

TOWN OF NORTH HEMPSTEAD  
APPLICATION FOR PUBLIC ACCESS TO RECORDS

TO: RECORDS ACCESS OFFICER  
220 PLANDOME ROAD  
MANHASSET, NEW YORK 11030  
(516) 869-7600



I hereby apply to inspect the following record(s):

See attached email dated 1/27/14

I hereby declare, under penalty of perjury, that the above information  is or  is not (check one) being used for solicitation or fund-raising purposes.

Signature

Richard Bentley

Telephone Number

Print Name

Council of Greater Manhasset Civic Association

Representing

rbentley@downstate.edu

Mailing Address

Date

FOR AGENCY USE ONLY

I have checked for record(s) you requested with the following departments: Parks Department; Department of Public Works; Planning Department

- and the attached record(s) were found (information not subject to FOIL may have been redacted).
- and no record(s) were found.
- the \_\_\_\_\_ which is the subject of your request is not within the Town's jurisdiction.
- REQUEST BUILDING DEPARTMENT RECORDS DIRECTLY FROM THEM (869-7816).

NOTE:

Your request cannot be responded to for the following reasons:

- Your request is not sufficiently specific for me to identify the record(s) with reasonable certainty. You may renew the request with additional details.
- Disclosure of a portion/all the information would be an unwarranted invasion of personal privacy.
- A portion/All of the requested record(s) are exempt from release by statute.
- A portion/All of the record(s) requested involve contract negotiations and are not disclosable.
- A portion/All of the record(s) sought are intra-agency or inter-agency materials exempt from disclosure.
- The record(s) cannot be released for the following reasons:

*Richard Bentley* Acting Records Access Officer 2/28/14  
Signature Title Date

NOTICE: You have the right to appeal a denial of this application within 30 days. The head of this agency must fully explain the reasons for such denial in writing within ten business days of receipt of an appeal.

I hereby appeal:

Name

Date

**From:** Richard Bentley [mailto:RBentley@downstate.edu]  
**Sent:** Monday, January 27, 2014 2:16 PM  
**To:** Wayne Wink  
**Subject:** FOIL REQUEST: Plandome Pond Park Consulting Report

January 27, 2014

Wayne Wink, Town Clerk  
Town of North Hempstead

Wayne:

We have been working for years with TONH on Plandome Pond Park, for years dating back to Councilman Fred Pollack tenure. In furtherance of those efforts, the Town recently engaged a consulting engineer/architect firm to study Plandome Pond Park in Plandome Height, NY. We understand that Town action is already underway to consider the funding of dredging project at this pond, resulting from the final consultant's report that was recently received by the Town within the past 60 days.

I have been requesting a copy of that study since it was received by the Town (See below), but have not yet received it. In anticipation that the Town may require a formal FOIL request for the document to be released, I ask that this eMail be considered my formal FOIL request. Any guidance you can provide in expediting receiving a copy of the report is greatly appreciated.. An electronic format if available by eMail is preferred

Many thanks,  
Rich

 Please consider the environment before printing this e-mail

Richard Bentley, President  
Council of Greater Manhasset Civic Associations  
[rbentley@downstate.edu](mailto:rbentley@downstate.edu)

Phone 718-270-2186; Cell: 917-751-1399

----- Forwarded by Richard Bentley/Downstate on 01/27/2014 01:59 PM -----

From: Richard Bentley/Downstate  
To: [cardinalc@northhempsteadny.gov](mailto:cardinalc@northhempsteadny.gov),  
Date: 01/27/2014 01:56 PM  
Subject: Fw: Plandome Pond Park Consulting Report - Status/Copy ?

Cindy:

Councilwoman DeGiorgio reports today that there's been recent internal Town progress - the project is about \$300K. I'm assuming the engineer/architect report likely recommended the 500cuYd dredging, but the report itself has not yet been shared.

How can we (civics) best obtain a copy of the engineers study? If a formal FOIL request is required, let me know the name of the project/ report so I can submit request.

Thanks,  
Rich



Please consider the environment before printing this e-mail

Richard Bentley, President

Council of Greater Manhasset Civic Associations

[rbentley@downstate.edu](mailto:rbentley@downstate.edu)

Phone 718-270-2186; Cell: 917-751-1399

# ENGINEERING REPORT

## EVALUATION OF PLANDOME PARK POND

Plandome Heights  
Nassau County, New York

H2M Project No.  
TONH 13-02

JANUARY 2014



### Prepared for:

Town of North Hempstead Department of Public Works  
285 Denton Avenue  
New Hyde Park, New York 11040

### Prepared by:

Holzmacher, McLendon & Murrell, P.C.  
538 Broad Hollow Road, 4<sup>th</sup> Floor East  
Melville, New York 11747

### In conjunction with:

Land Use Ecological Services  
570 Expressway Drive South, Suite 2F  
Medford, New York 11763



architects + engineers





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## EXECUTIVE SUMMARY

Pursuant to authorization by the Town of North Hempstead Department of Public Works, H2M architects + engineers and Land Use Ecological Services have been retained to evaluate potential improvements to Plandome Pond in Plandome Heights for the purpose of addressing accumulated pollutants and sediment that have been deposited from urban storm water runoff.

Our evaluation included a topographic survey of the pond that identified an accumulation of approximately 500 cubic yards of organic sediment that contains several pollutants such as DDD, DDE, and nickel. Removal of this sediment would improve water quality and expose the original sandy bottom of the pond, which is a preferred habitat for plants and animals. The characteristics of this material do not permit the dredge spoil to be utilized as fill material and would therefore need to be disposed at a landfill. However, levels of contamination are within limits that would allow for disposal of the material at any Long Island landfill or for use as landfill cover.

## INTRODUCTION

Plandome Pond is a 0.3 acre pond located within Plandome Park at the eastern end of Bourndale Road in Plandome Heights. A location map is included in Figure 1. The accumulation of organic sediment within the pond has reduced the depth of water, which adversely affects water quality and the overall health of the pond. The sediment is also suspected to contain potential pollutants.

The Town of Hempstead Department of Public Works has retained H2M architects + engineers (H2M) and Land Use Ecological Services (LUES) to assess the feasibility of dredging the pond to remove the accumulated sediment. The proposed work is aimed at identifying accumulated organic sediments, pollutants contained within the sediment and alternatives for addressing the removal of the organic material. Additionally, all existing storm water inputs that can contribute future organic material to the pond are to be identified.

## EVALUATION

### *Sediment Quantity and Sources*

H2M assigned a field survey team to perform a topographic survey of Plandome Pond. This survey included the elevations of the organic sediment (soft bottom) as well as the elevations of the underlying sand (hard bottom). The hard bottom sand provides a more natural pond surface. Copies of these surveys are included in Figures 2a and 2b. Based on the results of these surveys, we calculated a total of approximately 500 cubic yards of accumulated organic sediment that could be dredged from Plandome Pond.

Organic sediment is typically introduced by storm water runoff. A review of record plans provided by Nassau County Department of Public Works identified two piped discharges into the pond. The first is a 6 inch diameter overflow pipe from Nassau County Recharge Basin No. 408 located at the south side of the pond. The other is a 15" diameter pipe that appears to discharge water from a series of buried slotted pipes on the east side of the pond. No visible evidence of either of these pipes was located in the field, as they are likely buried. However, during a rain event, we did note a slight turbulence in the water in the apparent vicinity of the 15" pipe, which would suggest the pipe is present and discharging storm water runoff into the pond. Additional runoff is also introduced via overland flow from the landscaped lawn area surrounding the pond. A copy of the record plan sheet that identifies these outfalls is included as Figure 3.

### *Ecological Assessment*

Plandome Pond discharges through two outflows to a freshwater stream located to the north of the park. This freshwater stream flows parallel to Brookside Drive and into Leeds Pond. The stream appears to have been manipulated in the past through excavation to more efficiently carry groundwater downstream. The shoreline of Plandome Pond and banks of the freshwater stream are presented in Figure 4. The shoreline of Plandome Pond is mowed to the water edge; as a result, no emergent wetland plant communities are present on the shoreline. The banks of the stream to the north are bordered by residential lawns/plantings and upland forests. No freshwater wetland communities, such as red maple-hardwood swamp, were located adjacent to the streams within at least 300 feet of Plandome Pond Park. The New York State Environmental Resource Mapper database indicates the potential presence of bent sedge (*Carex styloflexa*) in the project area based on a historic (1907) observation of this NYS-Endangered plant. Bent sedge inhabits the edges of streams in wet habitats such as red maple-hardwood swamps, red maple-sweet gum swamps, emergent marshes, floodplain forests, pine barrens, vernal ponds, and coastal plain poor fens (New York Natural Heritage Program, 2013). Therefore, Plandome Pond Park and the upland forests located to the north do not provide suitable habitat for bent sedge. Accordingly, dredging at Plandome Pond Park is not likely to adversely affect this species or its habitat.

### *Environmental Permitting*

#### *a. NYSDEC*

Plandome Pond is not a regulated freshwater wetland under New York State's Freshwater Wetlands Act (Article 24). Leeds Pond is a regulated freshwater wetland, as are the hardwood swamps adjacent to the streams that discharge into the south end of Leeds Pond. However, no freshwater wetland communities were located adjacent to the stream located within 300 feet of Plandome Park. Thus, dredging of Plandome Pond would not require the Freshwater Wetlands permit from the NYSDEC that is necessary for most dredging projects on Long Island. However, dredging at Plandome Pond would be regulated under the NYSDEC's Protection of Waters (Article 15) regulations. Article 15 restricts excavation/dredging in navigable waters and wetlands "adjacent or contiguous to" navigable waters. The NYSDEC interprets "adjacent or contiguous to" very broadly and, as a result, Plandome Pond is regulated under Article 15 due to its hydrological connection to Manhasset Bay and Leeds Pond through the freshwater stream to the east of Brookside Drive.

In addition, the NYSDEC regulates the handling, transport, and disposal of solid waste and materials through the Division of Materials Management. Approval from the Division of Materials Management is necessary to dispose of the dredged sediments at a Long Island landfill. Accordingly, it is recommended that a sediment sampling plan be submitted to the NYSDEC along with or before the dredging plans and permit application for approval by the Division of Materials Management. This sediment sampling plan should specify the number of sediment borings, the depth of sediment borings (including the organic sediments, mineral sediments located between 0 and 1 feet below the organic sediments, and mineral sediments located between 1 and 2 feet below the organic sediments), and contaminants that will be assessed by laboratory analysis.

#### *b. US Army Corps of Engineers*

Dredging of Plandome Pond would also require authorization from the US Army Corps of Engineers under Section 404 of the Clean Water Act, as Plandome Pond has a "significant nexus" with Leeds Pond and Manhasset Bay, which are classified as "jurisdictional waters of the US". Dredging of Plandome Pond would not qualify for Nationwide Permit 18 (Minor Discharge) as more than 25 cubic yards of material would be removed from below the ordinary high water mark. Therefore, dredging of Plandome Pond would require a General Permit from the US Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.

### *Sediment Contaminant Concentrations and Ramifications for Material Disposal*

The organic sediments in Plandome Pond were analyzed for the presence of metals, pesticides and PCBs, VOCs, SVOCs, grain size distribution, and total organic carbon to assess potential disposal alternatives for dredged material. Three samples of the soft organic sediments in the pond were collected throughout the pond and composited into a single sample for analysis for metals, pesticides and PCBs, SVOCs, grain size distribution, and total organic carbon. A single sample was collected for analysis for VOCs to minimize loss of volatile contaminants during compositing of multiple samples. Samples were collected on October 15, 2013. Samples were placed in glass sample containers and transported on ice to H2M Labs. Samples were received at the laboratory within 4 hours of collection. Chain of custody documentation and laboratory reports are provided in Appendix A. Results of laboratory analysis were compared to New York State regulatory standards to determine potential disposal locations of dredged sediments. NYSDEC regulatory standards used to evaluate contaminant concentrations included Remedial Program Soil Clean-Up Objectives of 6 NYCRR Part 375, Tables 375-6.8(a) and (b) (NYSDEC, 2006); TOGS 5.1.9 In-Water and Riparian Management of Sediment and Dredged Material, Table 1 (NYSDEC, 2004); and Groundwater Quality Standards of 6 NYCRR Part 703, Table 1 (NYSDEC, 2008). Analytical laboratories often have difficulty attaining the minimum detectable limits required for Tables 375-6.8(a) and (b) and TOGS 5.1.9 Table 1 due to the complex nature of organic dredge material.

The NYSDEC Division of Materials Management acknowledges this difficulty and requires typically utilizes risk assessment principles to determine if analytical results for dredge material provide acceptable documentation of contaminant concentrations. The analytical results for dredge material and risk assessment are evaluated by the NYSDEC on a case-by-case basis. In many cases, the NYSDEC requires that the contaminant concentration of the dredged sediments is assumed to be equivalent to the minimum detectable limit of the laboratory analysis even though the actual contaminant concentration is likely to be less than the minimum detectable limit.

The organic sediments in Plandome Park consist of fine-grained sands (84%) and silts and clays (16%) with a total organic carbon content of (0.69%). The sediments are comprised of more than 10% silts and clays and have a total organic carbon content of greater than 0.5%; accordingly, the sediments must be analyzed for contaminant concentrations to determine potential dredging restrictions and disposal locations.

Elevated concentrations of several contaminants were observed in the pond's organic sediments (Table 1). Contaminants with elevated concentrations included DDD, DDE, and nickel. DDD and DDE are metabolic breakdown products of DDT. DDT was extensively utilized as an insecticide between the 1940s and 1960s prior to realization of its environmental impacts; the DDD and DDE present in Plandome Pond are the residual effects of past DDT application. These results indicate that the organic sediments at Plandome Pond will not qualify for an unrestricted or beneficial use determination. Accordingly, any dredged sediments cannot be re-used or disposed of on-site and will need to be disposed of at a licensed landfill facility. In addition, the minimum detectable limits of the laboratory analysis exceeded NYSDEC regulatory standards for several contaminants, due to interference of the organic sediments with the laboratory analysis, including mercury, DDT, dieldrin, hexavalent chromium, and 1,4 dioxane. Therefore, in order to determine a suitable disposal location for dredged sediments, it must be assumed that the concentration of these contaminants is equivalent to the minimum detectable limit for the laboratory analysis.

**Table 1: Contaminant Concentrations Exceeding NYS Regulatory Standards**  
 All concentrations in ppm (mg/Kg)

Contaminant	New York State Standard				Plandome Pond Sediment Sample
	Unrestricted Use <sup>a</sup>	Protection of Groundwater <sup>b</sup>	Protection of Ecol. Resources <sup>b</sup>	TOGS 5.1.9 <sup>c</sup>	
1,4-Dioxane	0.1	0.1	0.1	NS	<0.18
DDT	0.0033	136	0.0033	0.0033	<0.0058
DDD	0.0033	14	0.0033	0.0033	0.0063
DDE	0.0033	17	0.0033	0.0033	0.0098
Dieldrin	0.005	0.039	0.006	0.11	<0.0058
Nickel	30	130	30	NS	35.3
Chromium, Trivalent	30	36	NS	NS	34.0
Chromium, Hexavalent	1	19	1	NS	<1.8
Total Mercury	0.18	0.73	0.18	0.17	<0.35

<sup>a</sup>Remedial Program Soil Clean-Up Objectives, Table 375-6.8(a)  
<sup>b</sup>Remedial Program Soil Clean-Up Objectives, Table 375-6.8(b)  
<sup>c</sup>In-Water and Riparian Management of Sediment and Dredged Material, Table 1  
 NS= No standard provided by TOGS 5.1.9

The concentration of DDD, DDE, and nickel in the Plandome Pond sediments exceed New York State's standards for Unrestricted Use Soil Cleanup Objectives (Table 375-6.8(a)). In addition, the minimum detectable limit of the laboratory analyses were insufficient, due to matrix interference, to rule out the potential presence of mercury, DDT, dieldrin, hexavalent chromium, and 1,4 dioxane. As a result, the

NYSDEC Division of Materials Management will not approve the re-use or disposal of the dredged sediments at Plandome Pond Park.

In addition, the sum of DDT+DDD+DDE concentrations (0.02 mg/Kg) and the assumed mercury concentration due to the laboratory minimum detectable limit (0.35 mg/Kg) in Plandome Pond sediments classifies the material as Class B under TOGS 5.1.9. This indicates that the sediment is expected to be chronically toxic to aquatic biota. Dredging of Class B sediments typically involves restrictions, such as the use of a clam-shell or closed bucket and the use of turbidity curtains and appropriate control dewatering supernatant to avoid transport of suspended contaminants. The Class B designation also limits the potential for in-water or riparian disposal of the dredged sediments; however, in-water or riparian disposal would clearly not be considered at this site. In addition, the Class B designation indicates that the NYSDEC will require a complete characterization of contaminant concentrations in the pond including the concentrations in the mineral sediments located below the organic sediments. This complete characterization is necessary to document that the cut depth of a dredging project is sufficient to remove all contaminated sediments and the newly exposed pond substrate does not contain sediments that are expected to be chronically toxic to aquatic biota.

Sediment analysis indicated the potential presence of two contaminants (chromium and mercury) in concentrations necessitating determination if the dredged material exhibits the toxicity characteristics of hazardous wastes under the federal hazardous waste program (40 CFR Part 261). The chromium concentration and assumed mercury concentrations due to the laboratory minimum detectable limit at Plandome Pond are 35.8 mg/Kg and 0.35 mg/Kg, respectively. Therefore, there is no potential for these sediments to exceed the 5 mg/Kg and 0.2 mg/Kg standards for a chromium and mercury TCLP tests, respectively, according to the TCLP "Rule of 20". As a result, the Plandome Pond sediments are not classified as hazardous and would be suitable for disposal at a Long Island landfill.

It is also necessary to compare the analytical results with New York State's standards for Protection of Groundwater Soil Cleanup Objectives (Table 375-6.8(b)) to determine if dredged material would need to be disposed of outside of the deepflow recharge zone of the Long Island Aquifer, according to Sub Part 360-8 pertaining to Long Island landfills (NYSDEC, 1988). The concentration of 1,4 dioxane was found to be less than 0.18 mg/Kg and potentially exceeds the NYS Protection of Groundwater Standards of 0.1 mg/Kg (Table 1). All other contaminants were present in concentrations less than Protection of Groundwater Standards. The analytical laboratory was unable to attain the minimum detectable limit of 1,4 dioxane of 0.1 mg/kg due to the complex nature of organic dredge material. Due to this organic matrix interference issue, it cannot be definitively ruled out that the dredge material's concentration of 1,4 dioxane is lower than the NYSDEC's Protection of Groundwater standards (Table 375-6.8(b)). Typically, this indicates that the dredged material would need to be disposed of outside of the deepflow recharge zone of the Long Island Aquifer according to Sub Part 360-8 (NYSDEC, 1988). However, 1,4 dioxane is not a listed contaminant in the Groundwater Effluent Limitations put forth by the NYSDEC (Part 703) (NYSDEC, 2008). Therefore, this contaminant does not need to be considered when evaluating disposal options in landfills on Long Island. As a result, dredge material from Plandome Pond Park can be disposed of or used as daily cover at any Long Island landfill, regardless of groundwater recharge zone, if accepted by the landfill.

## IMPLEMENTATION AND PRELIMINARY COST OPINION

The organic sediment contained within Plandome Pond will require dewatering on-site prior to transporting to a landfill. Assuming an average depth of four feet, an area of approximately 3,400 square feet will be required to store the material for the anticipated drying time. Sufficient space appears to be available north and west of Nassau County Recharge Basin 408 to provide this required storage.

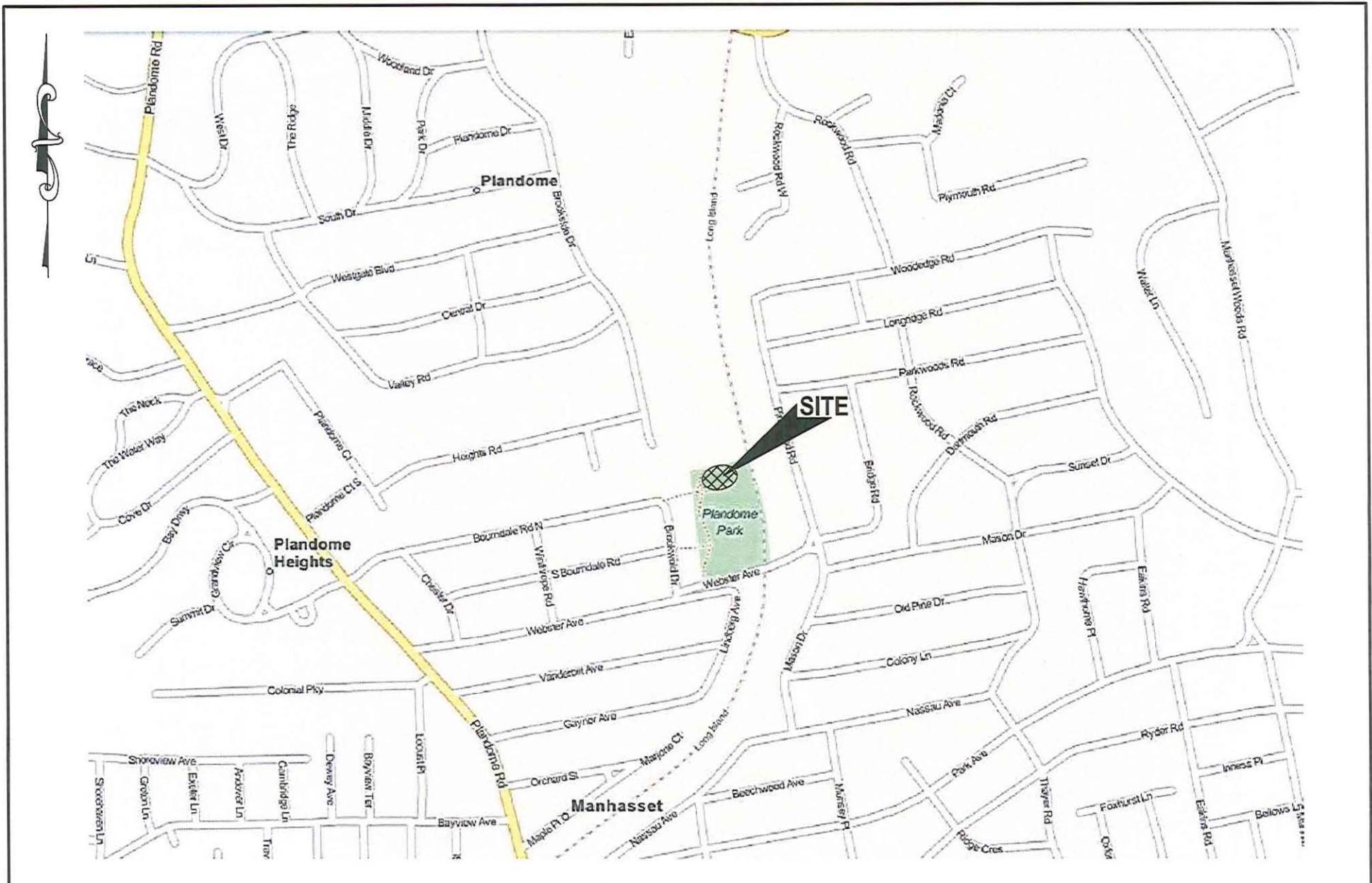
Dredging and disposal of this material at a Long Island landfill is expected to cost approximately \$220,000. This cost opinion does not include surveying, engineering, construction administration, or construction inspection costs. A breakdown of these costs is identified below:



Mobilization	\$ 20,000
Dewatering basin	\$ 10,000
Dredging	\$ 50,000
Load trucks after drying	\$ 5,000
Transport and disposal	\$ 55,000
Site restoration	\$ 10,000
General conditions	\$ 30,000
Subtotal	\$180,000
Contingencies	\$ 40,000
Total	\$220,000

References

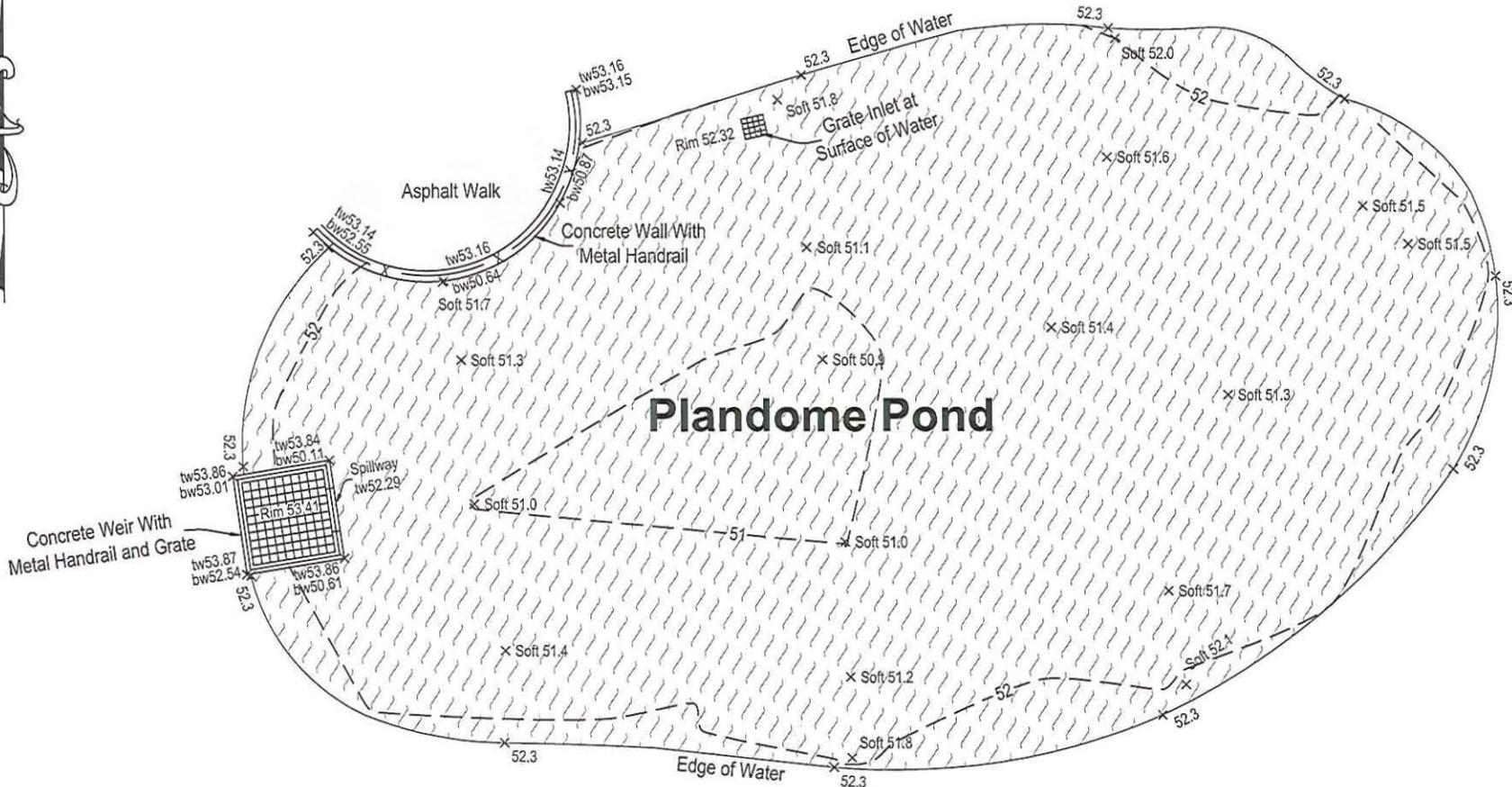
- NYNHP. 2013. NYNHP Conservation Guide: Bent Sedge (*Carex styloflexa*). 6 pages.
- NYSDEC. 1988. 6 NYCRR Environmental Conservation Law Sub-Part §360-8. Long Island Landfills.
- NYSDEC. 2004. In-water and riparian management of sediment and dredged material. New York State Department of Environmental Conservation- Division of Water. Technical and Operational Guidance Series 5.1.9. 77 pgs.
- NYSDEC. 2006. 6 NYCRR Environmental Conservation Law Sub-Part §375-6. Remedial Program Soil Clean-Up Objectives.
- NYSDEC. 2008. 6 NYCRR Environmental Conservation Law Part §703.5. Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.



**FIGURE 1**

© 2013 MAPQUEST MAP DATA

<p>PROJECT</p> <p><b>EVALUATION OF PLANDOME POND</b></p>	<p>PROJECT NUMBER: TONH 1302</p> <p>DATE: DECEMBER 2013</p>	<p>PROJECT LOCATION</p>	<p><b>H 2 M</b></p> <p>architects + engineers</p> <p>Malville, NY Albany, NY          North Hempstead, NY Parsippany, NJ</p>
<p>CLIENT</p> <p><b>TOWN OF NORTH HEMPSTEAD          NASSAU COUNTY, NY</b></p>	<p>SHEET: FIG. 1</p> <p>SCALE: 1</p>		



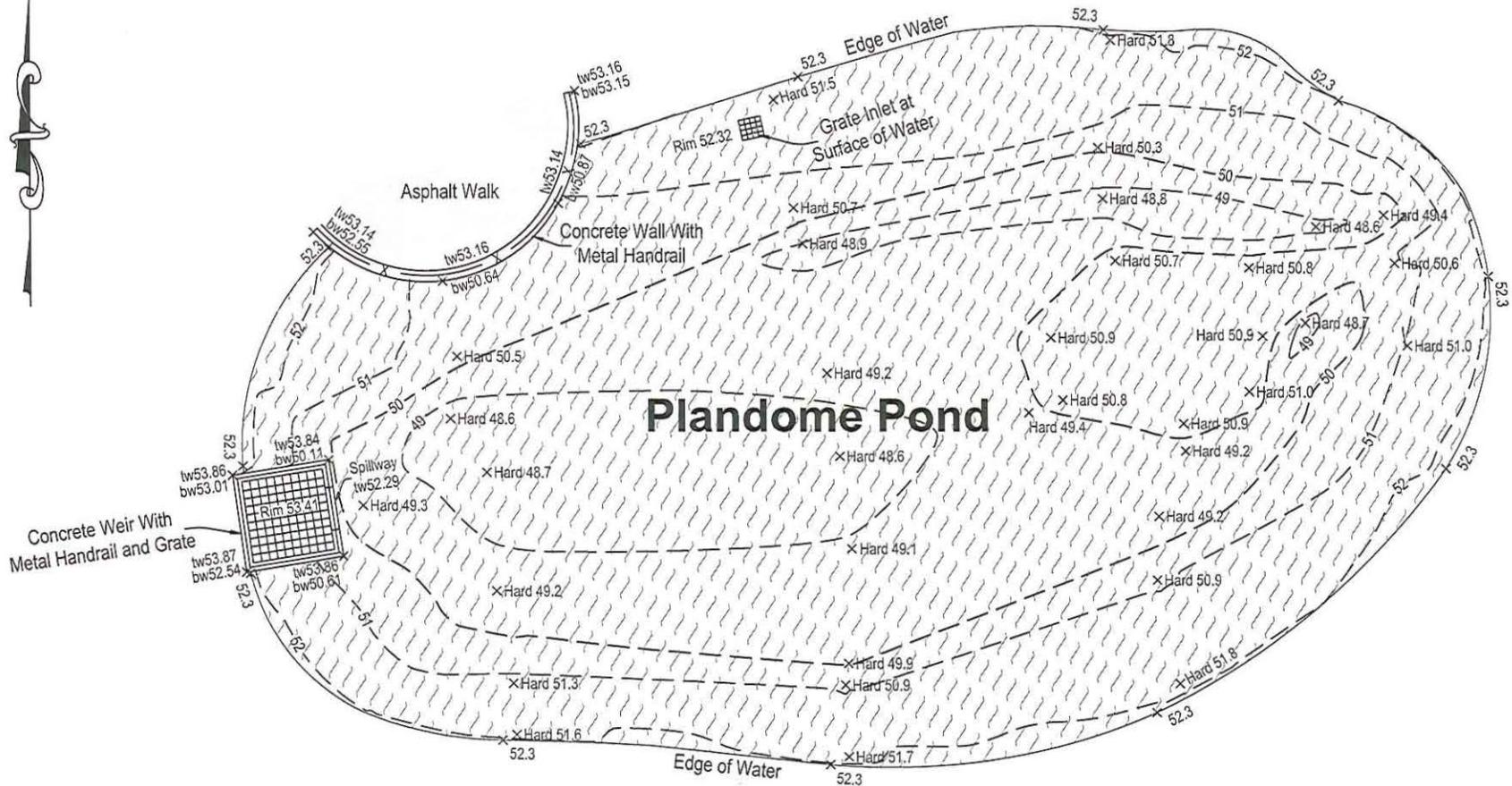
**LEGEND**

- INLET
- METAL HANDRAIL
- ASPHALT PAVEMENT
- WATER
- 52.3 x SPOT ELEVATION
- x Hard 48.6 SPOT ELEVATION AT HARD BOTTOM OF POND
- x Soft 50.9 SPOT ELEVATION AT SOFT BOTTOM OF POND
- tw53.68 TOP/BOT WALL GRADE
- bw51.26

**FIGURE 2a**

<p><b>PROJECT</b></p> <p style="text-align: center;"><b>EVALUATION OF PLANDOME POND</b></p>	<p><b>PROJECT NUMBER:</b> TONH 1302</p> <p><b>DATE:</b> DECEMBER 2013</p>	<p>TOPOGRAPHIC SURVEY OF PLANDOME POND SOFT BOTTOM</p>	<div style="font-size: 48pt; font-weight: bold; letter-spacing: 10px;">H 2</div> <div style="font-size: 24pt; font-weight: bold; letter-spacing: 10px;">M</div> <p style="font-size: 8pt;">architects + engineers</p>
<p><b>CLIENT</b></p> <p style="text-align: center;"><b>TOWN OF NORTH HEMPSTEAD NASSAU COUNTY, NY</b></p>	<p><b>SHEET:</b> FIG. 2a</p> <p><b>SCALE:</b> 1" = 20'-0"</p>	<p><b>All Contracts</b></p>	

Malville, NY Albany, NY  
New City, NY Parsippany, NJ

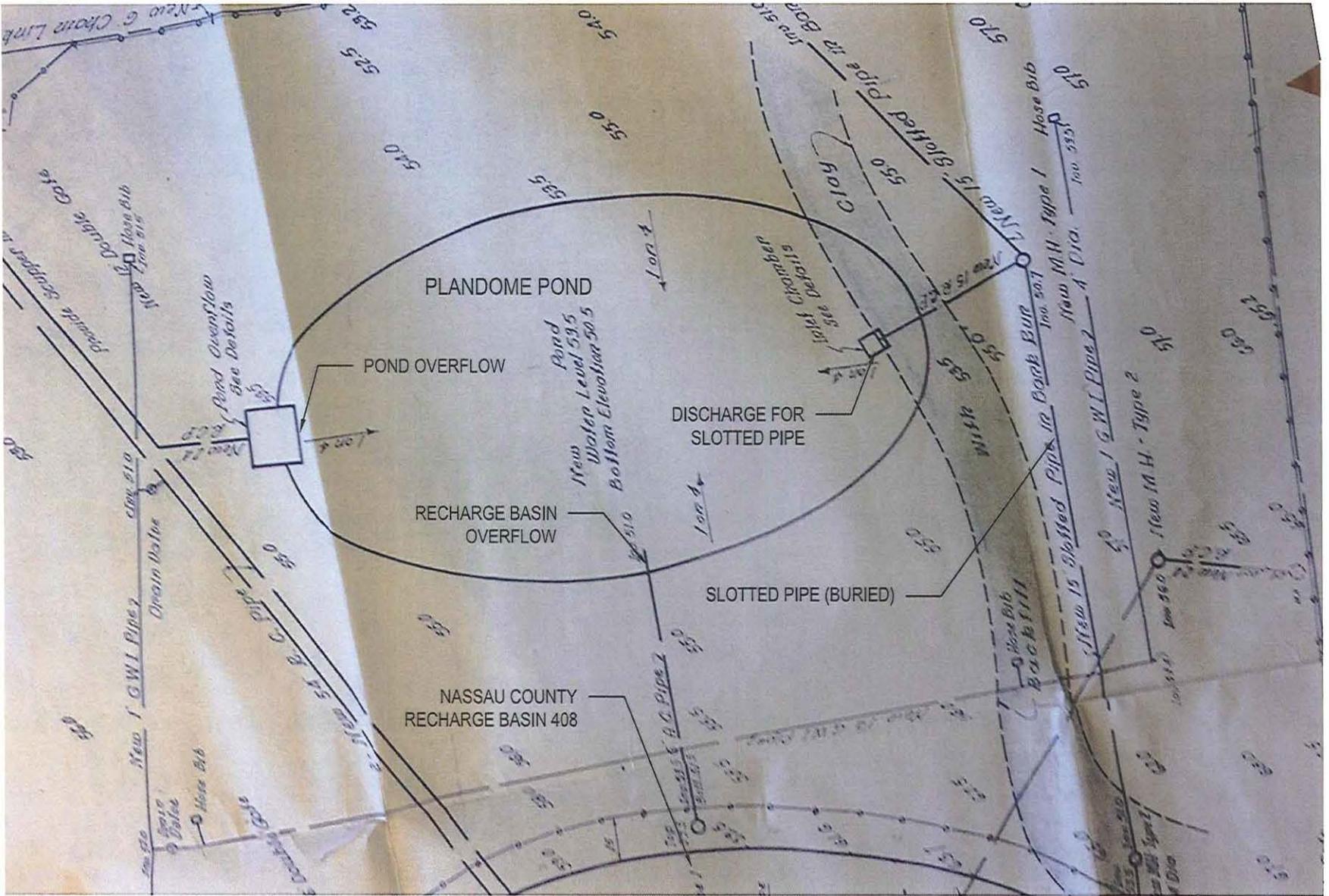


**LEGEND**

	INLET	52.3 x	SPOT ELEVATION
	METAL HANDRAIL	x Hard 48.6	SPOT ELEVATION AT HARD BOTTOM OF POND
	CONTOUR	x Soft 50.9	SPOT ELEVATION AT SOFT BOTTOM OF POND
	ASPHALT PAVEMENT	tw53.68	TOP/BOT WALL GRADE
	WATER	bw51.26	

**FIGURE 2b**

PROJECT	<b>EVALUATION OF PLANDOME POND</b>	PROJECT NUMBER: <b>TONH 1302</b>	<b>H 2</b>	architects + engineers
		DATE: <b>DECEMBER 2013</b>		
CLIENT	<b>TOWN OF NORTH HEMPSTEAD NASSAU COUNTY, NY</b>	SHEET: <b>FIG. 2b</b>	<b>M</b>	Molville, NY New City, NY Albany, NY Parsippany, NJ
		SCALE: <b>1" = 20'-0"</b>		

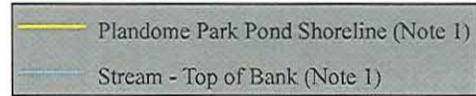


**FIGURE 3**

SOURCE: NCDPW

PROJECT	<b>EVALUATION OF PLANDOME POND</b>		PROJECT NUMBER: <b>TONH 1302</b>	DATE: <b>DECEMBER 2013</b>	STORMWATER DISCHARGE INTO PLANDOME POND	<div style="display: flex; align-items: center;"> <div style="font-size: 2em; margin-right: 5px;">H</div> <div style="font-size: 2em; margin-right: 5px;">2</div> </div>	architects + engineers
	CLIENT	<b>TOWN OF NORTH HEMPSTEAD NASSAU COUNTY, NY</b>					
			SCALE: <b>1" = 30'-0"</b>	<b>All Contracts</b>		Molville, NY New City, NY	Albany, NY Parsippany, NJ

Plandome Park Pond Study - Environmental Conditions



1 inch = 40 feet

NOTES:

1. Freshwater wetland boundary equivalent to Plandome Park Pond Shoreline and Stream -Top of Bank as determined by W.P. Bowman, PhD, Land Use Ecological Services, Inc. on 10/15/2013.
2. Environmental data collected 10/15/2013 by Land Use Ecological Services, Inc. using hand-held GPS unit with sub-meter accuracy.
3. 2010 orthoimage from NYS ITS (<http://gis.ny.gov>)



Prepared By: Land Use Ecological Services, Inc.  
570 Expressway Drive South, Suite 2F  
Medford, NY 11763

Project: Plandome Park Pond Study  
For: Town of North Hempstead  
Department of Public Works  
Project No. 13-13

Drawn By: KR

Designed By: WB

Date: 12/17/2013

Revised:

Scale: As Noted

Sheet: Figure 4



**APPENDIX A  
SEDIMENT SAMPLES CHAIN OF CUSTODY AND  
LABORATORY REPORTS**



labs

575 Broad Hollow Road, Melville, NY 11747  
TEL: (631) 694-3040 FAX: (631) 420-8436  
NYSDOH ID#10478

**LABORATORY RESULTS**

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

**Plandome Pond Sediment**

Lab No. : 1310876-003

Sample Information:

Type : Sediment

Client Sample ID: PLANDOME PARK-3

Attn To : Matt Mohlin

Origin:

Collected : 10/15/2013 2:30:00 PM

Received : 10/15/2013 4:38:00 PM

Collected By LANDUSE99

Parameter(s)	Results	Qualifier	D.F.	Units	Prep Date: 10/21/2013 2:00:00 PM	Analyst: CGZ
Arsenic	1.79		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Barium	92.6		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Beryllium	< 0.87		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Cadmium	< 0.87		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Copper	22.3		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Lead	20.4		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Manganese	145		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Nickel	35.3		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Selenium	< 0.87		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Silver	< 1.75		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01
Zinc	68.3		1	mg/kg-dry	10/22/2013 10:54 AM	Container-01 of 01

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Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 11/1/2013

Page 1 of 6



labs

575 Broad Hollow Road, Melville, NY 11747  
TEL: (631) 694-3040 FAX: (631) 420-8436  
NYSDOH ID#10478

**LABORATORY RESULTS**

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

**Plandome Pond Sediment**

**Sample Information:**

Type : Sediment

Lab No. : 1310876-003

Client Sample ID: PLANDOME PARK-3

Attn To : Matt Mohlin

Collected : 10/15/2013 2:30:00 PM

Received : 10/15/2013 4:38:00 PM

Collected By LANDUSE99

Origin:

Parameter(s)	Results	Qualifier	D.F.	Units	Prep Date: 10/18/2013 9:51:47 AM	Analyst: JB	
4,4'-DDD	6.3		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
4,4'-DDE	9.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
4,4'-DDT	< 5.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Aldrin	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
alpha-BHC	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
alpha-Chlordane	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Aroclor 1016	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1221	< 120		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1232	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1242	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1248	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1254	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
Aroclor 1260	< 58		1	µg/Kg-dry	10/22/2013 5:56 PM	Container-01 of 01	
beta-BHC	3.7		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
delta-BHC	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Dieldrin	< 5.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Endosulfan I	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Endosulfan II	< 5.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Endosulfan sulfate	< 5.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Endrin	< 5.8		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
gamma-BHC	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Heptachlor	< 3.0		1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Mirex	< 5.8	+	1	µg/Kg-dry	10/22/2013 5:16 PM	Container-01 of 01	
Surr: Decachlorobiphenyl	54.9		1	%REC	Limit 30-150	10/22/2013 5:16 PM	Container-01 of 01
Surr: Decachlorobiphenyl	50.5		1	%REC	Limit 30-150	10/22/2013 5:56 PM	Container-01 of 01
Surr: Tetrachloro-m-xylene	37.9		1	%REC	Limit 30-150	10/22/2013 5:56 PM	Container-01 of 01
Surr: Tetrachloro-m-xylene	35.7		1	%REC	Limit 30-150	10/22/2013 5:16 PM	Container-01 of 01

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Laboratory Manager

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labs

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478

LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Plandome Pond Sediment

Lab No. : 1310876-003

Sample Information:

Type : Sediment

Client Sample ID: PLANDOME PARK-3

Attn To : Matt Mohlin

Origin:

Collected : 10/15/2013 2:30:00 PM

Received : 10/15/2013 4:38:00 PM

Collected By LANDUSE99

Table with columns: Analytical Method, Prep Method, Analyst, Parameter(s), Results, Qualifier, D.F., Units, Analyzed, Container. Lists various chemical compounds and their detection results.

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N = Indicates presumptive evidence of compound

Signature of Joann M. Slavins, Laboratory Manager

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labs

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TEL: (631) 694-3040 FAX: (631) 420-8436
NYSDOH ID#10478

LABORATORY RESULTS

Results for the samples and analytes requested

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Plandome Pond Sediment

Sample Information:

Type : Sediment

Lab No. : 1310876-003

Client Sample ID: PLANDOME PARK-3

Attn To : Matt Mohlin

Collected : 10/15/2013 2:30:00 PM

Received : 10/15/2013 4:38:00 PM

Collected By LANDUSE99

Origin:

Table with 2 main sections. Section 1: Analytical Method: SW8260, Prep Method: 5035A-L, Analyst: BL. Section 2: Analytical Method: SW8270, Prep Method: SW3545, Prep Date: 10/21/2013 9:48:41 AM, Analyst: SH. Columns include Parameter(s), Results, Qualifier, D.F., Units, Limit, Analyzed, and Container.

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Joann M. Slavina

Laboratory Manager

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labs

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NYSDOH ID#10478

**LABORATORY RESULTS**

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

**Plandome Pond Sediment**

Lab No. : 1310876-003

Sample Information:

Type : Sediment

Client Sample ID: PLANDOME PARK-3

Attn To : Matt Mohlin

Origin:

Collected : 10/15/2013 2:30:00 PM

Received : 10/15/2013 4:38:00 PM

Collected By LANDUSE99

Parameter(s)	Results	Qualifier	D.F.	Units	Prep Date:	Analyzed:	Analyst:	Container:
<u>Analytical Method:</u> SW9014 : <u>Prep Method:</u> SW9010C								
Cyanide	< 0.49		1	mg/Kg	10/21/2013 10:25:00 AM	10/21/2013 2:07 PM	HT	Container-01 of 01
<u>Analytical Method:</u> CALC : <u>Analyst:</u> CO								
Chromium, Trivalent	34.0	+	1	mg/Kg		10/30/2013		Container-01 of 01
<u>Analytical Method:</u> SW7196 : <u>Prep Method:</u> SW7196A <u>Prep Date:</u> 10/24/2013 9:00:00 AM <u>Analyst:</u> MLM								
Chromium, Hexavalent	< 1.8		1	mg/Kg-dry	10/24/2013 11:32 AM			Container-01 of 01
<u>Analytical Method:</u> SW7471 : <u>Prep Method:</u> SW7471 <u>Prep Date:</u> 10/17/2013 4:00:00 PM <u>Analyst:</u> Aba								
Mercury	< 0.35		1	mg/Kg-dry	10/18/2013 10:22 AM			Container-01 of 01
<u>Analytical Method:</u> D2216 : <u>Analyst:</u> TF								
Percent Moisture	43.2		1	wt%	10/16/2013 2:40 PM			Container-01 of 01
<u>Analytical Method:</u> SUB : <u>Analyst:</u> Sub								
Subcontract (See Attached)	-	+	1		10/23/2013			Container-01 of 03
<u>Analytical Method:</u> SW9060 : <u>Analyst:</u> Sub								
Total Organic Carbon	6,900		1	mg/Kg	10/15/2013			Container-01 of 03

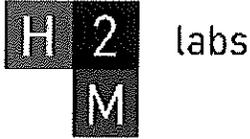
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Laboratory Manager

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Date Reported : 11/1/2013



H2M LABS INC  
 575 Broad Hollow Road  
 Melville, NY 11747  
 TEL: (631) 694-3040 FAX: (631) 420-8436  
 Website: www.h2mlabs.com

# Sample Receipt Checklist

Client Name **PCPPS**

Date and Time Received: **10/15/2013 4:38:00 PM**

Work Order Number: **1310876**

RcptNo: **1**

Received by **Melissa Watson**

Completed by: *M. Watson*

Reviewed by: *Joseph C...*

Completed Date: 10/15/2013

Reviewed Date: 10/18/2013 9:36:03 AM

Carrier name: Client

- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Are matrices correctly identified on Chain of custody? Yes  No
- Is it clear what analyses were requested? Yes  No
- Custody seals intact on sample bottles? Yes  No  Not Present
- Samples in proper container/bottle? Yes  No
- Were correct preservatives used and noted? Yes  No  NA
- Preservative added to bottles:
- Sample Condition? Intact  Broken  Leaking
- Sufficient sample volume for indicated test? Yes  No
- Were container labels complete (ID, Pres, Date)? Yes  No
- All samples received within holding time? Yes  No
- Was an attempt made to cool the samples? Yes  No  NA
- All samples received at a temp. of > 0° C to 6.0° C? Yes  No  NA
- Response when temperature is outside of range:
- Sample Temp. taken and recorded upon receipt? Yes  No  To 4.9°
- Water - Were bubbles absent in VOC vials? Yes  No  No Vials
- Water - Was there Chlorine Present? Yes  No  NA
- Water - pH acceptable upon receipt? Yes  No  No Water
- Are Samples considered acceptable? Yes  No
- Custody Seals present? Yes  No
- Airbill or Sticker? Air Bil  Sticker  Not Present

Case Number:

SDG:

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted?  Yes  No      Person Contacted:

Contact Mode:  Phone:  Fax:  Email:  In Person:

Client Instructions:

Date Contacted:      Contacted By:

Regarding:

Comments:

Samples Composited at Lab. For VOC sample we utilized sample Plandome Park 003

CorrectiveAction:



**SUMMIT**  
ENVIRONMENTAL TECHNOLOGIES, INC  
Analytical Laboratories

Summit Environmental Technologies, Inc.  
3310 Win St.  
Cuyahoga Falls, Ohio 44223  
TEL: (330) 253-8211 FAX: (330) 253-4489  
Website: <http://www.settek.com>

October 29, 2013

Jennifer Aracri  
H2M Lab, Inc.  
575 Broad Hollow Rd.  
Melville, NY 11747  
TEL: 631-694-3040  
FAX: 631-420-8436

RE: 1310876

Order No.: 13101480

Dear Jennifer Aracri:

Summit Environmental Technologies, Inc. received 1 sample(s) on 10/17/2013 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Dr. Mo Osman  
Project Manager  
3310 Win St.  
Cuyahoga Falls, Ohio 44223

A2LA 0724.01, Alabama 41600, Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0105, Delaware, Florida NELAC E87688, Georgia E87688 and 943, Idaho OH00923, Illinois 200061 and Reg.5, Indiana C-OH-13, Kansas E-10347, Kentucky (underground Storage Tank) 3, Kentucky 90146, Louisiana 04061 and LA12004, Maine 2012015, Maryland 339, Massachusetts M-OPH923, Minnesota 409711, Montana CERT0099, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, Ohio 4170, Ohio VAP CL0052, Oklahoma 9940, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Tennessee TN04018, Texas T104704466-11-5, Region 8 8TMS-L, USDA/APHIS P330-11-00244, Utah OH009232011-1, Vermont VT-87688, Virginia 00440 and 1581, Washington C891, West Virginia 248 and 9957C and E87688, Wisconsin 399013010

Page 1 of 4

Page 1 of 5



**SUMMIT**  
ENVIRONMENTAL TECHNOLOGIES, INC.  
Analytical Laboratories

Summit Environmental Technologies, Inc.  
3310 Win St.  
Cuyahoga Falls, Ohio 44223  
TEL: (330) 253-8211 FAX: (330) 253-4489  
Website: <http://www.settek.com>

## Workorder Sample Summary

WO#: 13101480  
29-Oct-13

---

**CLIENT:** H2M Lab, Inc.  
**Project:** 1310876

---

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
13101480-001	1310876-003E		10/15/2013 2:00:00 PM	10/17/2013 10:10:00 AM	Solid



Summit Environmental Technologies, Inc.  
3310 Win St.  
Cuyahoga Falls, Ohio 44223  
TEL: (330) 253-8211 FAX: (330) 253-4489  
Website: <http://www.settek.com>

WO#: 13101480  
Date Reported: 10/29/2013  
Company: H2M Lab, Inc.  
Address: 575 Broad Hollow Rd.  
Melville NY 11747

### Laboratory Report

Date Collected: 10/15/2013  
Date Received: 10/17/2013  
Project#: 1310876  
Client SampleID: 1310876-003E  
Laboratory SampleID: 13101480-001  
Matrix: Solid

Parameter	Method	Result	Analysis
No. 30 (600-um)		21 %	10/23/2013
No.10 (2-mm)		5.7 %	10/23/2013
No.100 (150-um)		34 %	10/23/2013
No.140 (106-um)		3.6 %	10/23/2013
No.200 (75-um)		20 %	10/23/2013
Non-retained material		16 %	10/23/2013



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Cuyahoga Falls, Ohio 44223  
TEL: (330) 253-8211 FAX: (330) 253-4489  
Website: <http://www.settek.com>

WO#: 13101480  
Date Reported: 10/29/2013  
Company: H2M Lab, Inc.  
Address: 575 Broad Hollow Rd.  
Melville NY 11747  
Received: 10/17/2013  
Project#: 1310876

Client ID#	Lab ID#	Collected	Analyte	Result	Units	Qual	Matrix	Method	DF	LOD	LOQ	Run	Analyst
1310876-003E	001	10/15/2013	Organic Carbon, Total	6900	mg/Kg		Solid	EPA 9060	1	50	100	10/27/2013	NBX



CHAIN OF CUSTODY RECORD

Omega COCID 969	PAGE: 1	OF: 1
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**ADDRESS**  
 H2M LABS INC  
 575 Broad Hollow Road  
 Melville, NY 11747  
 TEL: (631) 694-3040  
 FAX: (631) 420-8436  
 Website: www.h2mlabs.com

Please Include Email Address of Report Recipient Whenever Possible!!!

SUB CONTRACTOR: <b>SUMMIT</b>		COMPANY: <b>Summit Environmental Technol</b>		SPECIAL INSTRUCTIONS / COMMENTS:			
ADDRESS: <b>3310 Win St.</b>		Please analyze for Sieve and TOC in soil. If you have any questions, please contact Jennifer Aracri at ext. 1211. Thanks!					
CITY, STATE, ZIP: <b>Cuyahoga Falls, Ohio 44223</b>							
PHONE: <b>(330) 253-8211</b>	FAX: <b>(330) 253-4489</b>						
ACCOUNT #:	EMAIL:						
ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	1310876-003E	PLANDOME PARK-38-oz JAR	Sediment		10/15/2013 2:00:00 PM	3	
SUBCONTRACT (SUB), TOC9060_S (SW9060)							

13101480-01J

Relinquished By: <i>[Signature]</i>	Date: 10/16/13	Time: 1830	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARDCOPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	
Relinquished By:	Date:	Time:	Received By: <i>[Signature]</i>	Date: 10/17/13	Time:	FOR LAB USE ONLY Temp of samples _____ °C    Attempt to Cool ? _____ Comments: _____
TAT:    Standard <input type="checkbox"/> RUSH <input checked="" type="checkbox"/>			Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/>			
Note: RUSH requests will incur surcharge						