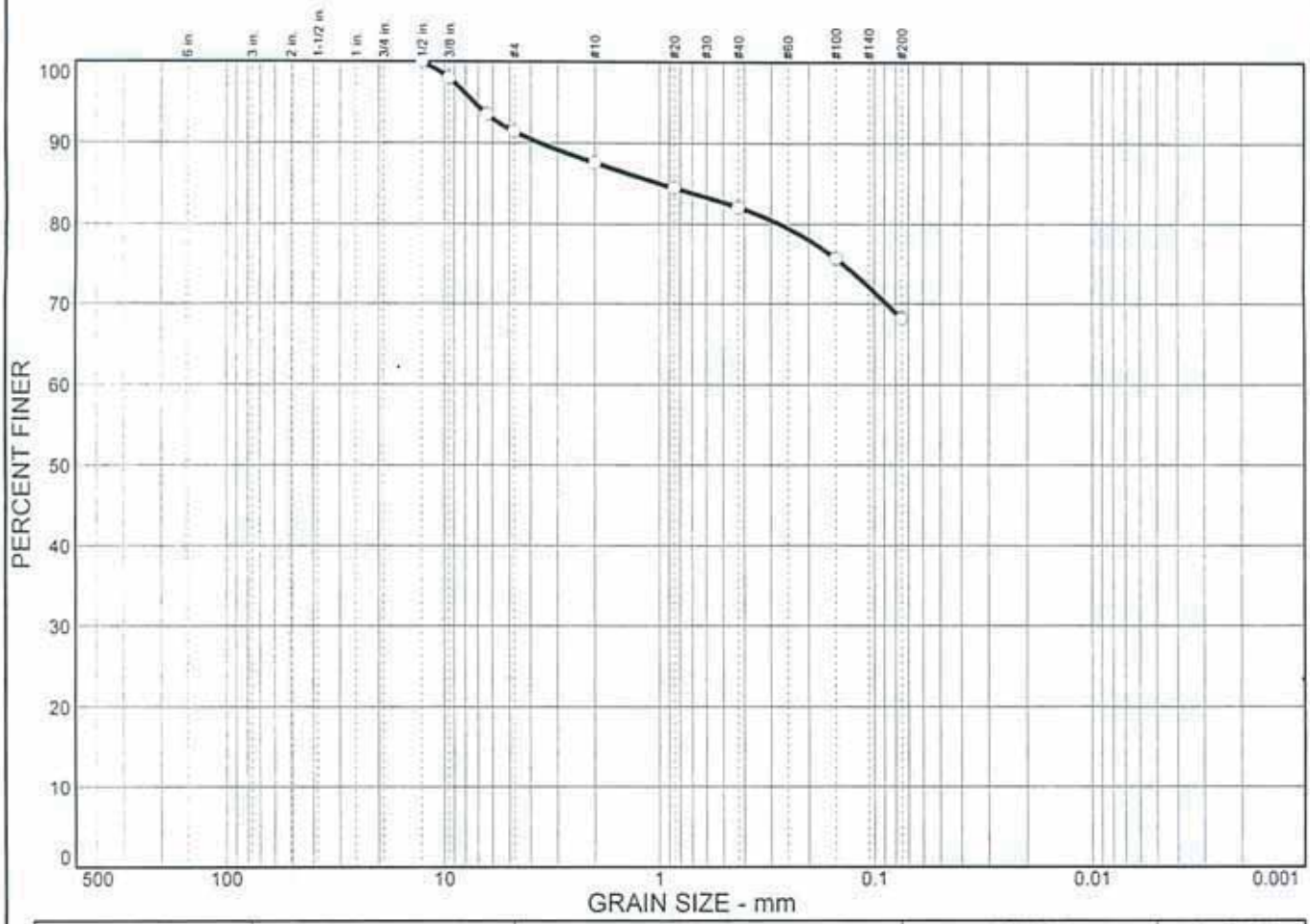


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-12	S-3	4' - 6'	13.1 %	13	24	11	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	8.6	23.2	68.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5 in.	100.0		
.375 in.	98.0		
.25 in.	93.5		
#4	91.4		
#10	87.6		
#20	84.5		
#40	82.1		
#100	75.7		
#200	68.2		

* (no specification provided)

Soil Description

B-12, S-3: 4' - 6'

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{85}= 0.983 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-122

Sample No.: S-3 **Source of Sample:** B-12 **Date:** 2-14-14
Location: B-12, S-3: 4' - 6' **Elev./Depth:** 4' - 6'

SJB SERVICES, INC.

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-123
SAMPLE LOCATION: B-31, S-6: 10' – 12'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
10.7 %	23	13	10

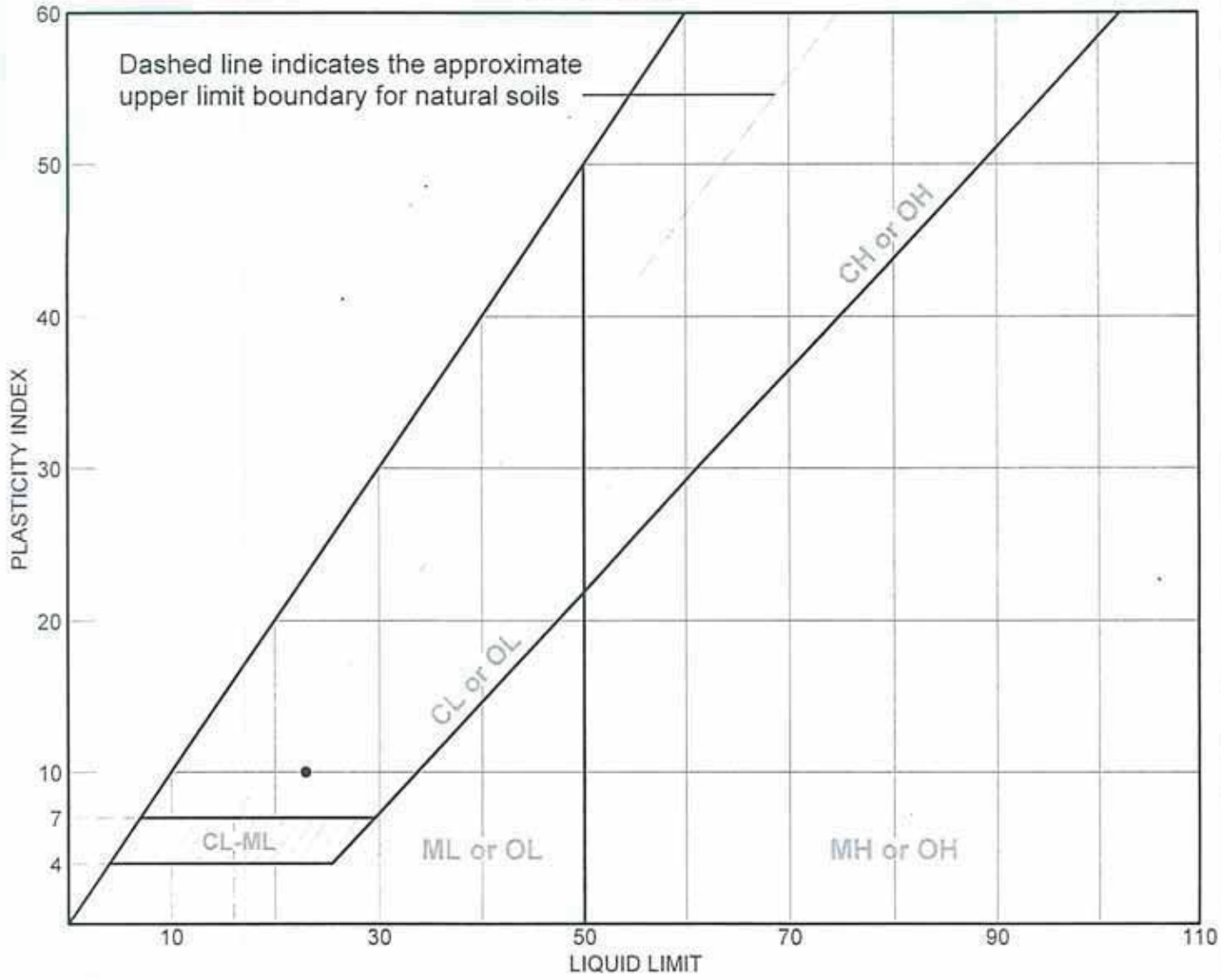
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 43.0 %
Value of Shrinkage Limit = 12
Value of Shrinkage Ratio = 1.94

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
¾"	100.0
½"	96.5
⅜"	94.4
¼"	92.2
#4	90.9
#10	87.1
#20	84.5
#40	82.4
#100	76.4
#200	69.3

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

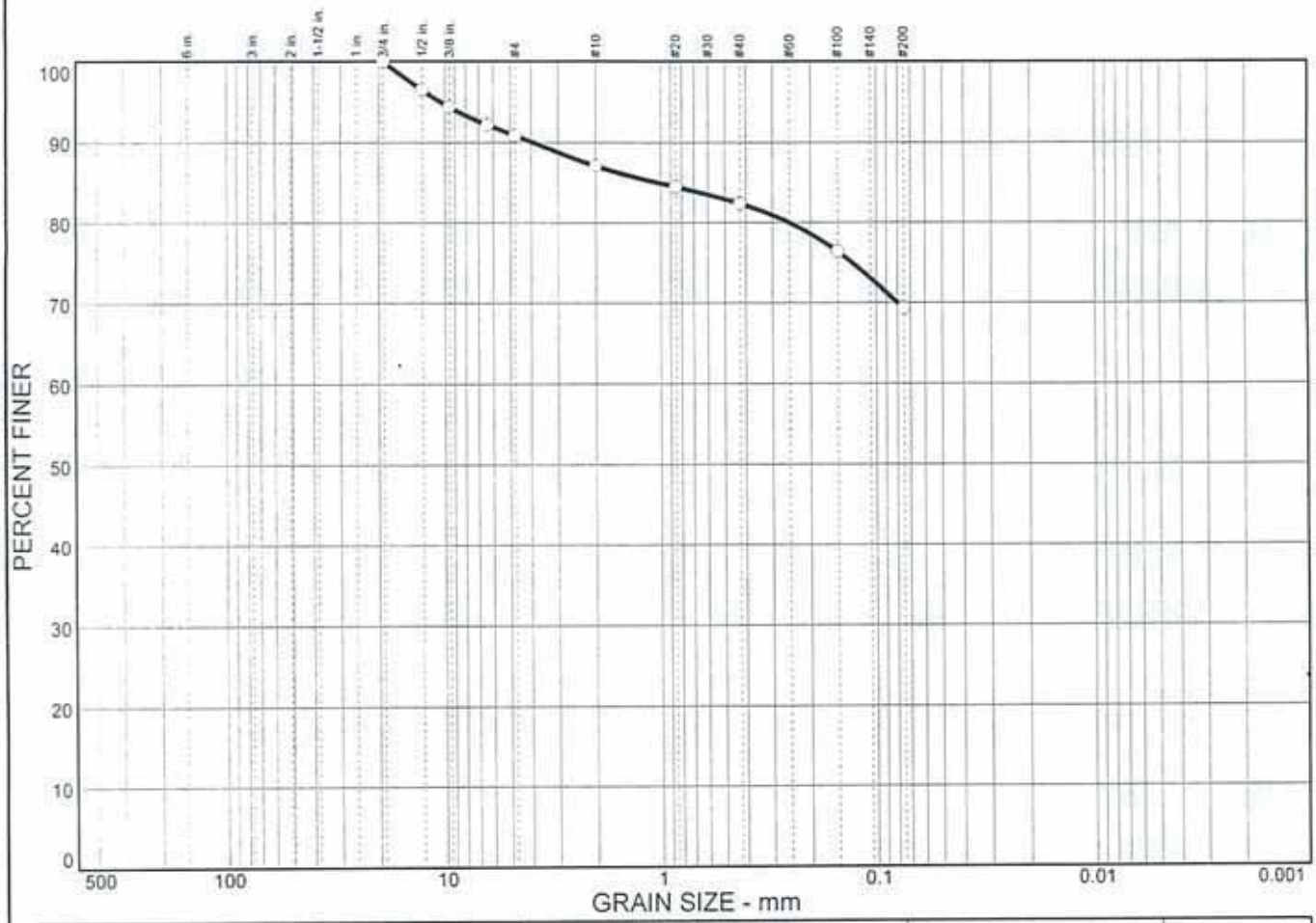


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-31	S-6	10' - 12'	10.7 %	13	23	10	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	9.1	21.6	69.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	96.5		
.375 in.	94.4		
.25 in.	92.2		
#4	90.9		
#10	87.1		
#20	84.5		
#40	82.4		
#100	76.4		
#200	69.3		

* (no specification provided)

Soil Description

B-31, S-6: 10' - 12'

Atterberg Limits

PL= 13 LL= 23 PI= 10

Coefficients

D_{85}= 1.02 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-123

Sample No.: S-6 **Source of Sample:** B-31 **Date:** 2-14-14
Location: B-31, S-6: 10' - 12' **Elev./Depth:** 10' - 12'

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PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-124
SAMPLE LOCATION: B-38, S-2: 2' – 4'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
21.3 %	44	20	24

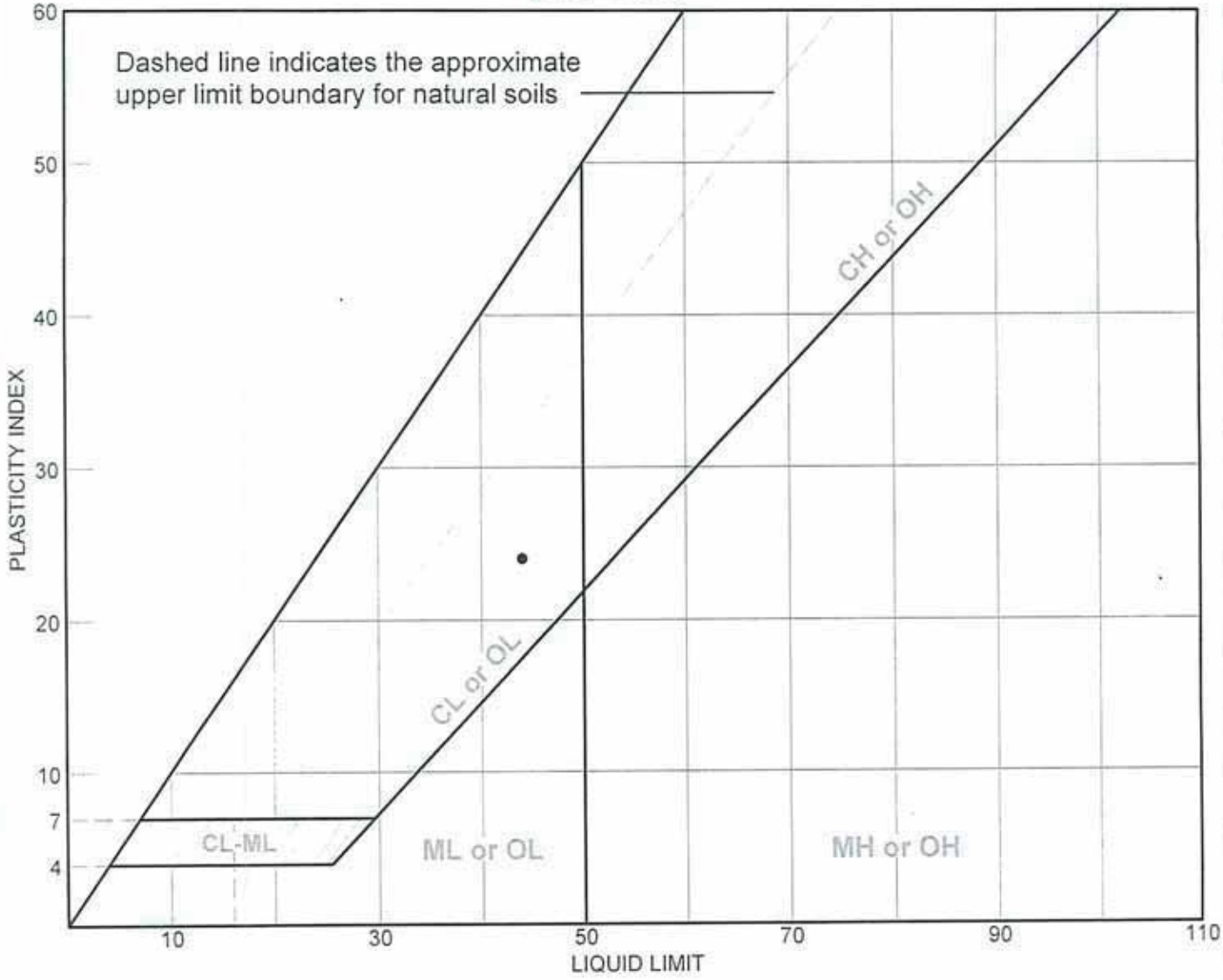
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 51.2 %
Value of Shrinkage Limit = 20
Value of Shrinkage Ratio = 1.64

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
#4	100.0
#10	99.6
#20	99.2
#40	98.7
#100	97.3
#200	96.2

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

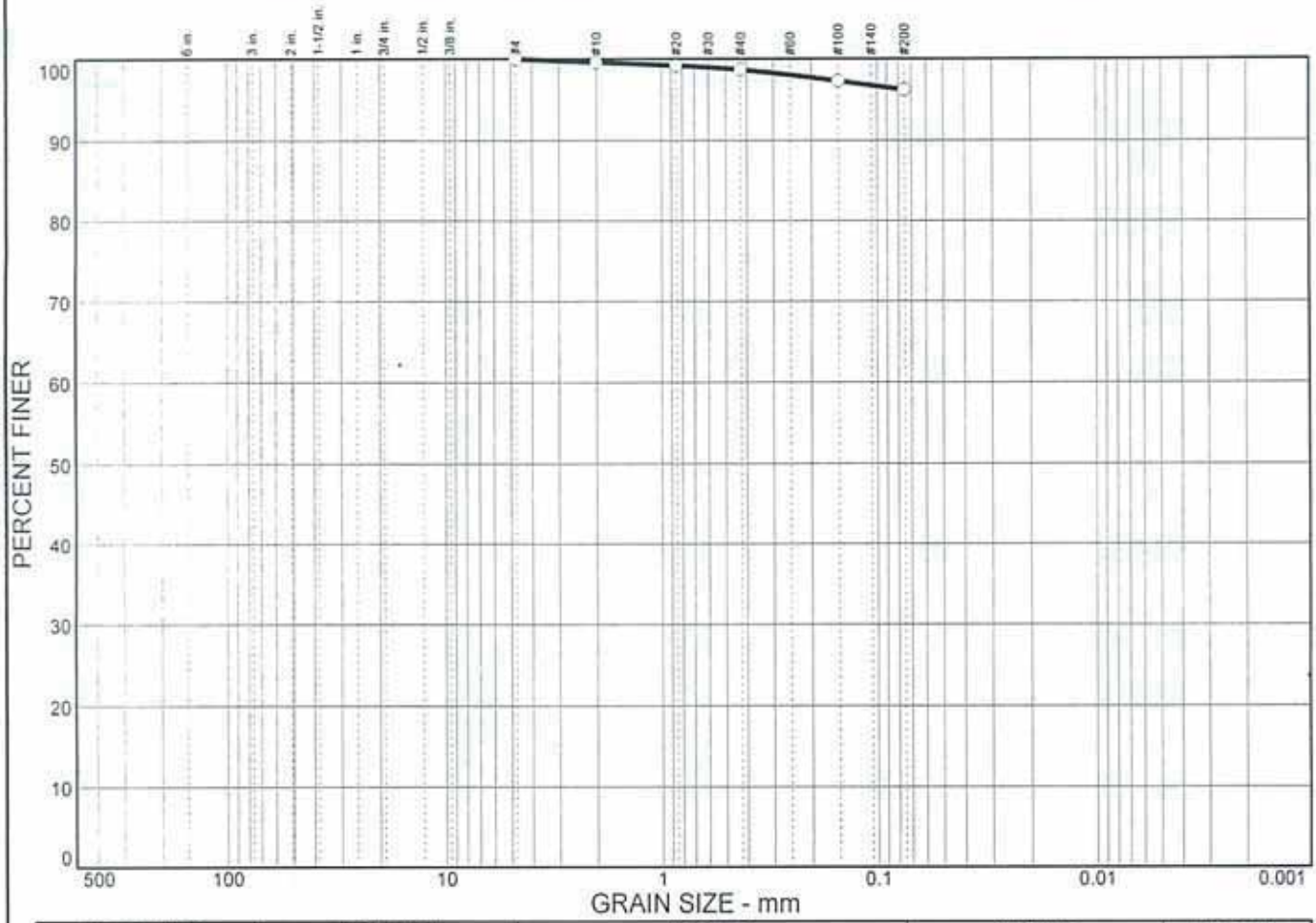


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-38	S-2	2' - 4'	21.3 %	20	44	24	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	3.8	96.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#20	99.2		
#40	98.7		
#100	97.3		
#200	96.2		

* (no specification provided)

Soil Description

B-38, S-2: 2' - 4'

Atterberg Limits

PL= 20 LL= 44 PI= 24

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-124

Sample No.: S-2 **Source of Sample:** B-38 **Date:** 2-14-14
Location: B-38, S-2: 2' - 4' **Elev./Depth:** 2' - 4'

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PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-125
SAMPLE LOCATION: B-40, S-4: 6' – 8'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
12.0 %	25	14	11

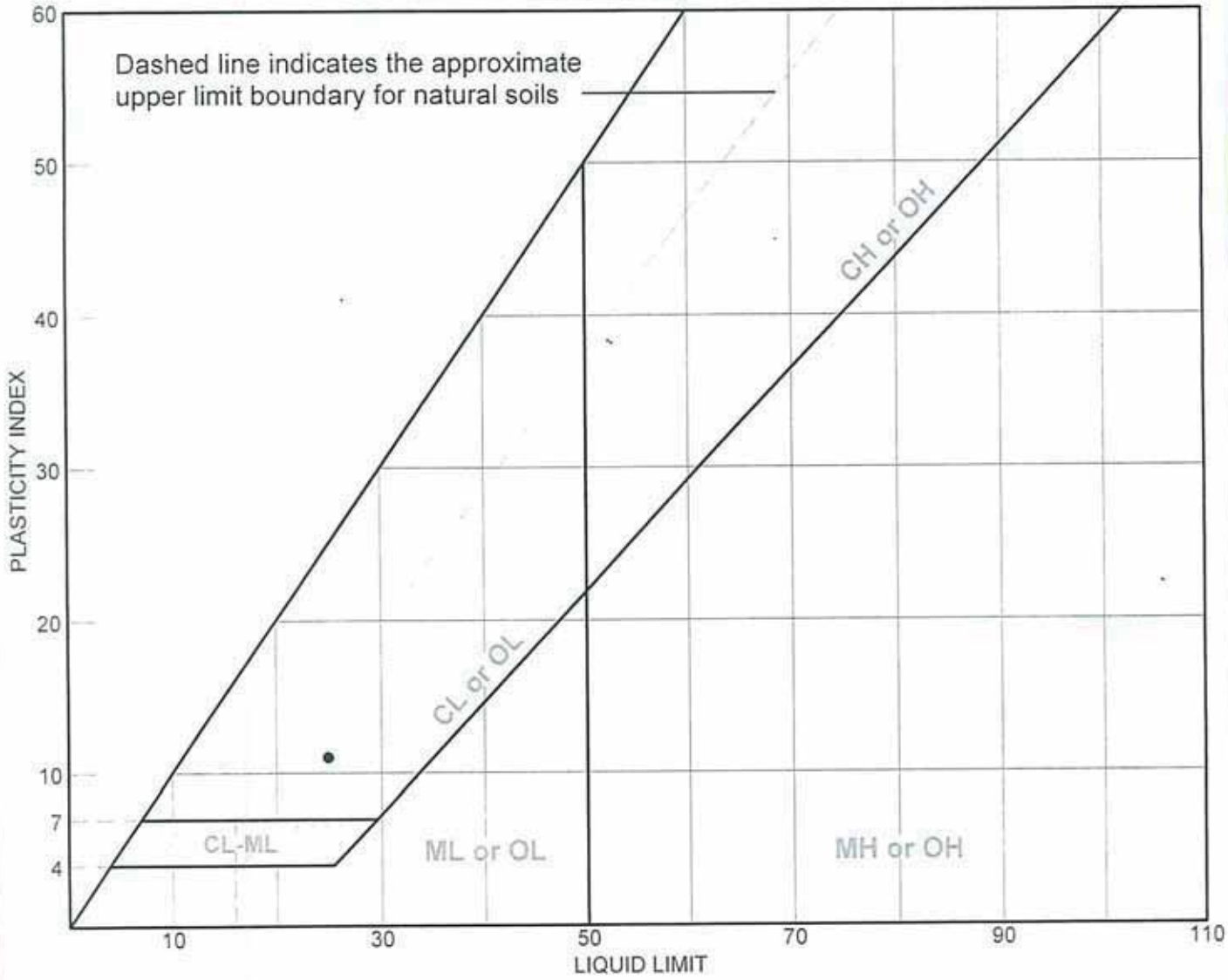
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 31.5 %
Value of Shrinkage Limit = 13
Value of Shrinkage Ratio = 1.95

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
3/8"	100.0
¼"	98.8
#4	97.8
#10	95.8
#20	94.0
#40	92.6
#100	88.6
#200	83.0

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

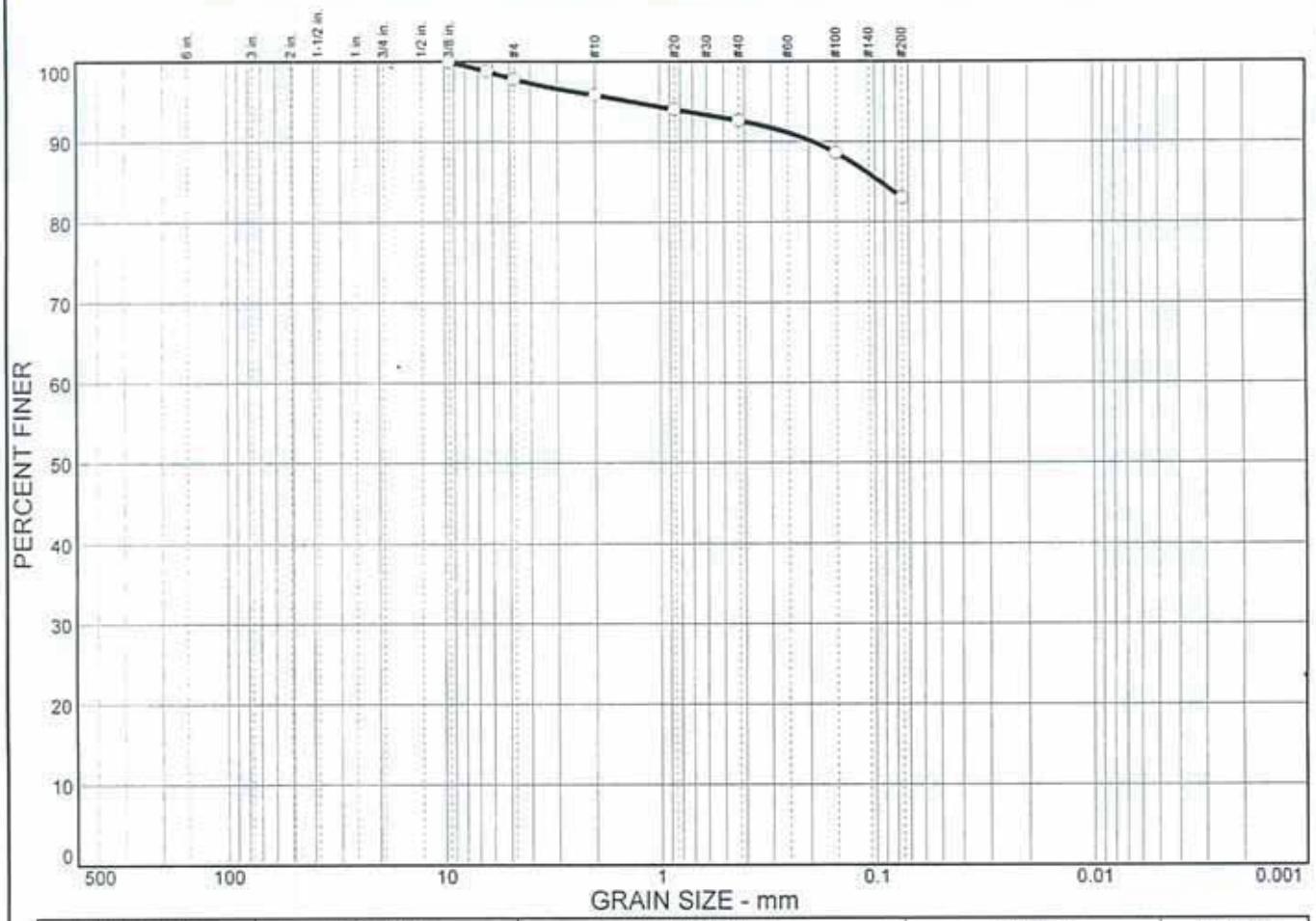


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-40	S-4	6' - 8'	12.0 %	14	25	11	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	2.2	14.8	83.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.375 in.	100.0		
.25 in.	98.8		
#4	97.8		
#10	95.8		
#20	94.0		
#40	92.6		
#100	88.6		
#200	83.0		

* (no specification provided)

Soil Description

B-40, S-4: 6' - 8'

Atterberg Limits

PL= 14 LL= 25 PI= 11

Coefficients

D_{85}= 0.0941 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-125

Sample No.: S-4 **Source of Sample:** B-40 **Date:** 2-14-14
Location: B-40, S-4: 6' - 8' **Elev./Depth:** 6' - 8'

SJB SERVICES, INC.

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Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-126
SAMPLE LOCATION: B-46, S-3: 4' – 6'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil & Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
28.1 %	61	25	36

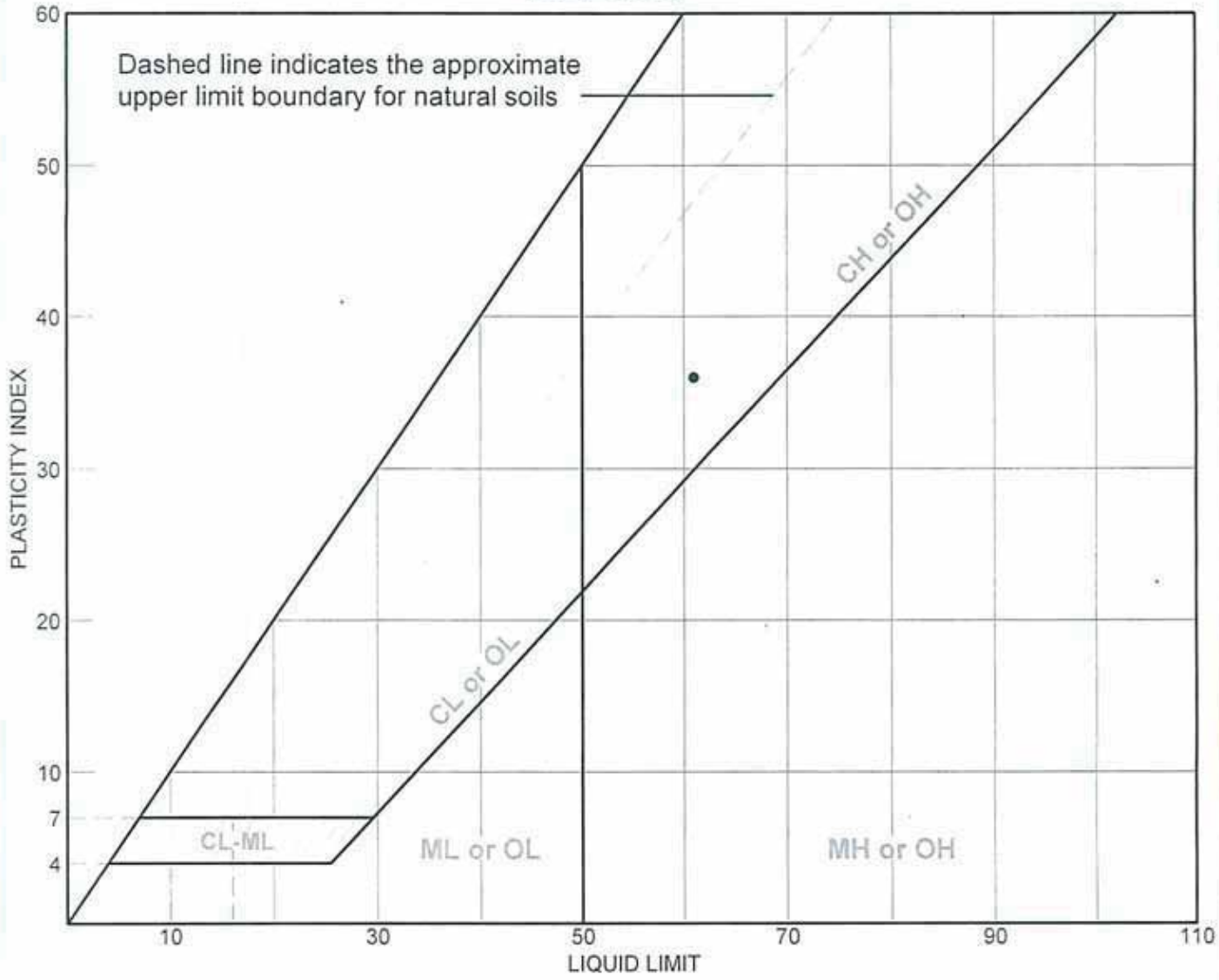
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 66.6 %
Value of Shrinkage Limit = 22
Value of Shrinkage Ratio = 1.65

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
#4	100.0
#10	99.9
#20	99.9
#40	99.7
#100	99.4
#200	99.2

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT

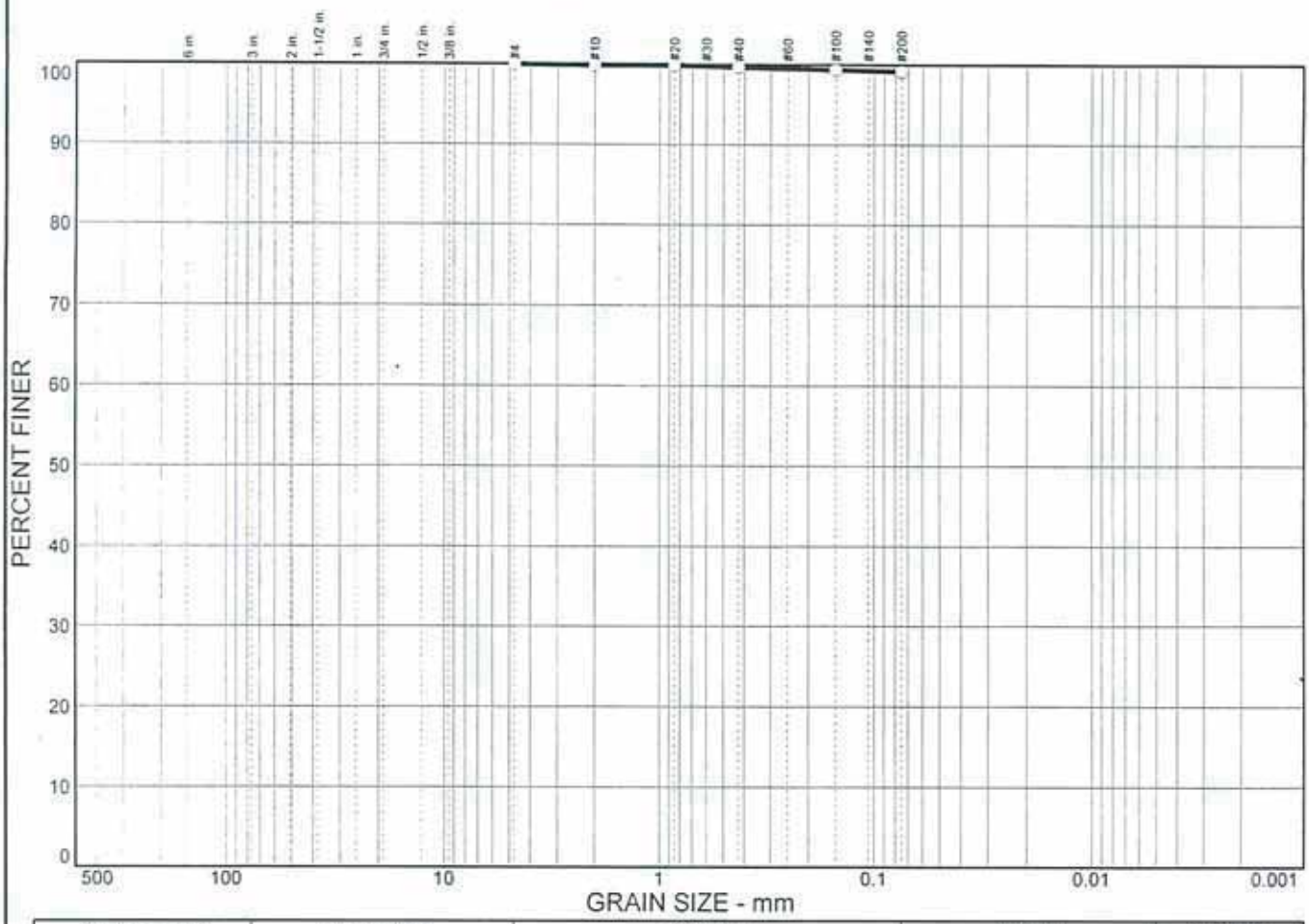


SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-46	S-3	4' - 6'	28.1 %	25	61	36	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	0.8	99.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#20	99.9		
#40	99.7		
#100	99.4		
#200	99.2		

* (no specification provided)

Soil Description

B-46, S-3: 4' - 6'

Atterberg Limits

PL= 25 LL= 61 PI= 36

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-126

Sample No.: S-3 **Source of Sample:** B-46 **Date:** 2-14-14
Location: B-46, S-3: 4' - 6' **Elev./Depth:** 4' - 6'

SJB SERVICES, INC.

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SJB SERVICES, INC.

Laboratory Test Report

PROJECT: **Proposed Westwood Country Club Development Project**

CLIENT: **Mensch Capital Partners, LLC.**

DATE: **February 14, 2014**

PROJECT NO.: BE-13-192
REPORT NO.: LTR-2

SAMPLE NUMBER: 14-127
SAMPLE LOCATION: B-48, S-5: 8' – 10'

ASTM D-2216: Laboratory Determination of Water (Moisture) Content of Soil &Rock
ASTM D-4318: Liquid Limit, Plastic Limit, and Plasticity Index of Soil

Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index
11.8 %	23	13	10

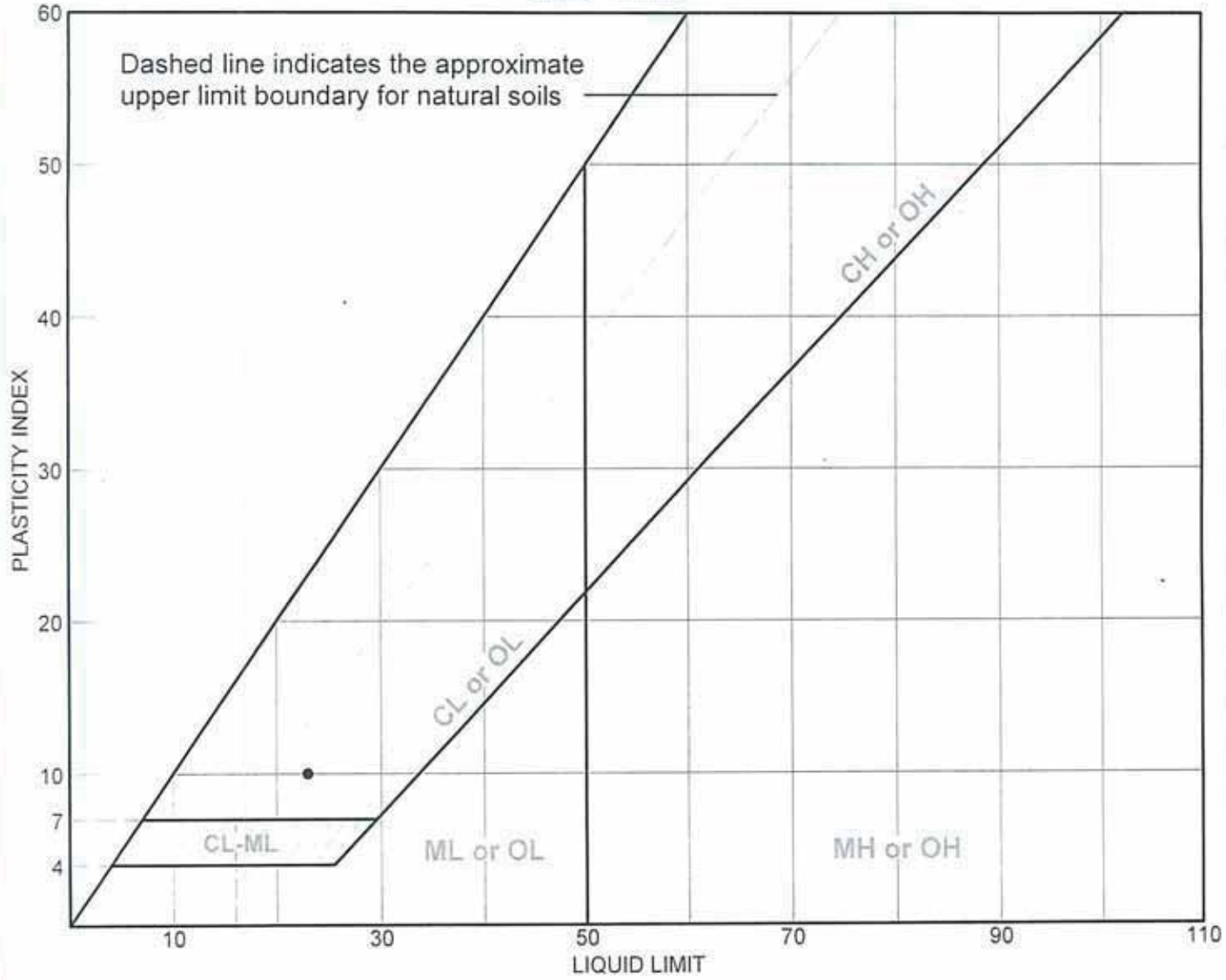
ASTM D-427: Shrinkage Factors of Soils by the Mercury Method

Value of Initial Water Content = 34.4 %
Value of Shrinkage Limit = 14
Value of Shrinkage Ratio = 1.94

ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	*Percent Passing*
3/8"	100.0
¼"	97.9
#4	96.2
#10	93.0
#20	90.5
#40	88.5
#100	83.5
#200	77.1

SJB SERVICES, INC. LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-48	S-5	8' - 10'	11.8 %	13	23	10	

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No.: BE-13-192

ASTM C-136: Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	3.8	19.1	77.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.375 in.	100.0		
.25 in.	97.9		
#4	96.2		
#10	93.0		
#20	90.5		
#40	88.5		
#100	83.2		
#200	77.1		

* (no specification provided)

Soil Description

B-48, S-5: 8' - 10'

Atterberg Limits

PL= 13 LL= 23 PI= 10

Coefficients

D_{85}= 0.196 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

SAMPLE NUMBER: 14-128

Sample No.: S-5 **Source of Sample:** B-48 **Date:** 2-14-14
Location: B-48, S-5: 8' - 10' **Elev./Depth:** 8' - 10'

SJB SERVICES, INC.

Client: MENSCH CAPITAL PARTNERS, LLC
Project: WESTWOOD COUNTRY CLUB DEVELOPMENT PROJECT
Project No: BE-13-192

SJB SERVICES, INC.
Contract Drilling and Testing

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467
Phone: 585-359-2730
Fax: 585-359-9668

Summary of Laboratory Testing

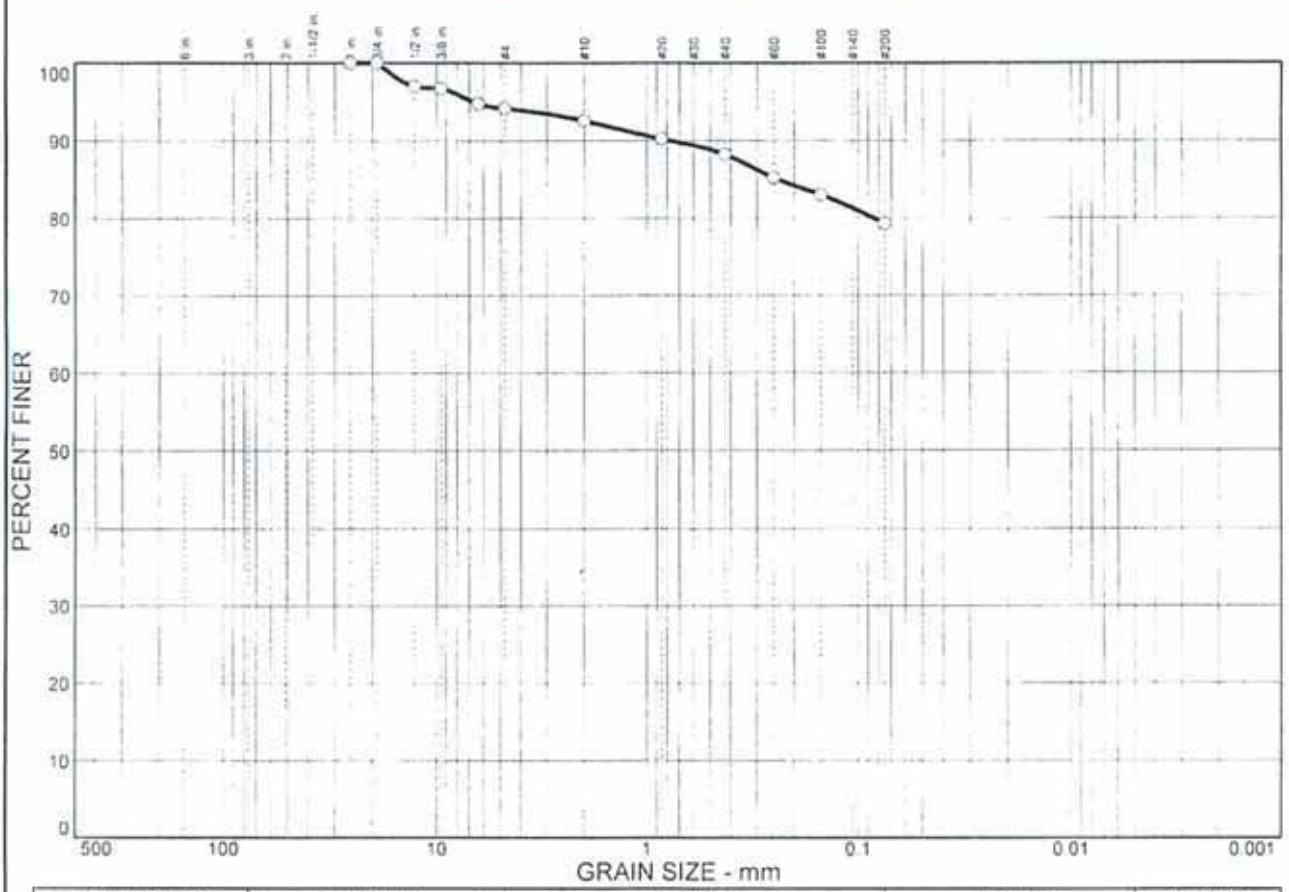
Project:	Westwood Country Club Development Project	**Date:**	02-03-2014
Client:	Mensch Capital Partners		
Project Number:	BE-13-192		

Lab Id#	Location	Depth (ft)	Moisture Content (%)
14-035	B-6, S-2	2 – 4	4.5
14-036	B-6, S-3	4 – 6	11.3
14-037	B-6, S-4	6 – 8	10.3
14-042	B-34, S-2	2 – 4	6.1
14-043	B-34, S-3	4 – 6	5.9
14-044	B-34, S-4	6 – 8	12.0
14-045	B-34, S-5	8 – 10	10.1

SJB Laboratory Technician: William Gilmore

Respectfully submitted:
SJB Services, Inc.

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	5.8	14.9	79.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100.0		
3/4 in.	100.0		
1/2 in.	97.0		
3/8 in.	96.7		
1/4 in.	94.8		
#4	94.2		
#10	92.6		
#20	90.2		
#40	88.2		
#60	85.2		
#100	83.0		
#200	79.3		

* (no specification provided)

Soil Description

Fines, Little Sand, Trace Gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.240 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

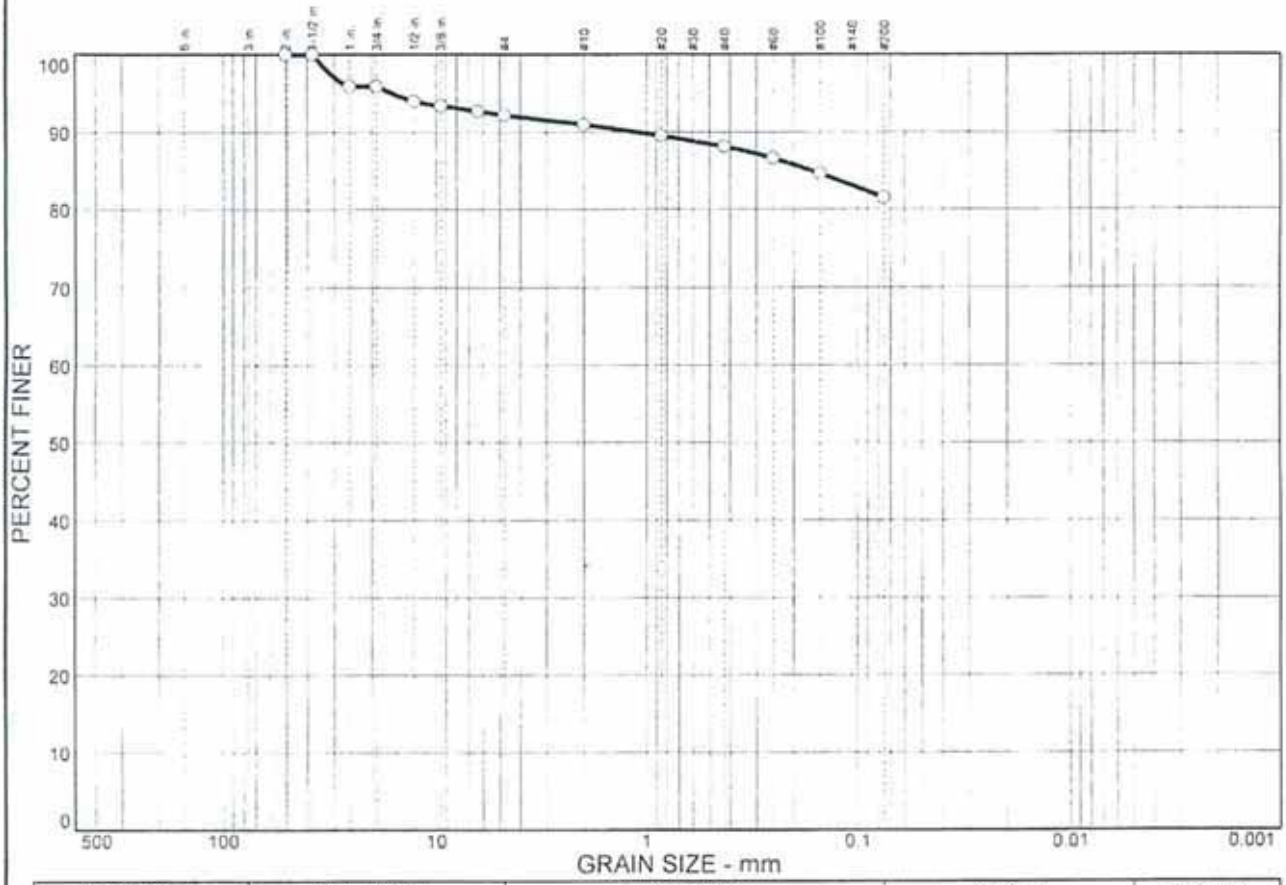
Remarks

Sample No.: 14-038 **Source of Sample:** B-6 **Date:** 02-03-2014
Location: B-6 **Elev./Depth:** 2' - 8'

SJB SERVICES, INC.

Client: Mensch Capital Partners
Project: Westwood Country Club development Project
Project No: BE-13-192 **Plate** 14-038

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	7.8	10.7	81.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2 in.	100.0		
1.5 in.	100.0		
1 in.	95.9		
3/4 in.	95.9		
1/2 in.	94.0		
3/8 in.	93.4		
1/4 in.	92.7		
#4	92.2		
#10	91.0		
#20	89.5		
#40	88.1		
#60	86.6		
#100	84.6		
#200	81.5		

* (no specification provided)

Soil Description

Fines, Trace Sand, Trace Gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.165 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 14-046 **Source of Sample:** B-34 **Date:** 02-03-2014
Location: B-34 **Elev./Depth:** 2' - 10'

SJB SERVICES, INC.

Client: Mensch Capital Partners
Project: Westwood Country Club development Project
Project No: BE-13-192 **Plate** 14-046

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467

LABORATORY D.I.P.R.A. TESTS

Project: Westwood Country Club

Project Number: BE-13-192

Town /City: N/A

Date: 02-03-2014

Client: Mensch Capital Partners

Technician: William Gilmore

Summary of Laboratory Analysis Soil

Lab ID:	Location:	Resistivity (Ohm-cm)	Redox (mv)	PH	Sulfides (+,T,-)	% Moisture Content (wet, moist, dry)	TOTAL POINTS
		Points	*Points*	*Points*	*Points*	*Points*	
14-038	B-6 Composite	*15,000*	*-35.2*	*6.95*	-	*Moist (9.5%)*	6
	Depth = 2' – 8'	*0*	*5*	*0*	*0*	*1*	
14-046	B-34 Composite	*11,500*	*-22.6*	*6.35*	-	*Moist (8.9%)*	6
	Depth = 2' – 10'	*0*	*5*	*0*	*0*	*1*	

Per the Ductile Iron Pipe Research Association (DIPRA), point totals 10 or greater should be considered for Cathodic Protection.

SJB SERVICES, INC.
Contract Drilling and Testing

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467
Phone: 585-359-2730
Fax: 585-359-9668

Summary of Laboratory Testing

Project:	Westwood Country Club Development Project	**Date:**	02-03-2014
Client:	Mensch Capital Project		
Project Number:	BE-13-192		

Lab#	Location	Depth (Feet)	Chlorides (ppm)	Sulfates (ppm)
14-038	B-6 Composite	2 – 8	15	ND
14-046	B-34 Composite	2 –10	10	ND

SJB Laboratory Technician: William Gilmore

Respectfully submitted:
SJB Services, Inc.

Chuck Guzzetta
District Manager

SJB SERVICES, INC.
Contract Drilling and Testing

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467
Phone: 585-359-2730
Fax: 585-359-9668

Summary of Laboratory Testing

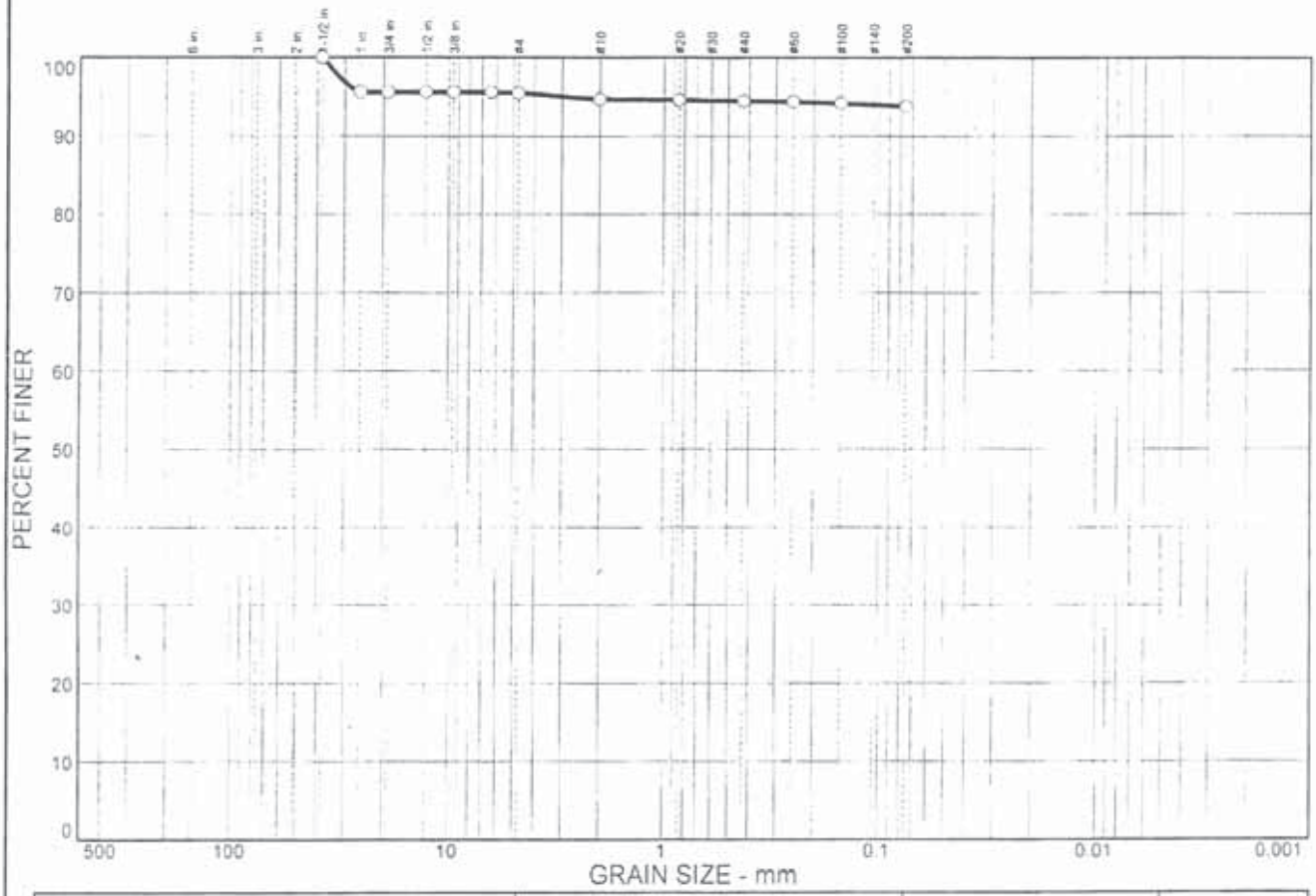
Project: Proposed Westwood Country Club Development Project **Date:** 02-24-2014
Client: Mensch Capital Partners, LLC
Project Number:

Lab Id#	Location	Depth (ft)	Moisture Content (%)
14-121	B-45	2 – 4	23.1
14-122	B-45	4 – 6	23.4
14-123	B-45	6 – 8	28.6
14-124	B-45	8 – 10	20.2
14-125	B-45	2 – 10	23.9

SJB Laboratory Technician: William Gilmore

Respectfully submitted:
SJB Services, Inc.

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	4.5	1.7	93.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5 in.	100.0		
1 in.	95.6		
3/4 in.	95.6		
1/2 in.	95.6		
3/8 in.	95.6		
1/4 in.	95.6		
#4	95.5		
#10	94.7		
#20	94.6		
#40	94.5		
#60	94.4		
#100	94.2		
#200	93.8		

* (no specification provided)

Soil Description

Fines, Trace Gravel, Trace Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 14-125 **Source of Sample:** B-45 Composite **Date:** 02-24-2014
Location: B-45 Composite **Elev./Depth:** 2' - 10'

SJB SERVICES, INC.

Client: Mensch Capital Partners
Project: Westwood Country Club development Project
Project No: BE-13-192 **Plate** 14-125

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467

LABORATORY D.I.P.R.A. TESTS

Project: Westwood Country Club

Project Number: BE-13-192

Town /City: N/A

Date: 02-24-2014

Client: Mensch Capital Partners

Technician: William Gilmore

Summary of Laboratory Analysis Soil

Lab ID:	Location:	Resistivity (Ohm-cm)	Redox (mv)	PH	Sulfides (+,T,-)	% Moisture Content (wet, moist, dry)	TOTAL POINTS
		Points	*Points*	*Points*	*Points*	*Points*	
14-125	B-45 Composite	*2,700*	*9.0*	*7.55*	-	*Wet (23.9%)*	**7**
	Depth = 2' – 10'	*1*	*4*	*0*	*0*	*2*	

Per the Ductile Iron Pipe Research Association (DIPRA), point totals 10 or greater should be considered for Cathodic Protection.

SJB SERVICES, INC.
Contract Drilling and Testing

Rochester Office
535 Summit Point Drive
Henrietta, NY 14467
Phone: 585-359-2730
Fax: 585-359-9668

Summary of Laboratory Testing

Project: Westwood Country Club Development Project **Date:** 02-24-2014
Client: Mensch Capital Project
Project Number: BE-13-192

Lab#	Location	Depth (Feet)	Chlorides (ppm)	Sulfates (ppm)
14-125	B-6 Composite	2 –10	18	ND

SJB Laboratory Technician: William Gilmore

Respectfully submitted:
SJB Services, Inc.

Chuck Guzzetta
District Manager

APPENDIX C

EXISTING SITE INFORMATION

APPENDIX C1

SOIL SURVEY INFORMATION

Unified Soil Classification (Surface)—Erie County, New York
(Westwood Country Club)



Map Scale: 1:8,660 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- CH
- CL
- CL-A (proposed)
- CL-K (proposed)
- CL-ML
- CL-O (proposed)
- CL-T (proposed)
- GC
- GC-GM
- GM
- GP
- GP-GC
- GP-GM
- GW
- GW-GC
- GW-GM
- MH
- MH-A (proposed)
- MH-K (proposed)
- MH-O (proposed)
- MH-T (proposed)
- ML
- ML-A (proposed)
- ML-K (proposed)
- ML-O (proposed)
- ML-T (proposed)
- OH
- OH-T (proposed)
- OL
- PT
- SC
- SC-SM
- SM
- SP
- SP-SC
- SP-SM
- SW
- SW-SC
- SW-SM
- Not rated or not available

Soil Rating Lines
- CH
- CL
- CL-A (proposed)
- CL-K (proposed)
- CL-ML
- CL-O (proposed)
- CL-T (proposed)
- GC
- GC-GM
- GM
- GP
- GP-GC
- GP-GM
- GW
- GW-GC
- GW-GM
- MH
- MH-A (proposed)
- MH-K (proposed)
- MH-O (proposed)
- MH-T (proposed)
- ML
- ML-A (proposed)
- ML-K (proposed)
- ML-O (proposed)
- ML-T (proposed)
- OH
- OH-T (proposed)
- OL
- PT
- SC
- SC-SM
- SM
- SP
- SP-SC
- SP-SM
- SW
- SW-SC
- SW-SM
- Not rated or not available

Soil Rating Points
- CH
- CL
- CL-A (proposed)
- CL-K (proposed)
- CL-ML
- CL-O (proposed)
- CL-T (proposed)
- GC
- GC-GM
- GM
- GP
- GP-GC
- GP-GM
- GW
- GW-GC
- GW-GM
- MH
- MH-A (proposed)
- MH-K (proposed)
- MH-O (proposed)
- MH-T (proposed)
- ML
- ML-A (proposed)
- ML-K (proposed)
- ML-O (proposed)
- ML-T (proposed)
- OH
- OH-T (proposed)
- OL
- PT
- SC
- SC-SM
- SM
- SP
- SP-SC
- SP-SM
- SW
- SW-SC
- SW-SM
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails

MAP INFORMATION


Interstate Highways


US Routes


Major Roads

Local Roads

Background


Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York
Survey Area Data: Version 11, Dec 1, 2011

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 2, 2010—Jul 1, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Unified Soil Classification (Surface)

Unified Soil Classification (Surface)— Summary by Map Unit — Erie County, New York (NY029)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
CrA	Claverack loamy fine sand, 0 to 3 percent slopes	SM	36.1	14.9%
Cv	Cosad loamy fine sand	SM	25.9	10.7%
La	Lakemont silt loam	CL	8.2	3.4%
Od	Odessa silt loam	ML	77.6	32.0%
SaA	Schoharie silt loam, 0 to 3 percent slopes	CL	7.4	3.1%
SaB	Schoharie silt loam, 3 to 8 percent slopes	CL	41.8	17.2%
Sw	Swormville clay loam	CL	8.2	3.4%
Te	Teel silt loam	CL	15.4	6.3%
Ut	Urban land-Odessa complex		13.4	5.5%
W	Water		2.9	1.2%
Wd	Wayland silt loam	ML	5.9	2.4%
Totals for Area of Interest			**242.8**	**100.0%**

Description

The Unified soil classification system classifies mineral and organic mineral soils for engineering purposes on the basis of particle-size characteristics, liquid limit, and plasticity index. It identifies three major soil divisions: (i) coarse-grained soils having less than 50 percent, by weight, particles smaller than 0.074 mm in diameter; (ii) fine-grained soils having 50 percent or more, by weight, particles smaller than 0.074 mm in diameter; and (iii) highly organic soils that demonstrate certain organic characteristics. These divisions are further subdivided into a total of 15 basic soil groups. The major soil divisions and basic soil groups are determined on the basis of estimated or measured values for grain-size distribution and Atterberg limits. ASTM D 2487 shows the criteria chart used for classifying soil in the Unified system and the 15 basic soil groups of the system and the plasticity chart for the Unified system.

The various groupings of this classification correlate in a general way with the engineering behavior of soils. This correlation provides a useful first step in any field or laboratory investigation for engineering purposes. It can serve to make some general interpretations relating to probable performance of the soil for engineering uses.

For each soil horizon in the database one or more Unified soil classifications may be listed. One is marked as the representative or most commonly occurring. The representative classification is shown here for the surface layer of the soil.

Rating Options

Aggregation Method: Dominant Condition

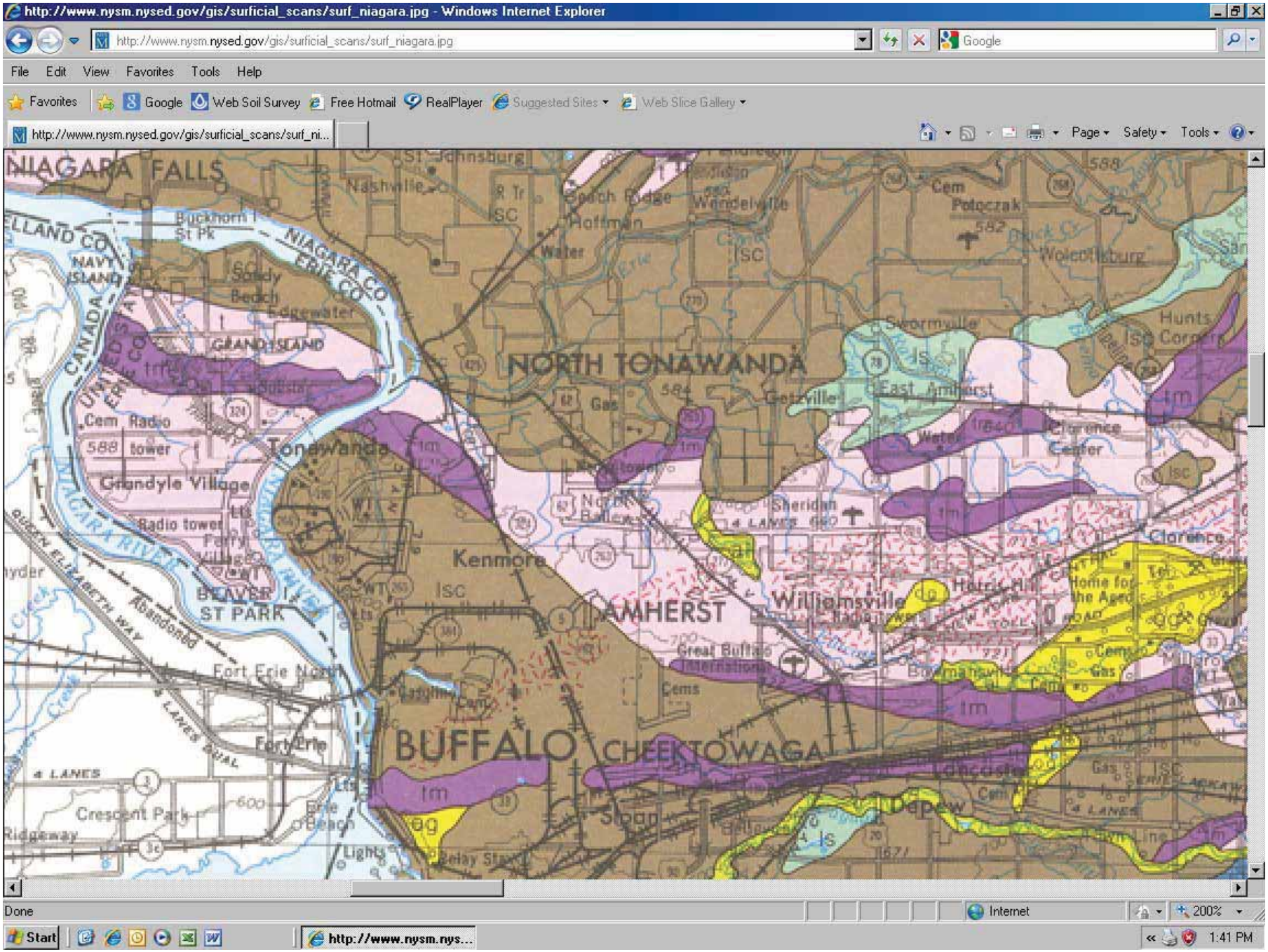
Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

APPENDIX C2

SURFICIAL AND BEDROCK GEOLOGY


http://www.nysm.nysed.gov/gis/surficial_scans/surf_niagara.jpg - Windows Internet Explorer
http://www.nysm.nysed.gov/gis/surficial_scans/surf_niagara.jpg
File Edit View Favorites Tools Help
Favorites Google Web Soil Survey Free Hotmail RealPlayer Suggested Sites Web Slice Gallery
http://www.nysm.nysed.gov/gis/surficial_scans/surf_ni...
Page Safety Tools
NIAGARA FALLS
NORTH TONAWANDA
TONAWANDA
AMHERST
BUFFALO
CHEEKTOWAGA
KENMORE
WILLIAMSVILLE
GRAND ISLAND
NAVY ISLAND
BEAVER ISLAND ST PARK
Fort Erie
Crescent Park
Grandyle Village
Getzville
East Amherst
Clarence Center
Sheridan
Transit
Hoffman
Nashville
Wendelville
Wolcottsburg
Swormville
Hunts Corners
Kenmore
Williamsville
Clarence
Lancaster
Depew
Cheektowaga
Sloan
Buckhorn St Pk
Sandy Beach
Edgewater
Niagara River
Niagara Co
Erie Co
Canada
Queen Elizabeth Way
Abandoned
4 LANES
Ridgeway
Erie Beach
Relay Station
Done
Internet
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Start
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1:41 PM

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http://www.nysm.nysed.gov/gis/surficial_scans/surf_niagara.jpg
Google
File Edit View Favorites Tools Help
Favorites Google Web Soil Survey Free Hotmail RealPlayer Suggested Sites Web Slice Gallery
http://www.nysm.nysed.gov/gis/surficial_scans/surf_ni...
Page Safety Tools

generally more permeable than till,
deposition adjacent to ice,
more variably drained,
may include ablation till,
thickness variable (10–30 meters).

t

t — Till
Variable texture (e.g. clay, silt-clay, boulder clay),
usually poorly sorted diamict,
deposition beneath glacier ice,
relatively impermeable (loamy matrix),
variable clast content — ranging from abundant well-rounded diverse lithologies in valley tills to relatively angular, more limited lithologies in upland tills, tends to be sandy in areas underlain by gneiss or sandstone,
potential land instability on steep slopes,
thickness variable (1–50 meters).

r

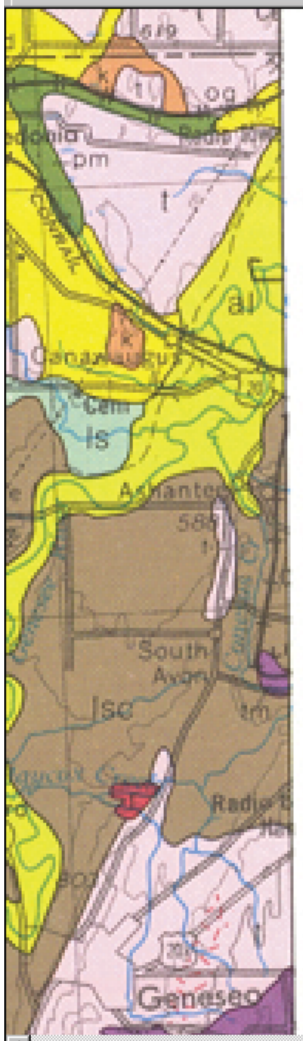
r — Bedrock
Exposed or generally within 1 meter of the surface.

Bedrock stipple overprint
Bedrock may be within 1–3 meters of the surface,
may sporadically crop out,
variable mantle of rock debris and glacial till.

MAP SYMBOLS

Done
Internet
200%
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1:52 PM

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File Edit View Favorites Tools Help
Favorites Google Web Soil Survey Free Hotmail RealPlayer Suggested Sites Web Slice Gallery
http://www.nysm.nysed.gov/gis/surficial_scans/surf_ni...
Page Safety Tools



thickness variable (up to 100 meters);
stipple overprint where bedrock is within 1–3 meters of the surface.

ls

ls — Lacustrine sand
Sand deposits associated with large bodies of water,
generally a near-shore deposit or near a sand source,
well sorted, stratified,
generally quartz sand,
thickness variable (2–20 meters).

og

og — Outwash sand and gravel
Coarse to fine gravel with sand,
proglacial fluvial deposition,
well rounded and stratified,
generally finer texture away from ice border,
may be calcreted beyond Wisconsinan glacial limit,
thickness variable (2–20 meters).

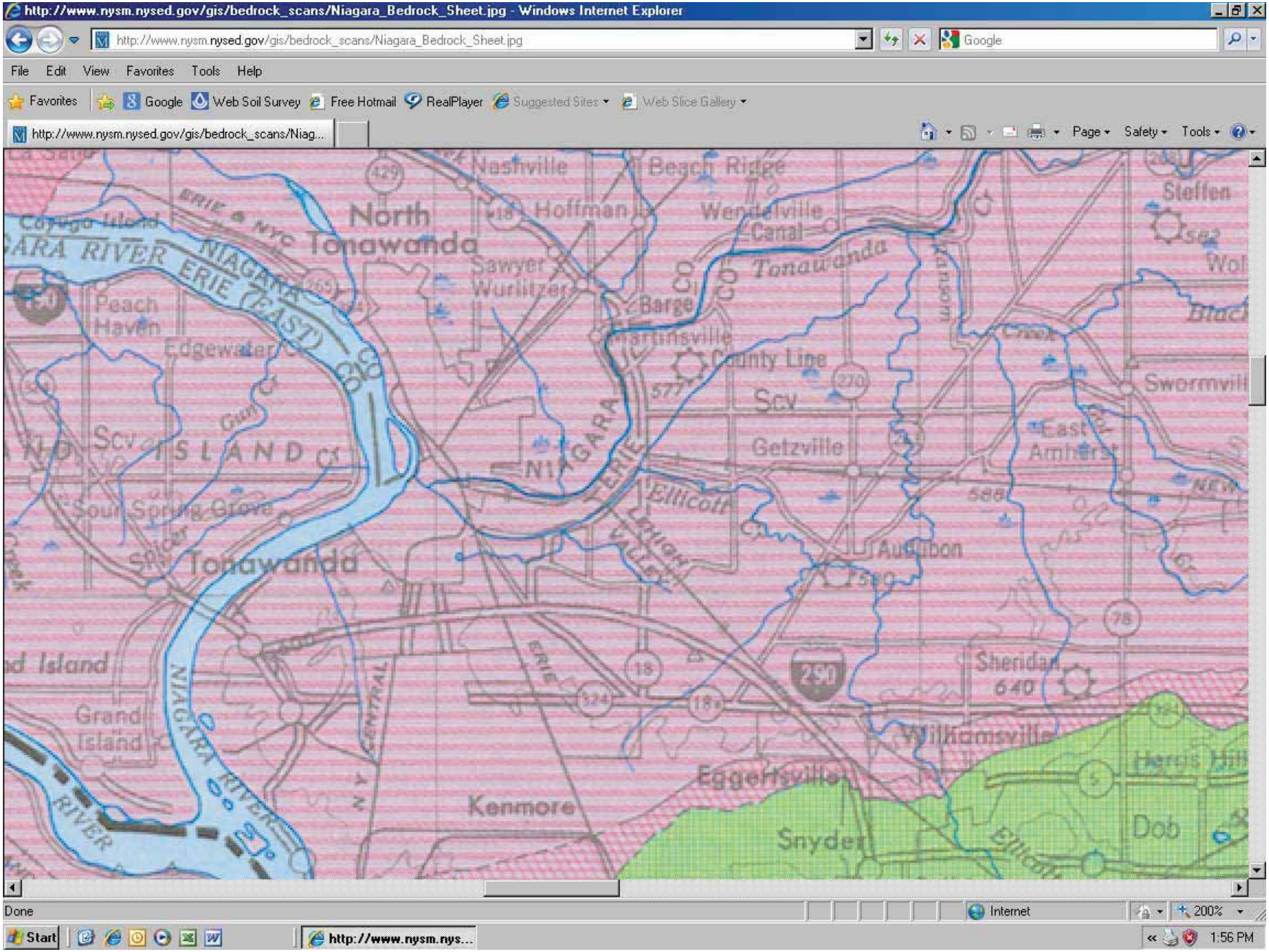
fg

fg — Fluvial gravel
Same as outwash sand and gravel,
except deposition farther from glacier,
age uncertain.

k

k — Kame deposits
Includes kames, eskers, kame terraces, kame deltas,
coarse to fine gravel and/or sand,
deposition adjacent to ice (if at ice margin, relief is below elevation of associated o

Done
Internet
200%
Start
Report Text.DOC - Micros...
http://www.nysm.nys...
8:16 AM


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http://www.nysm.nysed.gov/gis/bedrock_scans/Niagara_Bedrock_Sheet.jpg
File Edit View Favorites Tools Help
Favorites Google Web Soil Survey Free Hotmail RealPlayer Suggested Sites Web Slice Gallery
Page Safety Tools
Nashville
Beach Ridge
Hoffman
Wendelville
Canal
North Tonawanda
Sawyer
Wurlitzer
Barge
Tonawanda
Peach Haven
Edgewater
Martinsville
County Line
Getzville
East Amherst
Swormville
Steffen
Niagara River
Niagara Falls Blvd
Eggert Rd
Sheridan
640
Williamsville
Eggertsville
Kenmore
Snyder
Dob
Grand Island
Tonawanda
Sour Spring Grove
Ellicott
Auditorium
Done
Internet
200%
Start
1:56 PM

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Google
File Edit View Favorites Tools Help
Favorites Google Web Soil Survey Free Hotmail RealPlayer Suggested Sites Web Slice Gallery
http://www.nysm.nysed.gov/gis/bedrock_scans/Niag...
Page Safety Tools

Lower

Bois Blanc Formation—dolostone, limestone, sandstone (Springvale).

Do Oriskany Sandstone.

Upper Silurian

AKRON DOLOSTONE AND SALINA GROUP
400-700 ft. (120-210 m.)



Sab Akron Dolostone; Bertie Formation—dolostone, shale.

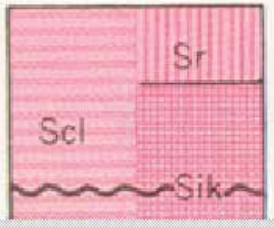
Scv Camillus, Syracuse, and Vernon Formations—shale, dolostone, salt, and gypsum.

LOCKPORT GROUP
150-200 ft. (45-60 m.)



Sl Guelph, Oak Orchard, Eramosa, and Goat Island Dolostones; Gasport Limestone—local bioherms.

CLINTON GROUP
100-150 ft. (30-45 m.)



Scl Decew Dolostone; Rochester Shale; Irondequoit and Merriton Limestones.

Sr Decew Dolostone; Rochester Shale.

Sik Irondequoit Limestone; Rockway Dolostone; Hickory Corners Limestone; Neahga Shale; Kodak Sandstone.

urian

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Internet
150%
Start
http://www.nysm.nys...
1:59 PM

APPENDIX C3

FLOOD PLAIN MAPPING

Erie County On-Line Mapping System





Legend

- Base Flood Elevation
- Flood Hazard Lines
  - <all other values>
  - 0.2 PCT ANNUAL CHANCE FLOO
  - 0.2 PCT ANNUAL CHANCE FLOO
  - 1 PCT ANNUAL CHANCE FLOOD
  - 1 PCT ANNUAL CHNACE FLOOD
  - APPARENT LIMIT
  - AREA NOT INCLUDED
  - END OF SPATIAL EXTENT
  - FLOODWAY
  - ZONE BREAK/ FLOODWAY
  - FLOWAGE EASEMENT BOUNDAI
  - LIMIT OF DETAILED STUDY
  - LIMIT OF DETAILED STUDY/ ZON
  - LIMIT OF FLOODWAY
  - LIMIT OF FLOODWAY/ ZONE BRE
  - LIMIT OF STUDY
  - SOURCE BOUNDARY
  - STATE ENCROACHEMENT LINE
  - ZONE BREAK
  - ZONE D
  - Not Printed / ZONE D
- Cross Section Lines
- Streets and Highways
  - Interstate
  - Primary State Road
  - Secondary State Road
  - County Road
  - Local Road
- Parcels

1: 10,476

Notes

Enter Map Description

0.3 0 0.17 0.3 Miles

Erie County and its officials and employees assume no responsibility or legal liability for the accuracy, completeness, reliability, timeliness, or usefulness of any information provided. Tax parcel data was prepared for tax purposes only and is not to be reproduced or used for surveying or conveyancing.

ERIE COUNTY, NEW YORK
DEPARTMENT OF ENVIRONMENT & PLANNING
OFFICE OF GEOGRAPHIC INFORMATION SERVICES

APPENDIX D

GEOTECHNICAL REPORT LIMITATIONS

GEOTECHNICAL REPORT LIMITATIONS

Empire Geo-Services, Inc. (Empire) has endeavored to meet the generally accepted standard of care for the services completed, and in doing so is obliged to advise the geotechnical report user of our report limitations. Empire believes that providing information about the report preparation and limitations is essential to help the user reduce geotechnical-related delays, cost over-runs, and other problems that can develop during the design and construction process. Empire would be pleased to answer any questions regarding the following limitations and use of our report to assist the user in assessing risks and planning for site development and construction.

PROJECT SPECIFIC FACTORS: The conclusions and recommendations provided in our geotechnical report were prepared based on project specific factors described in the report, such as size, loading, and intended use of structures; general configuration of structures, roadways, and parking lots; existing and proposed site grading; and any other pertinent project information. Changes to the project details may alter the factors considered in development of the report conclusions and recommendations. *Accordingly, Empire cannot accept responsibility for problems which may develop if we are not consulted regarding any changes to the project specific factors that were assumed during the report preparation.*

SUBSURFACE CONDITIONS: The site exploration investigated subsurface conditions only at discrete test locations. Empire has used judgement to infer subsurface conditions between the discrete test locations, and on this basis the conclusions and recommendations in our geotechnical report were developed. It should be understood that the overall subsurface conditions inferred by Empire may vary from those revealed during construction, and these variations may impact on the assumptions made in developing the report conclusions and recommendations. *For this reason, Empire should be retained during construction to confirm that conditions are as expected, and to refine our conclusions and recommendations in the event that conditions are encountered that were not disclosed during the site exploration program.*

USE OF GEOTECHNICAL REPORT: Unless indicated otherwise, our geotechnical report has been prepared for the use of our client for specific application to the site and project conditions described in the report. *Without consulting with Empire, our geotechnical report should not be applied by any party to other sites or for any uses other than those originally intended.*

CHANGES IN SITE CONDITIONS: Surface and subsurface conditions are subject to change at a project site subsequent to preparation of the geotechnical report. Changes may include, but are not limited to, floods, earthquakes, groundwater fluctuations, and construction activities at the site and/or adjoining properties. *Empire should be informed of any such changes to determine if additional investigative and/or evaluation work is warranted.*

MISINTERPRETATION OF REPORT: The conclusions and recommendations contained in our geotechnical report are subject to misinterpretation. *To limit this possibility, Empire should review project plans and specifications relative to geotechnical issues to confirm that the recommendations contained in our report have been properly interpreted and applied.*

Subsurface exploration logs and other report data are also subject to misinterpretation by others if they are separated from the geotechnical report. This often occurs when copies of logs are given to contractors during the bid preparation process. *To minimize the potential for misinterpretation, the subsurface logs should not be separated from our geotechnical report and the use of excerpted or incomplete portions of the report should be avoided.*

OTHER LIMITATIONS: Geotechnical engineering is less exact than other design disciplines, as it is based partly on judgement and opinion. For this reason, our geotechnical report may include clauses that identify the limits of Empire's responsibility, or that may describe other limitations specific to a project. These clauses are intended to help all parties recognize their responsibilities and to assist them in assessing risks and decision making. Empire would be pleased to discuss these clauses and to answer any questions that may arise.

	LOCATION			SJB-MW-3-102716		U1-70-112116	
	SAMPLING DATE			10/27/2016		11/21/2016	
	LAB SAMPLE ID			L1634732-01		L1637886-01	
		NY-TOGS-GA	Units	Results	Qual	Results	Qual
Dissolved Metals							
	Aluminum, Dissolved	2000	ug/l	7	J	-	-
	Antimony, Dissolved	6	ug/l	0.8	J	-	-
	Arsenic, Dissolved	50	ug/l	3.3		-	-
	Barium, Dissolved	2000	ug/l	47.5		-	-
	Beryllium, Dissolved	3	ug/l	0.5	U	-	-
	Cadmium, Dissolved	10	ug/l	0.2	U	-	-
	Calcium, Dissolved		ug/l	315000		-	-
	Chromium, Dissolved	100	ug/l	1.5		-	-
	Cobalt, Dissolved		ug/l	0.6		-	-
	Copper, Dissolved	1000	ug/l	1.7		-	-
	Iron, Dissolved	600	ug/l	26	J	-	-
	Lead, Dissolved	50	ug/l	1	U	-	-
	Magnesium, Dissolved	35000	ug/l	227000		-	-
	Manganese, Dissolved	600	ug/l	101.8		-	-
	Mercury, Dissolved	1.4	ug/l	0.2	U	-	-
	Nickel, Dissolved	200	ug/l	3		-	-
	Potassium, Dissolved		ug/l	7310		-	-
	Selenium, Dissolved	20	ug/l	5	U	-	-
	Silver, Dissolved	100	ug/l	0.4	U	-	-
	Sodium, Dissolved		ug/l	51000		-	-
	Thallium, Dissolved	0.5	ug/l	0.5	U	-	-
	Vanadium, Dissolved		ug/l	5	U	-	-
	Zinc, Dissolved	5000	ug/l	10	U	-	-
Total Metals							
	Aluminum, Total	2000	ug/l	1830		398	
	Antimony, Total	6	ug/l	4	U	4	U
	Arsenic, Total	50	ug/l	7.2		3.8	
	Barium, Total	2000	ug/l	67.8		13.1	
	Beryllium, Total	3	ug/l	0.5	U	0.5	U
	Cadmium, Total	10	ug/l	0.2	U	0.2	U
	Calcium, Total		ug/l	309000		125000	
	Chromium, Total	100	ug/l	3.3		1.1	
	Cobalt, Total		ug/l	2		1	
	Copper, Total	1000	ug/l	4.7		1	
	Iron, Total	600	ug/l	3260		858	
	Lead, Total	50	ug/l	3		0.6	J
	Magnesium, Total	35000	ug/l	222000		114000	
	Manganese, Total	600	ug/l	204.4		173.4	
	Mercury, Total	1.4	ug/l	0.2	U	0.2	U
	Nickel, Total	200	ug/l	5.4		2.4	
	Potassium, Total		ug/l	7140		2810	
	Selenium, Total	20	ug/l	5	U	5	U
	Silver, Total	100	ug/l	0.4	U	0.4	U
	Sodium, Total		ug/l	52800		56700	
	Thallium, Total	0.5	ug/l	0.5	U	0.5	U
	Vanadium, Total		ug/l	3.8	J	5	U
	Zinc, Total	5000	ug/l	12.8		4.5	J

*NY-TOGS-GA: New York TOGS 111 Groundwater Effluent Limitations criteria reflects all addendum to criteria through June 2004.