NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site
City: Catlin **Town:** Catlin
Region: 8 **County:** Chemung
Current Classification: 02 **Proposed Classification:** 04
Estimated Size (acres): 11.29 **Disposal Area:** Landfill
Significant Threat: Previously **Site Type:**
Priority ranking Score: 260 **Project Manager:** Zachary Russo

Summary of Approvals

Originator/Supervisor: Joseph White	**02/23/2015**
RHWRE: Bart Putzig:	**03/18/2015**
BEEI of NYSDOH:	**10/07/2014**
CO Bureau Director: Michael Cruden, Director, Remedial Bureau E:	**04/07/2015**
Assistant Division Director: Michael J. Ryan, P.E.:	**04/08/2015**

Basis for Classification Change

The remedial action at the site was completed in early 2014. This action included the excavation of the impacted soil, stabilize the excavated soils, treat in-situ waste materials in the former municipal waste disposal area, consolidate the treated materials in the waste management area (WMA) within the landfill footprint, grade and re-vegetate. Excavation of sediments from two on-site ponds, stabilize the sediments and consolidate within the WMA. Imposition of environmental easement to restrict the future use of the site and groundwater. The site will be reclassified from 2 to 4.

Site Description - Last Review: 12/31/2014

Site Location: The site is located in a rural portion of Chemung County, NY. The site is approximately 7 miles north of route 17. The Site is located within the Susquehanna River basin. An unnamed tributary to Post Creek passes within 500 feet southeast of the Site. Post Creek, a class C stream is located approximately 1700 feet north west of the site.

Site Features: The Site occupies an approximate 11.291 acre portion of a larger 28 acre property located on Townley Hill Road near the town of Catlin. The surrounding area is rural with small population centers along the Post Creek Valley to the northwest. A private residence is situated approximately 700 feet east of the identified "former drum disposal area" at the Site. The Site is not fenced, although a suspended steel cable across the driveway restricts vehicle access. Two areas of concern identified at the site are the "former drum disposal area" and the "former municipal waste disposal area".

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Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

The Site is located on a terrace, and the ground surface of the Site is relatively flat with steeply sloping sides. The surrounding hillsides are wooded, and hardwoods have grown over the original fill area, except for a small area at the crest of the hill. A small pond is located on the western side of the former drum disposal area. A second, smaller pond located to the east of the former drum disposal area is shown on the Site plan. Surface runoff appears to flow into the unnamed tributary to Post Creek located to the southeast of the Site area. Runoff on the western portion of the Site likely flows directly toward Post Creek.

Current zoning: The site is currently zoned as agricultural/residential.

Historic Use(s):

Mr. Joseph E. Lobell owned and operated the Site as a landfill beginning in the late 1950s or early 1960s. Beginning in 1964, the Site was owned by Mr. John A. Mandzak, who operated Superior Salvage Company (aka Superior Hauling and Superior Disposal). Throughout this period, the Site was reportedly used for disposal of municipal solid waste under a permit issued by the Chemung County Department of Health. The Site also reportedly received miscellaneous debris, including tires, junk automobiles, 55-gallon drums, and calcium fluoride sludge (Engineering-Science, 1988). Superior Salvage Company customers reportedly included local municipalities and the City of Corning School District, where Mr. Mandzak was reported to be the maintenance superintendent. Based on available records, approximately 300 drums containing an incinerator ash-like waste material were disposed of at the Site.

According to available historical records from Westinghouse Electric Corporation (Westinghouse), an unknown quantity of calcium fluoride sludge from the Westinghouse Industrial and Government Tube Division manufacturing facility located in Horseheads, New York plant was disposed of in bulk at the "Madzac property" (presumably the Site) between 1964 and 1967. This sludge reportedly consisted of "waste treatment plant sludge intermittently containing traces of lead phosphate and cadmium" from the Westinghouse Horseheads facility. The calcium fluoride sludge was reportedly buried in 8-foot deep trenches to the east of the Site access road.

On October 16, 1967, the Site was closed by the Chemung County Health Department due to complaints of odors and open burning. Beginning in 1969, most of the junked automobiles and other debris were removed by the new owner, Mr. James C. Case. With the assistance of the local offices of the U.S. Department of Agriculture, Soil Conservation Service, Mr. Case enlarged the on-Site pond and placed a soil cover over and revegetated most of the Site.

Chemung County foreclosed on the property in 1998 and subsequently sold the Site in 1999 to Northwoods Hunting Inc., of Ridgeway, Ontario (Northwoods). Northwoods is the current owner of the property that comprises the Site.

In April 1980, the Site was identified by NYSDEC as an inactive hazardous waste disposal site and placed on the Registry of Inactive Hazardous Waste Disposal Sites in New York. In 1983 and 1984, NYSDEC sampled the contents of the drums, and analyzed these drum samples for metals by the Extraction Procedure (EP). Results from the 1984 sampling event indicated an exceedance of the threshold EP toxicity concentrations for

cadmium and lead. The Site was subsequently classified as a "Class 2" Site in December 1986.

In December 1996, an "Immediate Investigation Work Assignment Work Plan" was finalized to investigate Site soils, particularly residual cadmium concentrations in soils in the former drum disposal area. In 1997, NYSDEC conducted a focused RI and issued a report in September 1998 that recommended a comprehensive RI/FS be conducted at the Site to investigate potential impacts to soil, sediment, and groundwater.

In 1989, 1995, and 1998, the NYSDOH sampled private wells servicing two homes within one quarter mile of the Site and found no site-related contaminants. As part of the RI, private well samples were collected in 2011 from the two residential supply wells historically sampled to confirm previous findings. Site-related contaminants were not detected in the 2011 private well samples.

The remedial investigation (RI) was completed in mid-2012 and the RI report was issued in December 2012. It was followed by the feasibility study (FS) and the FS report was issued in February 2012. The Proposed Remedial Action Plan was issued on February 17, 2012. A public meeting was held on March 6, 2012 and the Record of Decision (ROD) was signed on March 28, 2012. The main elements of the remedy are:
Excavate the impacted soil from the former drum disposal and test pit, stabilize the excavated soils as needed to assure the material is non-hazardous for cadmium and lead, treat in-situ waste materials in the former municipal waste disposal area, consolidate the treated materials in the waste management area (WMA) within the landfill footprint, grade and re-vegetate as needed to cover excavated areas in the landfill to provide for surface water drainage and excavate sediments from two on-site ponds, stabilize the sediments and consolidate within the WMA in the landfill footprint. Imposition of an institutional control in the form of an environmental easement to restrict the future use of the site and groundwater.

The remedail design to implement the remedy was completed in May 2013. The remedial construction began duirng the week of July 15, 2013. The remedial construction at the site is completed as of June 2014. The Final Engineering Report and Site Management Plan were approved in December 2014. An environmental asement was signed in January 2015 to restrict the furture land use and the groundwater use. The site will be reclassified from class 2 to calss 4.

Site Geology and Hydrogeology: Soil encountered at the Site during drilling and subsurface investigations consisted of brown and gray, silty sand and silty clay, with varying amounts of rock fragments. Soil thickness varied at the Site from 14.0 feet at Monitoring Well MW-1 to 47.5 feet at Monitoring Well MW 4. Soil thicknesses in southern monitoring wells (MW-3 and MW-4) were greater than those in the northern monitoring wells (MW-1 and MW-2) and are believed to be the result of glacial processes. A glacial terrace likely exists in the southern portion of the Site as evidenced by both the thickness and type of soil (glacial till) observed during drilling activities.

Bedrock in the Site region is of Upper Devonian age and consists of shale and siltstone from the Nunda and West Hill Formations of the West Falls Group. These beds reportedly dip gently to the south and show limited structural deformation. Bedrock was described in the boring logs as moderately hard to hard, gray and brown siltstone and shale. Varying amounts of clay-filled and iron-stained fractures were observed in bedrock, and fossiliferous shale beds were encountered.

Groundwater at the site flows to the west and southwest toward the Post Creek valley. Based on the Site geologic and hydrogeologic data, groundwater flow is believed to be primarily influenced by surface topography and the connectivity of bedrock fractures.

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

Contaminants of Concern (Including Materials Disposed) **Quantity Disposed**

OU 01
CADMIUM
LEAD
ARSENIC
PCB-AROCLOR 1254

Analytical Data Available for : Groundwater, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Groundwater, Soil, Sediment

Site Environmental Assessment- Last Review: 12/31/2014

Prior to Remediation:

There are three areas of concern at the site which includes the former drum disposal area, former municipal waste disposal area (landfill) and the pond area. The interim remedial measure (IRM) conducted by NYSDEC at the former drum disposal has removed and disposed approximately 300 drums containing an ash-type waste and approximately 336 cubic yards (CY) of soil impacted by cadmium.

The RI included the sampling of the waste in the landfill area. Consistent with the past use of the Site as a landfill, municipal waste and other debris was identified throughout an approximate 1.8-acre area of the Site. Observations made during test pitting show that this waste is generally about 9 to 12.5 feet thick in the center of the disposal area and gradually thins toward the edges of the indicated disposal area. None of the soil samples collected at these test pits exhibited cadmium concentrations above the commercial soil clean up goal. Calcium fluoride sludge was only identified in one test pit (TP-19) located about 100 feet further to the north; there the sludge was found in a thin lens at 2.5 to 3.0 feet bgs. Although there were sporadic detection of varying concentrations of contaminant of concern, soils in the municipal waste disposal area generally did not exhibit high concentrations of cadmium.

Concentrations of arsenic, antimony, iron, and manganese have been detected above NYSDEC groundwater standard in at least one of the four groundwater monitoring wells present at the Site. Site wells are completed to monitor groundwater in the shallow bedrock aquifer. The presence of these metals in Site groundwater can most likely be attributed to naturally occurring conditions associated with the aquifer properties (e.g., soil mineralogy/rock type, weathering, etc.) as each metal was detected above reporting limits in the upgradient monitoring well (MW-1). Cadmium was not detected above the groundwater standards in any of the wells. Arsenic (48 ppb) and Antimony (3.2 ppb) were detected marginally above groundwater standards. The groundwater standard for Arsenic is 25 ppb and Antimony is 3 ppb.

In 1989, 1995, and 1998 NYSDOH sampled nearby private wells and site-related contaminants were not detected. As part of the RI, private well samples were collected in 2011 to confirm historical sampling results and verify that site-related contamination were not present. The results did not detect any contaminant of concern from the site.

In 1989, 1995, and 1989 NYSDOH sampled nearby private well and site-related contaminants were not detected. As part of the RI, private wells samples were collected in 2011 to confirm historical sampling

results and verify that the site-related contaminants were not present. The results did not detect any contaminant of concern from the site.

Sediment samples collected from two small ponds at the site detected arsenic concentrations ranging from 7.0 ppm (SD-4) to 15 ppm (SD-1) exceeding the sediment criterion (6 ppm) in each sediment sample collected. One sediment sample (SD-2) detected cadmium at 4.6 ppm which exceeded the sediment criterion for cadmium (0.6 ppm). Concentrations of one PCB Aroclor (PCB-1254) exceeded the applicable criterion (0.8 ppb) in each sediment sample. PCB-1254 concentrations ranged from 6.8 ppb (SD-4) to 6,700 ppb (SD-2).

Post Remediation:

The remedial construction at the site is complete as of June 2014.

The remedial construction included excavation of impacted soil from the former drum disposal and test pit areas and stabilizing, in-situ treatment of waste materials in the former municipal waste disposal area identified as hazardous waste, consolidate the treated and stabilized materials in the waste management area within the landfill footprint, grade and re-vegetate as needed to cover excavated areas, excavate sediments to one-foot depth and stabilize and onsolidate with other treated materials and made repairs to and improvements of the existing soil cover.

Environmental easement to restrict the use and development of the controlled property for commercial and restricts the use of groundwater as a source of potable or process water ws signed in January 2015.

The Final Engineering Report and Site Management Plan were approved in December 2014. The site will be reclassified from class 2 to calss 4.

Site Health Assessment - Last Update: 02/23/2015

Remedial activities undertaken at the site have effectively reduced the potential for exposure to site-related contaminants and measures are in place to ensure that these measures remain protective in the future.

	Start		End	
OU 00				
Periodic Review	2/13/16	PLN	3/29/16	PLN
Site Management	12/30/14	ACT	12/29/44	PLN
OU 01				
OGC Docket - Environmental Easement	12/1/14	ACT	2/19/15	ACT
OGC Docket - Other	4/2/12	ACT	4/4/12	ACT
OGC Docket - SSF Order or Referral	2/1/04	ACT	11/22/10	ACT
Reclass Pkg.	2/23/15	ACT	5/31/15	PLN
Remedial Action	7/8/13	ACT	12/29/14	ACT
Remedial Design	7/23/12	ACT	5/28/13	ACT
Remedial Investigation	12/1/96	ACT	6/1/99	TRM
Remedial Investigation	11/23/10	ACT	3/28/12	ACT
OU 01A				
Remedial Action	4/1/88	ACT	8/1/88	ACT
OU 01B				

DATE: 5/4/2015

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Remedial Action	9/1/94	ACT	11/1/94	ACT
Remedial Design	7/1/94	ACT	9/1/94	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;
- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
2. Excavate the impacted soil from the former drum disposal and test pit areas where total cadmium concentrations were greater than the commercial SCO;

3. Stabilize the excavated soils as needed to assure the material is non-hazardous for cadmium and lead;

4. Treat in-situ (or excavate and treat ex-situ) waste materials in the former municipal waste disposal area identified as exhibiting the characteristic of a RCRA hazardous waste to render materials non-hazardous for cadmium and lead;

5. Consolidate the treated materials in the waste management area (WMA) within the landfill footprint;

6. Grade and re-vegetate as needed to cover excavated areas in the landfill to provide for surface water drainage; and

7. Excavate sediments to one-foot depth using conventional earthmoving equipment, stockpile on site, and allow to dry sufficiently to facilitate handling. Stabilize the sediments and consolidate within the WMA in the landfill footprint.

8. Where it is required make repairs to and improvements of the existing soil cover in the former municipal solid waste disposal area. This work would include removing surface debris, placing geo-textile on the prepared surface, and placing 24 inches of imported clean soil and topsoil and re-vegetate to reduce potential soil erosion.
9. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- prohibits agriculture or vegetable gardens on the controlled property; and
- requires compliance with the Department approved Site Management Plan.
10. Site Management Plan is required, which includes the following:
a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: The Environmental Easement discussed in the paragraph above.
Engineering Controls: maintenance of the soil cover.
This plan includes, but may not be limited to:
• descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
• provisions for the management and inspection of the identified engineering controls;
• Maintain the soil cover periodically. Maintenance will include mowing the cover one time a year, if necessary and repair of any areas of the cover that were damaged or compromised in any way;
• maintaining site access controls and Department notification; and
• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
b) a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
• monitoring of groundwater to assess the performance and effectiveness of the remedy and
• a schedule of monitoring and frequency of submittals to the Department.

Total Cost $1,361,000

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

Remedy Description for Operable Unit 01A

In July 1988, NYSDEC conducted an interim remedial measure (IRM) in which it removed approximately 300 drums containing an ash-type waste and approximately 100 cubic yards (CY) of soil impacted by cadmium. In November 1994, NYSDEC removed an additional 236 CY of soil from the former drum disposal area. Following the IRM, several Site investigations were conducted from 1990 through 1997, including the collection of numerous surface and subsurface soil samples.

Total Cost

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

Remedy Description for Operable Unit 01B

Additional soil samples were collected between September 1991 and June 1993 to evaluate the effectiveness of the drum removal IRM. Shallow (0 to 6 inches in depth) and subsurface (12 to 24 inches in depth) soil samples were collected and analyzed for cadmium. The results of the sampling showed detected concentrations of cadmium of up to 2,100 milligrams per kilogram (mg/kg), leading NYSDEC to remove additional soil. In November 1994, NYSDEC removed soil from the former drum disposal area to a depth of 24 inches below ground surface (bgs), resulting in 236 CY of material being sent off Site for disposal. Confirmatory soil sampling was conducted and indicated the continued presence of cadmium in the remaining soils at the former drum disposal area.

Total Cost $150,000

OU 00 **Site Management Plan Approval: 12/30/2014** **Status: ACT**

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
4/8/2015

SITE DESCRIPTION

SITE NO. 808006

SITE NAME Townley Hill Road Dump Site

SITE ADDRESS: Townley Hill Road ZIP CODE: 14902

CITY/TOWN: Catlin

COUNTY: Chemung

ALLOWABLE USE: Commercial and Industrial

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:

IC/EC Certification Plan	YES
Monitoring Plan	
Operation and Maintenance (O&M) Plan	YES
Periodic Review Frequency: once a year	NO

Periodic Review Report Submittal Date: 02/13/2016

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 5/4/2015

Site Code: 808006 **Site Name:** Townley Hill Road Dump Site

Description of Institutional Control

CASE JAMES C
BOX 68
153 TOWNLEY HILL RD
Environmental Easement
Block: 0001
Lot: 045
Sublot: 000
Section: 026
Subsection: 000
S_B_L Image: 26.00-1-45
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
Site Management Plan

Description of Engineering Control

CASE JAMES C
BOX 68
153 TOWNLEY HILL RD
Environmental Easement - Institutional Control Instrument
Block: 0001
Lot: 045
Sublot: 000
Section: 026
Subsection: 000
S_B_L Image: 26.00-1-45
Cover System

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

PUBLIC NOTICE | **State Superfund Program**

Receive Site Information by Email. See next page to Learn How.

Site Name: Townley Hill Road Dump Site May 4, 2015
Site No.: 808006 **Tax Map No.:** 26.00-1-45.1
Site Location: Townley Hill Road, Town of Catlin, 14902

Inactive Hazardous Waste Disposal Site Classification Notice

The Inactive Hazardous Waste Disposal Site Program (the State Superfund Program) is the State's program for identifying, investigating, and cleaning up sites where the disposal of hazardous waste may present a threat to public health and/or the environment. The New York State Department of Environmental Conservation (DEC) maintains a list of these sites in the Registry of Inactive Hazardous Waste Disposal Sites (Registry). As of the date of this notice, the site identified above, and located on a map on the reverse side of this page, was reclassified on the Registry as a Class 4 site as it no longer presents a significant threat to public health and/or the environment for the following reason(s):

The following cleanup activities have been completed:

- impacted soils from the former drum disposal and test pit areas were excavated and stabilized;
- hazardous waste in the former municipal waste disposal areas was treated in-situ;
- treated and stabilized materials within the landfill footprint were consolidated;
- excavated areas were graded and re-vegetated;
- sediments from two on-site ponds were excavated to one-foot depth, stabilized and consolidated; and
- repairs and improvements were made to the existing soil cover.

An environmental easement (EE) to restrict development of the property to commercial use was recorded. As a condition of the EE, the property owner must comply with an approved site management plan, restrict the use of groundwater, maintain the soil cover, and certify annually to NYSDEC that the institutional and engineering controls are in place.

If you own property adjacent to this site and are renting or leasing your property to someone else, please share this information with them. If you no longer wish to be on the contact list for this site or otherwise need to correct our records, please contact DEC's Project Manager listed below.

FOR MORE SITE INFORMATION

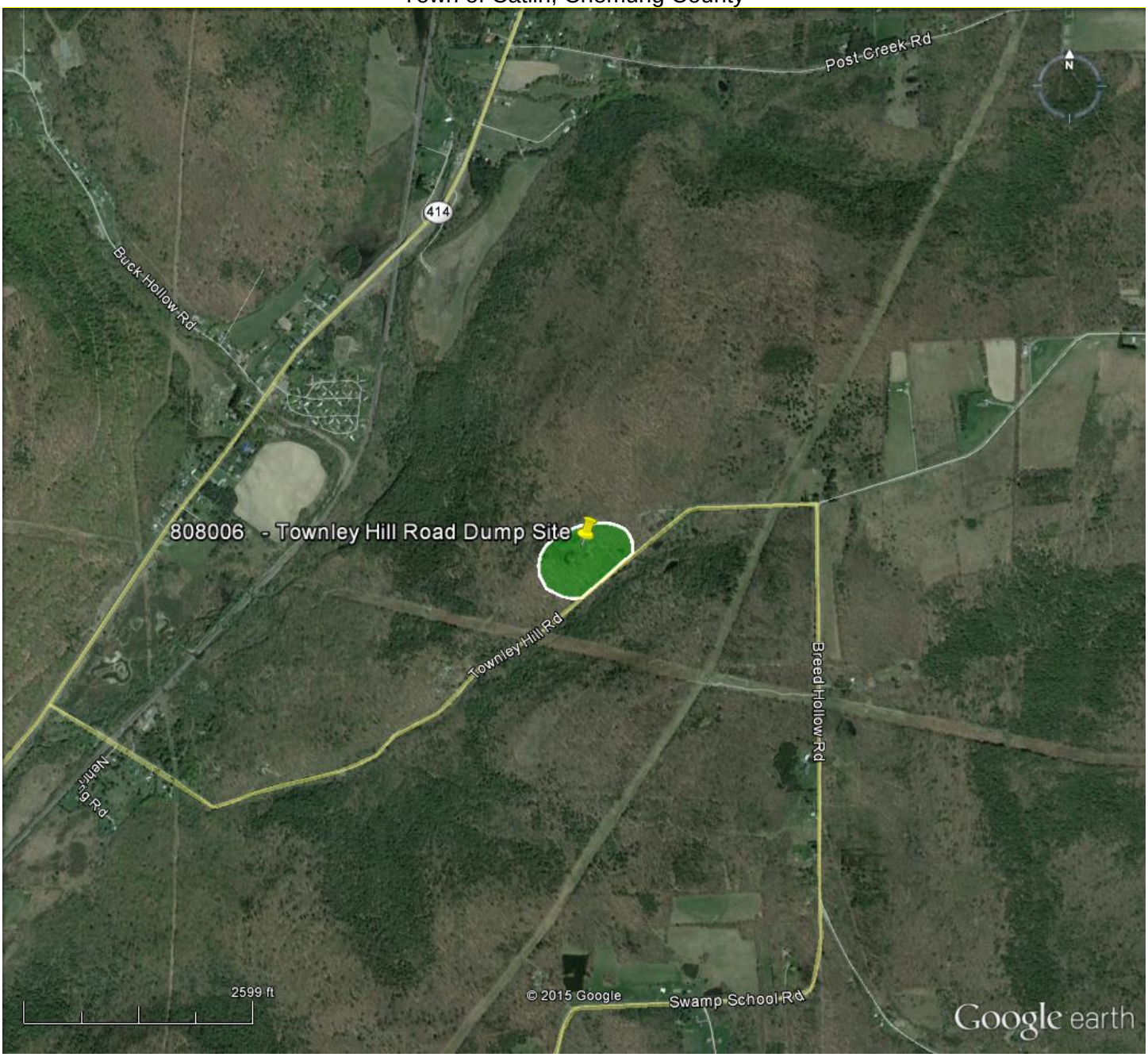
Additional information about this site can be found using DEC's "Environmental Site Remediation Database Search" engine which is located on the internet at:
www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3

Comments and questions are always welcome and should be directed as follows:

Project Related Questions
Zachary Russo, Project Manager
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7017
Tel: 518-402-9813
Email: zachary.russo@dec.ny.gov

DEC is sending you this notice in accordance with Environmental Conservation Law Article 27, Title 13 and its companion regulation (6 NYCRR 375-2.7(b)(6)(ii)) which requires DEC to notify all parties on the contact list for this site of this recent action.

Approximate Site Location
Townley Hill Road Dump Site
Site ID: 808006
Townley Hill Road
Town of Catlin, Chemung County



Receive Site Updates by Email
Have site information such as this public notice sent right to your email inbox. DEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: www.dec.ny.gov/chemical/61092.html . It's *quick*, it's *free*, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

You may continue also to receive paper copies of site information for a time after you sign up with a county listserv, until the transition to electronic distribution is complete.

Note: Please disregard if you received this notice by way of a county email listserv.

Electronic copies:

R. Schick, Director, Division of Environmental Remediation
A. English, Director, Bureau of Technical Support
K. Lewandowski, Chief, Site Control Section
M. Cruden, Director, Remedial Bureau E
B. Putzig, RHWRE, Region 8
S. Sheeley, Regional Permit Administrator, Region 8
L. Vera, Regional CPS, Region 8
K. Anders, NYSDOH
J. Deming, NYSDOH Regional Chief
M. Doroski, NYSDOH Project Manager
L. Ennist, DER, Bureau of Program Management
Z. Russo, Project Manager
B. Anderson, Site Control Section

Honorable LaVerne Phelps, Supervisor
Town of Catlin
Town Hall
1448 Chambers Road
Beaver Dams, NY 14812

Honorable Thomas J. Santulli
Chemung County Executive
John J. Hazlett Building
203 Lake Street, P.O. Box 588
Elmira, NY 14901

Commissioner Randy J. Olthof
Planning Department
Chemung County Commerce Center
400 E. Church St., P.O. Box 588
Elmira, NY 14901

Mark J. Cicora Jr.
Fire and Emergency Management
425 Pennsylvania Ave.,
P.O. Box 588
Elmira, NY 14901

Neil Scriven
Beaver Valley Water District
1448 Chambers Road
Beaver Dams, NY 14812

Thomas G. Kump, P.E.
Environmental Health Services
103 Washington St., P.O. Box 588
Elmira, NY 14812

Gary and Donna Brown
431 Townley Hill Road
Horseheads, NY 14845

Michael and Dianna Overhiser
319 Townley Hill Rd
Corning, NY 14830

Estate of William Petrasek
164 Terrace St
Wellsburg, NY 14894

Joseph Marrone
635 Newton St
Elmira, NY 14901

Richard C Dassance
540 Townley Hill Rd
Horseheads, NY 14845

D&G Brown Associates LTD
43 Townley Hill Rd
Beaver Dams, NY 14812

Neil Scriven
502 Sawdey Rd
Horseheads, NY 14845

Robert E. Page, Public Health Director
Chemung County
103 Washington Street
Elmira, NY 14812

Planning Board Chairperson
Town of Catlin
1448 Chambers Rd
Beaver Dams, NY 14812

Ronald Panosian, Chairperson
Chemung County Planning Board
Chemung County Commerce Center
400 East Church Street
Elmira, NY 14901

Keith Baier and
Christopher LaFountain
99 Cayuga Street
Trumansburg, NY 14886

Northwoods Hunting Inc.
3083 Thunder Bay Rd
Ridgeway, Ontario LOS1NO

Carol A Murry
479 Townley Hill Rd
Horseheads, NY 14845

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Technical Support
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518) 402-9543 I F: (518) 402-9547
www.dec.ny.gov

April 14, 2015

Northwoods Hunting Inc.
3083 Thunder Bay Road
Ridgeway, Ontario L0S1N0

Dear Sir/Madam:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (DEC) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that DEC notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State. The effective date of the classification change shall be 20 days from the date of this letter.

DEC Site No.: 808006
Site Name: Townley Hill Road Dump Site
Site Address: Townley Hill Road, Town of Catlin, 14902
Classification change: Class 2 to Class 4

The reason for the change is as follows:

The remedial construction included the excavation of impacted soil from the former drum disposal and test pit areas and stabilization; in-situ treatment of waste materials in the former municipal waste disposal area identified as hazardous waste; consolidation of the treated and stabilized materials in the waste management area within the landfill footprint; grading and re-vegetation as needed to cover excavated areas; excavation of sediments from two on-site ponds to one-foot depth, and stabilization and consolidation with other treated materials; and repairs and improvements were made to the existing soil cover.

An environmental easement (EE) restricting the use and development of the property to commercial use has been recorded. The EE included that the owner shall comply with an approved site management plan, restrict the use of groundwater for potable or process water, maintain the soil cover, and certify annually to NYSDEC that the institutional and engineering controls are in place.

Enclosed is a copy of DEC's Inactive Hazardous Waste Disposal Site Report form as it will appear in the Registry. An explanation of the site classifications is available at http://www.dec.ny.gov/chemical/8663.html. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of DEC for deletion of such site, modification of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition.

Such petition may be addressed to:

Honorable Joseph J. Martens
Commissioner
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

For additional information, please contact Vivek Nattanmai, the project manager at 518-402-9685.

Sincerely,

Kelly A. Lewandowski, P.E.
Chief, Site Control Section

KAL/BA/sls
Enclosure

ec w/Enc:
R. Schick
L. Zeppetelli
A. English
K. Lewandowski
V. Nattanmai, Project Manager
Leo Brausch, Environmental Engineer, CBS Corporation (lbrausch@consolidated.net)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Inactive Hazardous Waste Disposal Report

Site Code	808006				
Site Name	Townley Hill Road Dump Site	**Address**	Townley Hill Road		
Classification	04	**City**	Catlin	**Zip**	14902
Region	8	**County**	Chemung	**Town**	Catlin
Latitude	42 degrees, 13 minutes, 13.15 seconds			**Estimated Size**	11.2910
Longitude	-76 degrees, 57 minutes, 24.30 seconds				
Site Type		**Disposal Area**	Landfill		

Site Description

Site Location: The site is located in a rural portion of Chemung County. The site is approximately 7 miles north of route 17. The site is located within the Susquehanna River basin. An unnamed tributary to Post Creek passes within 500 feet southeast of the site. Post Creek, a class C stream is located approximately 1700 feet north west of the site.

Site Features: The site occupies an 11.291 acre portion of a larger 28 acre property located on Townley Hill Road near the town of Catlin. The surrounding area is rural with small population centers along the Post Creek Valley to the northwest. The site is not fenced, although a suspended steel cable across the driveway restricts vehicle access. Two areas of concern identified at the site are the "former drum disposal area" and the "former municipal waste disposal area".

The site is located on a terrace, and the ground surface of the site is relatively flat with steeply sloping sides. The surrounding hillsides are wooded, and hardwoods have grown over the original fill area, except for a small area at the crest of the hill. A small pond is located on the western side of the former drum disposal area. A second, smaller pond located to the east of the former drum disposal area.

Current zoning: The site is currently zoned as agricultural/residential.

Past Use(s) of the Site: Mr. Joseph E. Lobell owned and operated the site as a landfill beginning in the late 1950s or early 1960s. Beginning in 1964, the site was owned by Mr. John A. Mandzak, who operated Superior Salvage Company (aka Superior Hauling and Superior Disposal). Throughout this period, the site was reportedly used for disposal of municipal solid waste under a permit issued by the Chemung County Department of Health. The site also reportedly received miscellaneous debris, including tires, junk automobiles, 55-gallon drums, and calcium fluoride sludge. Superior Salvage Company customers reportedly included local municipalities and the City of Corning School District. Based on available records, approximately 300 drums containing an incinerator ash-like waste material were disposed of at the site.

According to available historical records from Westinghouse Electric Corporation (Westinghouse), an unknown quantity of calcium fluoride sludge from the Westinghouse Industrial and Government Tube Division manufacturing facility located in Horseheads, New York plant was disposed of in bulk at the "Madzac property" (presumably the Site) between 1964 and 1967. This sludge reportedly consisted of "waste treatment plant sludge intermittently containing traces of lead phosphate and cadmium" from the Westinghouse Horseheads facility. The calcium fluoride sludge was reportedly buried in 8-foot deep trenches to the east of the Site access road.

On October 16, 1967, the site was closed by the Chemung County Health Department due to complaints of odors and open burning. Beginning in 1969, most of the junked automobiles and other debris were removed by the new owner, Mr. James C. Case. With the assistance of the local offices of the U.S. Department of Agriculture, Soil Conservation Service, Mr. Case enlarged the on-site pond and placed a soil cover over and revegetated most of the site.

Chemung County foreclosed on the property in 1998 and subsequently sold the site in 1999 to Northwoods Hunting Inc., of Ridgeway, Ontario.

In April 1980, the site was identified by NYSDEC as an inactive hazardous waste disposal site and placed on the Registry of Inactive Hazardous Waste Disposal Sites in New York. In 1983 and 1984, NYSDEC sampled the contents of the drums, and analyzed the drum samples. Results indicated an exceedance of the threshold EP toxicity concentrations for cadmium and lead. The site was subsequently classified as a "Class 2" in 1986.

In 1996, an Investigation Work Plan was finalized to investigate site soils, particularly residual cadmium concentrations in soils in the former drum disposal area. In 1997, NYSDEC conducted a focused Remedial Investigation (RI) and issued a report in 1998 that

recommended a comprehensive RI/FS be conducted to investigate potential impacts to soil, sediment, and groundwater.

In 1989, 1995, and 1998, the NYSDOH sampled private wells servicing two homes within one quarter mile of the site and found no site-related contaminants.

A comprehensive RI was subsequently undertaken and, as part of the RI, private well samples were collected in 2011 from the two residential supply wells previously sampled to confirm findings. Site-related contaminants were not detected.

The RI was followed by a Feasibility Study (FS). The Proposed Remedial Action Plan was released for comment in early 2012 and a Record of Decision (ROD) was signed in March 2012. The remedial design was completed in May 2013 and the remedial construction was completed in June 2014.

The site will be reclssified to Class 4 which indiates that the site will be on a long-term maintenance plan.

Site Geology and Hydrogeology: Soil encountered at the site during drilling and subsurface investigations consisted of brown and gray, silty sand and silty clay, with varying amounts of rock fragments. Soil thickness varied from 14.0 feet at Monitoring Well MW-1 to 47.5 feet at Monitoring Well MW 4. Soil thicknesses in southern monitoring wells (MW-3 and MW-4) were greater than those in the northern monitoring wells (MW-1 and MW-2) and are believed to be the result of glacial processes. A glacial terrace likely exists in the southern portion of the Site as evidenced by both the thickness and type of soil (glacial till) observed during drilling activities.

Bedrock in the site region is of Upper Devonian age and consists of shale and siltstone from the Nunda and West Hill Formations of the West Falls Group. These beds reportedly dip gently to the south and show limited structural deformation. Bedrock was described in the boring logs as moderately hard to hard, gray and brown siltstone and shale. Varying amounts of clay-filled and iron-stained fractures were observed in bedrock, and fossiliferous shale beds were encountered.

Groundwater at the site flows to the west and southwest toward the Post Creek valley. Based on the site geologic and hydrogeologic data, groundwater flow is believed to be primarily influenced by surface topography and the connectivity of bedrock fractures.

Contaminants of Concern (Including Materials Disposed) — Quantity

OU 01

CADMIUM

LEAD

ARSENIC

PCB-AROCLOR 1254

Analytical Data Available for : Groundwater, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Groundwater, Soil, Sediment

Site Environmental Assessment

Prior to Remediation:

There are three areas of concern at the site which includes the former drum disposal area, former municipal waste disposal area (landfill) and the pond area. An interim remedial measure (IRM) conducted by NYSDEC at the former drum disposal removed and disposed of approximately 300 drums containing an ash-type waste and approximately 336 cubic yards (CY) of soil impacted by cadmium.

The Remedial Investigation (RI) included the sampling of the waste in the landfill area. Consistent with the past use of the site as a landfill, municipal waste and other debris was identified throughout an approximate 1.8-acre area of the site. Observations made during test pitting show that this waste is generally about 9 to 12.5 feet thick in the center of the disposal area and gradually thins toward the edges of the indicated disposal area. None of the soil samples collected at these test pits exhibited cadmium concentrations above the commercial soil cleanup goal. Calcium fluoride sludge was only identified in one test pit (TP-19) located about 100 feet further to the north; there the sludge was found in a thin lens at 2.5 to 3.0 feet bgs. Although there were sporadic detection of varying concentrations of contaminant of concern, soils in the municipal waste disposal area generally did not exhibit high concentrations of cadmium.

Concentrations of arsenic, antimony, iron, and manganese have been detected above NYSDEC groundwater standard in at least one of the four groundwater monitoring wells present at the site. Site wells are completed to monitor groundwater in the shallow bedrock aquifer. The presence of these metals in groundwater can most likely be attributed to naturally occurring conditions associated with the aquifer properties (e.g., soil mineralogy/rock type, weathering, etc.) as each metal was detected above reporting limits in the upgradient monitoring well (MW-1). Cadmium was not detected above the groundwater standards in any of the wells. Arsenic (48 ppb) and antimony (3.2 ppb) were detected marginally above groundwater standards. The groundwater standard for arsenic is 25 ppb and antimony is 3 ppb.

In 1989, 1995, and 1998 NYSDOH sampled nearby private wells and site-related contaminants were not detected. As part of the RI, private well samples were collected in 2011 to confirm historical sampling results and verify that site-related contamination was not present. The results did not detect any contaminant of concern from the site.

Sediment samples collected from two small ponds at the site detected arsenic concentrations ranging from 7.0 ppm (SD-4) to 15 ppm (SD-1) exceeding the sediment criterion (6 ppm) in each sediment sample collected. One sediment sample (SD-2) detected cadmium at 4.6 ppm which exceeded the sediment criterion for cadmium (0.6 ppm). Concentrations of one PCB Aroclor (PCB-1254) exceeded the applicable criterion (0.8 ppb) in each sediment sample. PCB-1254 concentrations ranged from 6.8 ppb (SD-4) to 6,700 ppb (SD-2).

Post Remediation:

The remedial construction at the site is complete as of June 2014.

The remedial construction included excavation of impacted soil from the former drum disposal and test pit areas and stabilizing, in-situ treatment of waste materials in the former municipal waste disposal area identified as hazardous waste, consolidate the treated and stabilized materials in the waste management area within the landfill footprint, grade and re-vegetate as needed to cover excavated areas, excavate sediments to one-foot depth and stabilize and consolidate with other treated materials and made repairs to and improvements of the existing soil cover.

An environmental easement (EE) to restrict the use and development of the property to commercial use has been recorded. The Final Engineering Report and Site Management Plan were approved in December 2014.

The site will be reclssified to Class 4 which indiates that the site will be on a long-term maintenance plan.

Site Health Assessment

Remedial activities undertaken at the site have effectively reduced the potential for exposure to site-related contaminants and measures are in place to ensure that these measures remain protective in the future.

Owners

Current Owner(s)

Northwoods Hunting Inc.

3083 Thunder Bay Road

Ridgeway, Province of Ontario ZZ L0S1N0

Previous Owner(s)

James Case

Box 1076

Corning NY 14830

Disposal Owner(s)

JOSEPH LOBDELL AND JOHN MANDZAK

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Operators

Previous Operator(s)

James Case

Box 1076

Corning NY 14830

JOSEPH LOBDELL AND JOHN MANDZAK

CORNING NY 14830

New York State Department of Environmental Conservation
Division of Environmental Remediation, 12th Floor
Phone: (518) 402-9706 - **Fax:** (518) 402-9020
Website: www.dec.state.ny.us

SSF FINAL ENGINEERING REPORT
& RECLASSIFICATION APPROVAL MEMO

TO: Michael J. Ryan, P.E., Assistant Director
Division of Environmental Remediation

FROM: Michael Cruden, Bureau Director
Remedial Bureau E

SUBJECT: Final Engineering Report and
Site Reclassification to Class ☒4 ☐5 ☐C
Remedial Party: CBS Corporatrion
Site Name: Townley Hill Road Dump Site
Site No.: 808006

DATE: 4/7/2015

Summary of Approvals

Originator/Supervisor: Joseph White **02/23/2015**

Regional Hazardous Waste Remedial Engineer: Bart Putzig: **03/18/2015**

BEEI of NYSDOH: **10/07/2014**

CO Bureau Director: Michael Cruden, Director, Remedial Bureau E: **04/07/2015**

Assistant Division Director: Michael J. Ryan, P.E.:

Conclusions: The Remedial party has met all the requirements of the Remedial Work Plan. The Final Engineering Report and Site Management Plan have been reviewed and meet the guidelines in the PM checklists.

Health Department Concurrence: The NYSDOH has reviewed and accepted the Final Engineering Report and concurs with site reclassification.

Registry Status and Site Classification: The Site's registry classification has been reassessed pursuant to internal guidance and the Site can be reclassified to Class ☒4 ☐5 ☐C.

Remediation of the Site: The remedial program was conducted in accordance with the work plan and the results of the remedial action are documented in the Final Engineering Report.

Final Engineering Report: The Final Engineering Report (FER) has been reviewed by NYSDEC and NYSDOH technical staff and the FER checklist has been completed recommending approval of the FER. The FER is signed and sealed by a Professional Engineer licensed to practice in New York State.

Certifications of Report Contents: The FER includes all applicable certifications pursuant to DER-10.

UIS Updates: All project-related updates have been made in the UIS.

Recommendation: We have reviewed the documentation for the completion of this project and recommend that the Final Engineering Report and site reclassification be approved.

ec: Patrick Foster
Vivekanandan Nattanmai, Project Manager
Joseph White, Section Chief
K. Lewandowski
DOH PM
DOH Supervisor

Documents Attached:

- ☒ Site Investigation Information Form
- ☒ UIS Generated Final Engineering report & Reclassification Approval Form

Supporting Documents in EDMS:

- ☒ Site Management Plan
- ☒ Remedial Investigation Report
- ☒ Remedial Action Work Plan
- ☒ Remedial Design Documents
- ☒ Environmental Easement
- ☒ Final Engineering Report
- ☒ DOH Concurrence
- ☒ Site Management Plan Checklist
- ☒ Final Engineering Report Checklist

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Final Engineering Report & Reclassification Approval Form

Site Code 808006 **Site Name** Townley Hill Road Dump Site

Classification 02 **New Classification** 04

Address Townley Hill Road

Region 8 **City** Catlin **Zip** 14902

Latitude 42.2203 **Town** Catlin **Project Manager** Vivekanandan Nattanmai

Longitude -76.9567 **County** Chemung

Site Type Landfill **Estimated Size** 11.2910

Remedial Party: CBS Corporatrion

Remedial Party Contact Information: 20 Stanwix Street
Pittsburgh, PA 15222

Env. Easement County Recording No.: 201502529

Allowable Use: Commercial and Industrial

Basis for Classification Change

The remedial action at the site was completed in early 2014. This action included the excavation of the impacted soil, stabilize the excavated soils, treat in-situ waste materials in the former municipal waste disposal area, consolidate the treated materials in the waste management area (WMA) within the landfill footprint, grade and re-vegetate. Excavation of sediments from two on-site ponds, stabilize the sediments and consolidate within the WMA. Imposition of environmental easement to restrict the future use of the site and groundwater. The site will be reclassified from 2 to 4.

Site Description **Last Review: 12/31/2014**

Site Location: The site is located in a rural portion of Chemung County, NY. The site is approximately 7 miles north of route 17. The Site is located within the Susquehanna River basin. An unnamed tributary to Post Creek passes within 500 feet southeast of the Site. Post Creek, a class C stream is located approximately 1700 feet north west of the site.

Site Features: The Site occupies an approximate 11.291 acre portion of a larger 28 acre property located on Townley Hill Road near the town of Catlin. The surrounding area is rural with small population centers along the Post Creek Valley to the northwest. A private residence is situated approximately 700 feet east of the identified “former drum disposal area” at the Site. The Site is not fenced, although a suspended steel cable across the driveway restricts vehicle access. Two areas of concern identified at the site are the “former drum disposal area” and the “former municipal waste disposal area”.

The Site is located on a terrace, and the ground surface of the Site is relatively flat with steeply sloping sides. The surrounding hillsides are wooded, and hardwoods have grown over the original fill area, except for a small area at the crest of the hill. A small pond is located on the western side of the former drum disposal area. A second, smaller pond located to the east of the former drum disposal

area is shown on the Site plan. Surface runoff appears to flow into the unnamed tributary to Post Creek located to the southeast of the Site area. Runoff on the western portion of the Site likely flows directly toward Post Creek.

Current zoning: The site is currently zoned as agricultural/residential.

Historic Use(s):

Mr. Joseph E. Lobell owned and operated the Site as a landfill beginning in the late 1950s or early 1960s. Beginning in 1964, the Site was owned by Mr. John A. Mandzak, who operated Superior Salvage Company (aka Superior Hauling and Superior Disposal). Throughout this period, the Site was reportedly used for disposal of municipal solid waste under a permit issued by the Chemung County Department of Health. The Site also reportedly received miscellaneous debris, including tires, junk automobiles, 55-gallon drums, and calcium fluoride sludge (Engineering-Science, 1988). Superior Salvage Company customers reportedly included local municipalities and the City of Corning School District, where Mr. Mandzak was reported to be the maintenance superintendent. Based on available records, approximately 300 drums containing an incinerator ash-like waste material were disposed of at the Site.

According to available historical records from Westinghouse Electric Corporation (Westinghouse), an unknown quantity of calcium fluoride sludge from the Westinghouse Industrial and Government Tube Division manufacturing facility located in Horseheads, New York plant was disposed of in bulk at the "Madzac property" (presumably the Site) between 1964 and 1967. This sludge reportedly consisted of "waste treatment plant sludge intermittently containing traces of lead phosphate and cadmium" from the Westinghouse Horseheads facility. The calcium fluoride sludge was reportedly buried in 8-foot deep trenches to the east of the Site access road.

On October 16, 1967, the Site was closed by the Chemung County Health Department due to complaints of odors and open burning. Beginning in 1969, most of the junked automobiles and other debris were removed by the new owner, Mr. James C. Case. With the assistance of the local offices of the U.S. Department of Agriculture, Soil Conservation Service, Mr. Case enlarged the on-Site pond and placed a soil cover over and revegetated most of the Site.

Chemung County foreclosed on the property in 1998 and subsequently sold the Site in 1999 to Northwoods Hunting Inc., of Ridgeway, Ontario (Northwoods). Northwoods is the current owner of the property that comprises the Site.

In April 1980, the Site was identified by NYSDEC as an inactive hazardous waste disposal site and placed on the Registry of Inactive Hazardous Waste Disposal Sites in New York . In 1983 and 1984, NYSDEC sampled the contents of the drums, and analyzed these drum samples for metals by the Extraction Procedure (EP). Results from the 1984 sampling event indicated an exceedance of the threshold EP toxicity concentrations for cadmium and lead. The Site was subsequently classified as a "Class 2" Site in December 1986.

In December 1996, an "Immediate Investigation Work Assignment Work Plan " was finalized to investigate Site soils, particularly residual cadmium concentrations in soils in the former drum

disposal area. In 1997, NYSDEC conducted a focused RI and issued a report in September 1998 that recommended a comprehensive RI/FS be conducted at the Site to investigate potential impacts to soil, sediment, and groundwater.

In 1989, 1995, and 1998, the NYSDOH sampled private wells servicing two homes within one quarter mile of the Site and found no site-related contaminants. As part of the RI, private well samples were collected in 2011 from the two residential supply wells historically sampled to confirm previous findings. Site-related contaminants were not detected in the 2011 private well samples.

The remedial investigation (RI) was completed in mid-2012 and the RI report was issued in December 2012. It was followed by the feasibility study (FS) and the FS report was issued in February 2012. The Proposed Remedial Action Plan was issued on February 17, 2012. A public meeting was held on March 6, 2012 and the Record of Decision (ROD) was signed on March 28, 2012. The main elements of the remedy are:
Excavate the impacted soil from the former drum disposal and test pit, stabilize the excavated soils as needed to assure the material is non-hazardous for cadmium and lead, treat in-situ waste materials in the former municipal waste disposal area, consolidate the treated materials in the waste management area (WMA) within the landfill footprint, grade and re-vegetate as needed to cover excavated areas in the landfill to provide for surface water drainage and excavate sediments from two on-site ponds, stabilize the sediments and consolidate within the WMA in the landfill footprint. Imposition of an institutional control in the form of an environmental easement to restrict the future use of the site and groundwater.

The remedail design to implement the remedy was completed in May 2013. The remedial construction began duirng the week of July 15, 2013. The remedial construction at the site is completed as of June 2014. The Final Engineering Report and Site Management Plan were approved in December 2014. An environmental asement was signed in January 2015 to restrict the furture land use and the groundwater use. The site will be reclassified from class 2 to calss 4.

Site Geology and Hydrogeology: Soil encountered at the Site during drilling and subsurface investigations consisted of brown and gray, silty sand and silty clay, with varying amounts of rock fragments. Soil thickness varied at the Site from 14.0 feet at Monitoring Well MW-1 to 47.5 feet at Monitoring Well MW 4. Soil thicknesses in southern monitoring wells (MW-3 and MW-4) were greater than those in the northern monitoring wells (MW-1 and MW-2) and are believed to be the result of glacial processes. A glacial terrace likely exists in the southern portion of the Site as evidenced by both the thickness and type of soil (glacial till) observed during drilling activities.

Bedrock in the Site region is of Upper Devonian age and consists of shale and siltstone from the Nunda and West Hill Formations of the West Falls Group . These beds reportedly dip gently to the south and show limited structural deformation. Bedrock was described in the boring logs as moderately hard to hard, gray and brown siltstone and shale. Varying amounts of clay-filled and iron-stained fractures were observed in bedrock, and fossiliferous shale beds were encountered.

Groundwater at the site flows to the west and southwest toward the Post Creek valley. Based on the Site geologic and hydrogeologic data, groundwater flow is believed to be primarily influenced by surface topography and the connectivity of bedrock fractures.

Analytical Data Available for : Groundwater, Surface Water, Soil, Sediment

Applicable Standards Exceeded for: Groundwater

Site Environmental Assessment **Last Review: 12/31/2014**

Prior to Remediation:

There are three areas of concern at the site which includes the former drum disposal area, former municipal waste disposal area (landfill) and the pond area. The interim remedial measure (IRM) conducted by NYSDEC at the former drum disposal has removed and disposed approximately 300 drums containing an ash-type waste and approximately 336 cubic yards (CY) of soil impacted by cadmium.

The RI included the sampling of the waste in the landfill area. Consistent with the past use of the Site as a landfill, municipal waste and other debris was identified throughout an approximate 1.8-acre area of the Site. Observations made during test pitting show that this waste is generally about 9 to 12.5 feet thick in the center of the disposal area and gradually thins toward the edges of the indicated disposal area. None of the soil samples collected at these test pits exhibited cadmium concentrations above the commercial soil clean up goal. Calcium fluoride sludge was only identified in one test pit (TP-19) located about 100 feet further to the north; there the sludge was found in a thin lens at 2.5 to 3.0 feet bgs. Although there were sporadic detection of varying concentrations of contaminant of concern, soils in the municipal waste disposal area generally did not exhibit high concentrations of cadmium.

Concentrations of arsenic, antimony, iron, and manganese have been detected above NYSDEC groundwater standard in at least one of the four groundwater monitoring wells present at the Site. Site wells are completed to monitor groundwater in the shallow bedrock aquifer. The presence of these metals in Site groundwater can most likely be attributed to naturally occurring conditions associated with the aquifer properties (e.g., soil mineralogy/rock type, weathering, etc.) as each metal was detected above reporting limits in the upgradient monitoring well (MW-1). Cadmium was not detected above the groundwater standards in any of the wells. Arsenic (48 ppb) and Antimony (3.2 ppb) were detected marginally above groundwater standards. The groundwater standard for Arsenic is 25 ppb and Antimony is 3 ppb.

In 1989, 1995, and 1998 NYSDOH sampled nearby private wells and site-related contaminants were not detected. As part of the RI, private well samples were collected in 2011 to confirm historical sampling results and verify that site-related contamination were not present. The results did not detect any contaminant of concern from the site.

In 1989, 1995, and 1989 NYSDOH sampled nearby private well and site-related contaminants were not detected. As part of the RI, private wells samples were collected in 2011 to confirm historical sampling results and verify that the site-related contaminants were not present. The results did not detect any contaminant of concern from the site.

Sediment samples collected from two small ponds at the site detected arsenic concentrations ranging from 7.0 ppm (SD-4) to 15 ppm (SD-1) exceeding the sediment criterion (6 ppm) in each sediment sample collected. One sediment sample (SD-2) detected cadmium at 4.6 ppm which exceeded the sediment criterion for cadmium (0.6 ppm). Concentrations of one PCB Aroclor (PCB-1254) exceeded

the applicable criterion (0.8 ppb) in each sediment sample. PCB-1254 concentrations ranged from 6.8 ppb (SD-4) to 6,700 ppb (SD-2).

Post Remediation:

The remedial construction at the site is complete as of June 2014.

The remedial construction included excavation of impacted soil from the former drum disposal and test pit areas and stabilizing, in-situ treatment of waste materials in the former municipal waste disposal area identified as hazardous waste, consolidate the treated and stabilized materials in the waste management area within the landfill footprint, grade and re-vegetate as needed to cover excavated areas, excavate sediments to one-foot depth and stabilize and onsolidate with other treated materials and made repairs to and improvements of the existing soil cover.

Environmental easement to restrict the use and development of the controlled property for commercial and restricts the use of groundwater as a source of potable or process water ws signed in January 2015.

The Final Engineering Report and Site Management Plan were approved in December 2014. The site will be reclassified from class 2 to calss 4.

Site Health Assessment **Updated: 02/23/2015**

Remedial activities undertaken at the site have effectively reduced the potential for exposure to site-related contaminants and measures are in place to ensure that these measures remain protective in the future.

	Start		End	
OU 00				
Periodic Review	2/13/16	PLN	3/29/16	PLN
Site Management	12/30/14	ACT	12/29/44	PLN
OU 01				
OGC Docket - Environmental Easement	12/1/14	ACT	2/19/15	ACT
OGC Docket - Other	4/2/12	ACT	4/4/12	ACT
OGC Docket - SSF Order or Referral	2/1/04	ACT	11/22/10	ACT
Reclass Pkg.	2/23/15	ACT	5/31/15	PLN
Remedial Action	7/8/13	ACT	12/29/14	ACT
Remedial Design	7/23/12	ACT	5/28/13	ACT
Remedial Investigation	12/1/96	ACT	6/1/99	TRM
Remedial Investigation	11/23/10	ACT	3/28/12	ACT
OU 01A				
Remedial Action	4/1/88	ACT	8/1/88	ACT
OU 01B				
Remedial Action	9/1/94	ACT	11/1/94	ACT
Remedial Design	7/1/94	ACT	9/1/94	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;
- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
2. Excavate the impacted soil from the former drum disposal and test pit areas where total cadmium concentrations were greater than the commercial SCO;

3. Stabilize the excavated soils as needed to assure the material is non-hazardous for cadmium and lead;

4. Treat in-situ (or excavate and treat ex-situ) waste materials in the former municipal waste disposal area identified as exhibiting the characteristic of a RCRA hazardous waste to render materials non-hazardous for cadmium and lead;

5. Consolidate the treated materials in the waste management area (WMA) within the landfill footprint;

6. Grade and re-vegetate as needed to cover excavated areas in the landfill to provide for surface water drainage; and

7. Excavate sediments to one-foot depth using conventional earthmoving equipment, stockpile on site, and allow to dry sufficiently to facilitate handling. Stabilize the sediments and consolidate within the WMA in the landfill footprint.

8. Where it is required make repairs to and improvements of the existing soil cover in the former municipal solid waste disposal area. This work would include removing surface debris, placing geo-textile on the prepared surface, and placing 24 inches of imported clean soil and topsoil and re-vegetate to reduce potential soil erosion.
9. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- requires the remedial party or site owner to complete and submit to the Department a periodic

certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- prohibits agriculture or vegetable gardens on the controlled property; and
- requires compliance with the Department approved Site Management Plan.

10. Site Management Plan is required, which includes the following:

a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: The Environmental Easement discussed in the paragraph above.
Engineering Controls: maintenance of the soil cover.
This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- Maintain the soil cover periodically. Maintenance will include mowing the cover one time a year, if necessary and repair of any areas of the cover that were damaged or compromised in any way;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

- monitoring of groundwater to assess the performance and effectiveness of the remedy and
- a schedule of monitoring and frequency of submittals to the Department.

Total Cost	$1,361,000
Capital Cost	$1,137,000
OM&M Cost	$25,000

Issues / Recommendations

Remedy Description for Operable Unit 01A

In July 1988, NYSDEC conducted an interim remedial measure (IRM) in which it removed approximately 300 drums containing an ash-type waste and approximately 100 cubic yards (CY) of soil impacted by cadmium. In November 1994, NYSDEC removed an additional 236 CY of soil from the former drum disposal area. Following the IRM, several Site investigations were conducted from 1990 through 1997, including the collection of numerous surface and subsurface soil samples.

Total Cost

Capital Cost

OM&M Cost

Issues / Recommendations

Remedy Description for Operable Unit 01B

Additional soil samples were collected between September 1991 and June 1993 to evaluate the effectiveness of the drum removal IRM. Shallow (0 to 6 inches in depth) and subsurface (12 to 24 inches in depth) soil samples were collected and analyzed for cadmium. The results of the sampling showed detected concentrations of cadmium of up to 2,100 milligrams per kilogram (mg/kg), leading NYSDEC to remove additional soil. In November 1994, NYSDEC removed soil from the former drum disposal area to a depth of 24 inches below ground surface (bgs), resulting in 236 CY of material being sent off Site for disposal. Confirmatory soil sampling was conducted and indicated the continued presence of cadmium in the remaining soils at the former drum disposal area.

Total Cost	$150,000
Capital Cost	$0
OM&M Cost	$0

Issues / Recommendations

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
4/7/2015

SITE DESCRIPTION

SITE NO. **808006**

SITE NAME **Townley Hill Road Dump Site**

SITE ADDRESS: Townley Hill Road ZIP CODE: 14902

CITY/TOWN: Catlin

COUNTY: Chemung

ALLOWABLE USE: Commercial and Industrial

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:	YES	NO
IC/EC Certification Plan	▣	☐
Monitoring Plan	▣	☐
Operation and Maintenance (O&M) Plan	☐	▣

Periodic Review Frequency: 1 year

Periodic Review Report Submittal Date: 02/13/2016

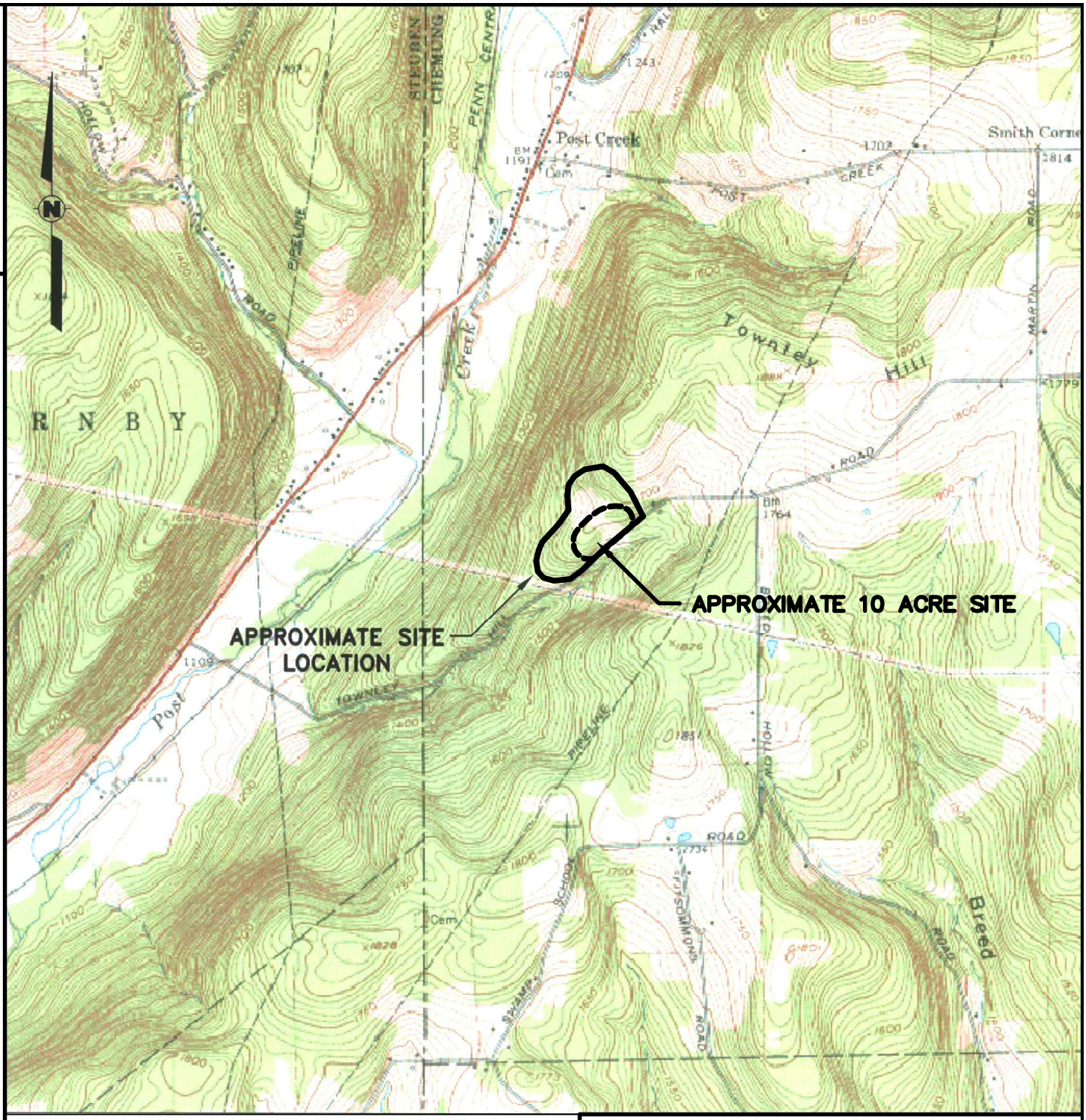
Description of Institutional Control

CASE JAMES C
153 TOWNLEY HILL RD
Environmental Easement
Block: 0001
Lot: 045
Sublot: 000
Section: 026
Subsection: 000
S_B_L Image: 26.00-1-45
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
Site Management Plan

Description of Engineering Control

CASE JAMES C
153 TOWNLEY HILL RD
Environmental Easement
Block: 0001
Lot: 045
Sublot: 000
Section: 026
Subsection: 000
S_B_L Image: 26.00-1-45
Cover System

DRAWING NUMBER 01304A10



SCALE

0 2000 4000 FEET

REFERENCES:

7.5–MIN. TOPOGRAPHIC QUADRANGLE
BIG FLATS, NY, DATED 1969
PHOTOINSPECTED 1976
SCALE 1:24000

QUADRANGLE LOCATION

FIGURE 1

SITE LOCATION MAP

TOWNLEY HILL ROAD DUMP SITE
CHEMUNG COUNTY, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

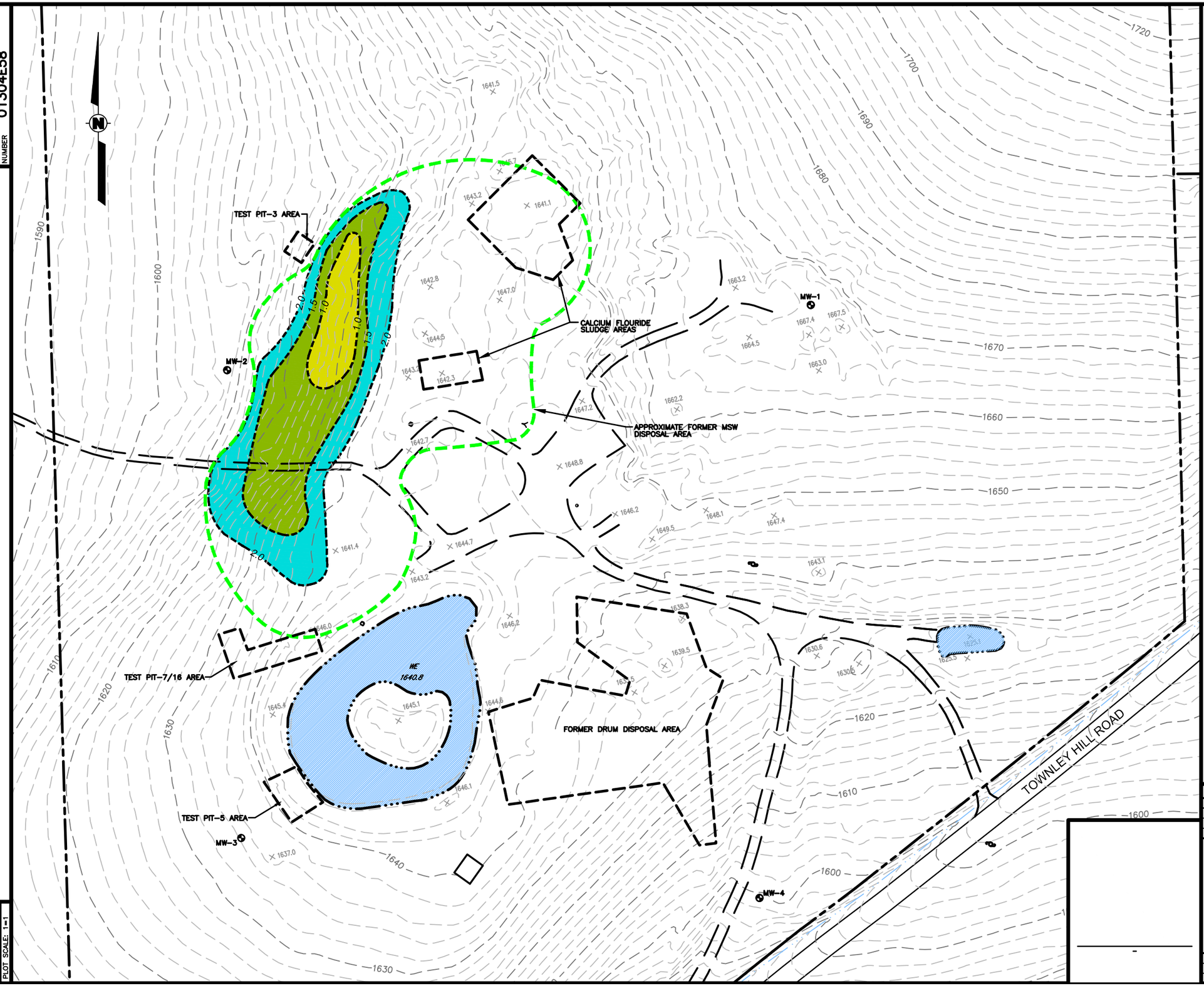
CUMMINGS RITER CONSULTANTS, INC.

DRAWING NUMBER
01304A10

REVISION	DATE	DESCRIPTION

DRAWN BY:	T.N. Fitzroy	DATE:	0–24–13
CHECKED BY:	B. Geno	DATE:	1–24–13
APPROVED BY:	B. Geno	DATE:	1–24–13

DRAWING NUMBER 01304E58



LEGEND:

- ~0.5' TO ~1.0' EXISTING SOIL COVER THICKNESS (3,680 SF)
- ~1.0' TO ~1.5' EXISTING SOIL COVER THICKNESS (11,140 SF)
- ~1.5' TO ~2.0' EXISTING SOIL COVER THICKNESS (12,660 SF)
- APPROXIMATE PROPERTY LINE
- APPROXIMATE LIMITS OF FORMER MSW DISPOSAL AREA
- POND

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES BY DICKERSON AERIAL SURVEYS, INC.
DRAWING FROM MAY 3, 1989 AERIAL PHOTOGRAPHY.
PROJECT REFERENCE 890410

SCALE
40 0 40 80 FEET

PLOT SCALE: 1=1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

PRE-REMEDIATION SITE CONDITIONS

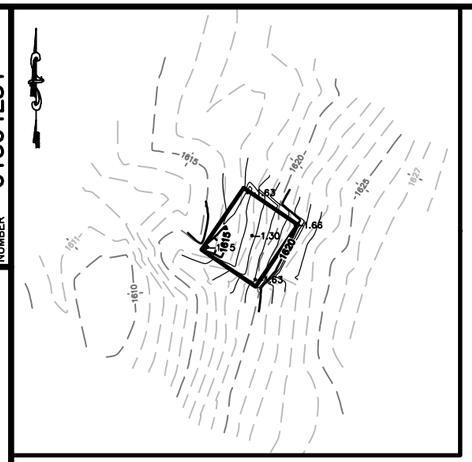
TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

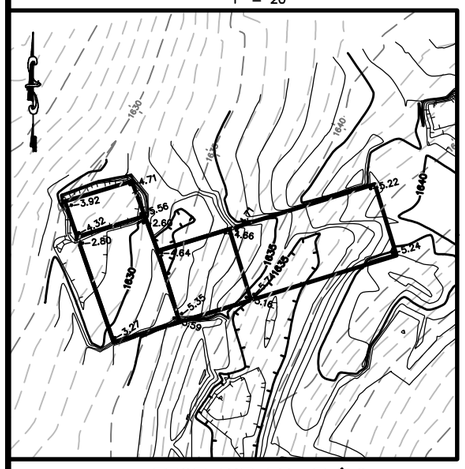
AUTOCAD FILE NUMBER: 01304E58

DRAWN BY:	T.N. Fitzroy	DATE: 2-4-14	FIGURE NUMBER 2
CHECKED BY:	R.P. HRENKO	DATE: 8-6-14	
APPROVED BY:	A.E. PROCTOR	DATE: 8-6-14	

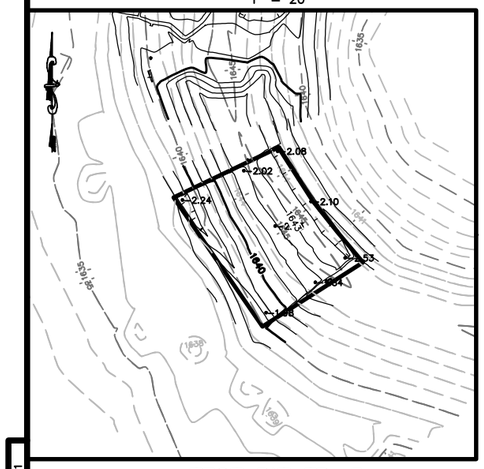
DRAWING NUMBER 01304E51



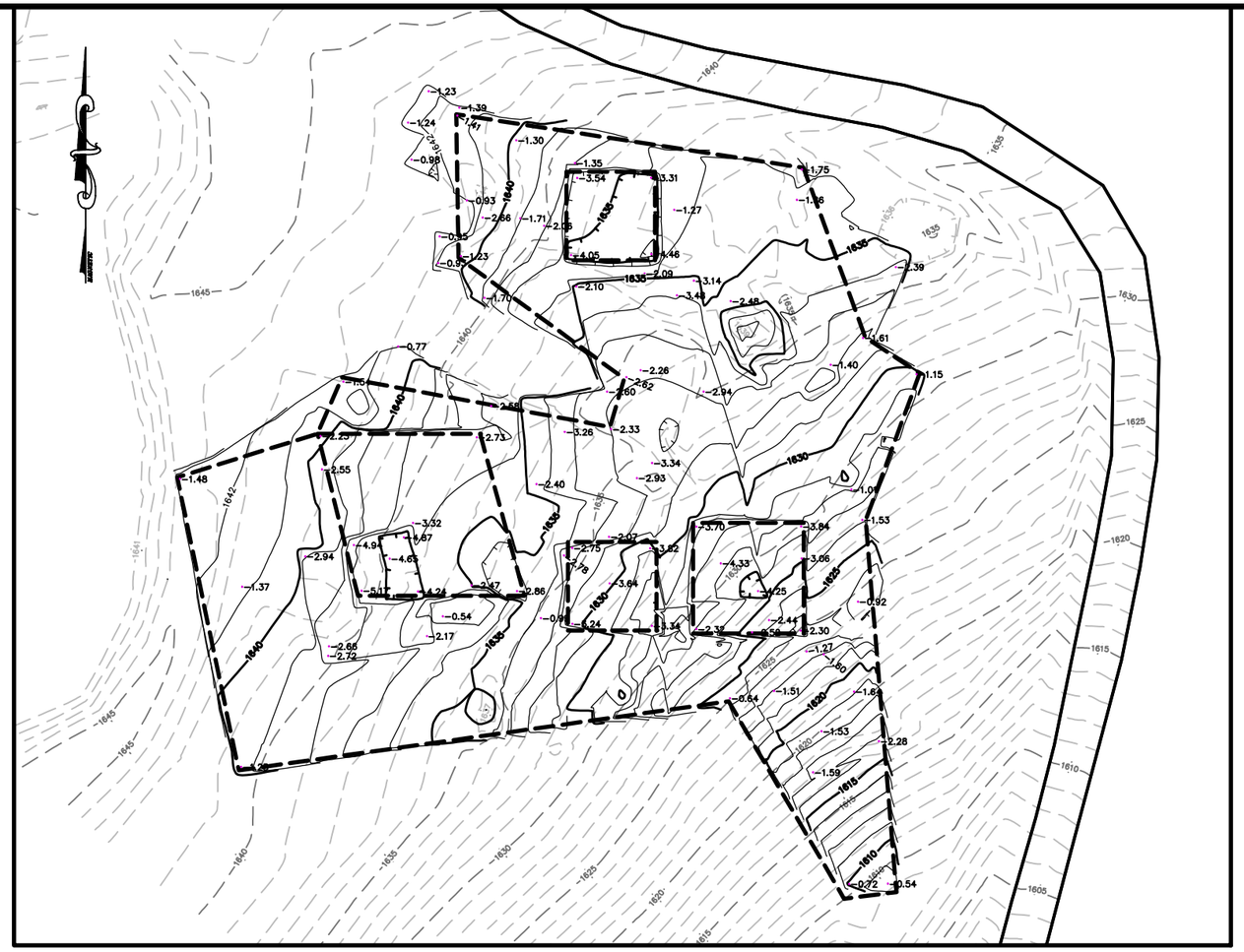
TEST PIT TP-3
1" = 20'



TEST PIT TP-7/16
1" = 20'



TEST PIT TP-5
1" = 20'



FORMER DRUM DISPOSAL AREA
1" = 20'

LEGEND:

- PROPOSED LIMITS OF SOIL EXCAVATION
- —1640— EXISTING GRADE CONTOUR
- 1640 FINAL EXCAVATED SOIL CONTOUR
- FINAL EXCAVATED SOIL CONTOUR DEPRESSION
- • –3.10 EXCAVATED DEPTH

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

SCALE
20 0 20 40 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

EXCAVATION AND MATERIAL REMOVAL AS-BUILT AREAS

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E51

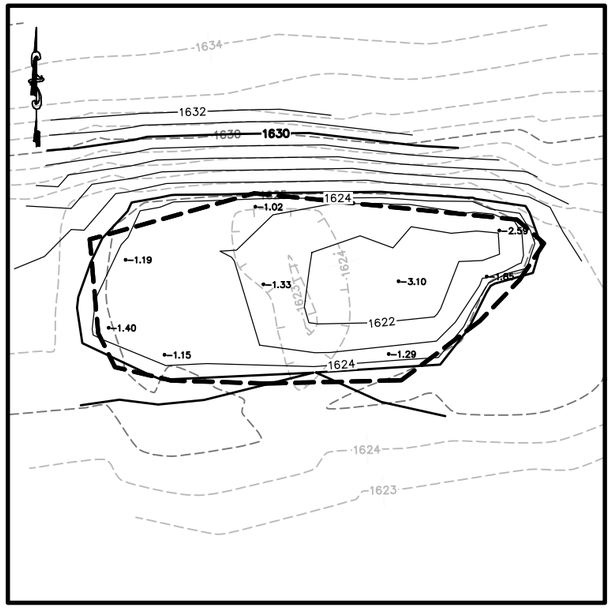
DRAWN BY:	D.J. Martino	DATE:	1-22-14
CHECKED BY:	R.P. HRENKO	DATE:	8-6-14
APPROVED BY:	A.E. PROCTOR	DATE:	8-6-14

FIGURE NUMBER 3

PLOT SCALE: 1=1

DRAWING NUMBER 01304E54

LARGER POND
1" = 20'



SMALLER POND
1" = 10'

LEGEND:

- PROPOSED LIMITS OF SOIL EXCAVATION
- 1640 EXISTING GRADE CONTOUR
- EXISTING GRADE CONTOUR DEPRESSION
- 1640 EXCAVATION CONTOUR
- 3.10 EXCAVATED DEPTH

NOTE:

DRAWING INDICATES ORIGINAL CONTOURS COMPARED TO FINAL EXCAVATION CONTOURS WITH EXCAVATION DEPTHS.

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

PLOT SCALE: 1=1

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

LARGER AND SMALLER POND SEDIMENT AND LARGER POND CALCIUM FLOURIDE SLUDGE REMOVAL AREAS AS-BUILT

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

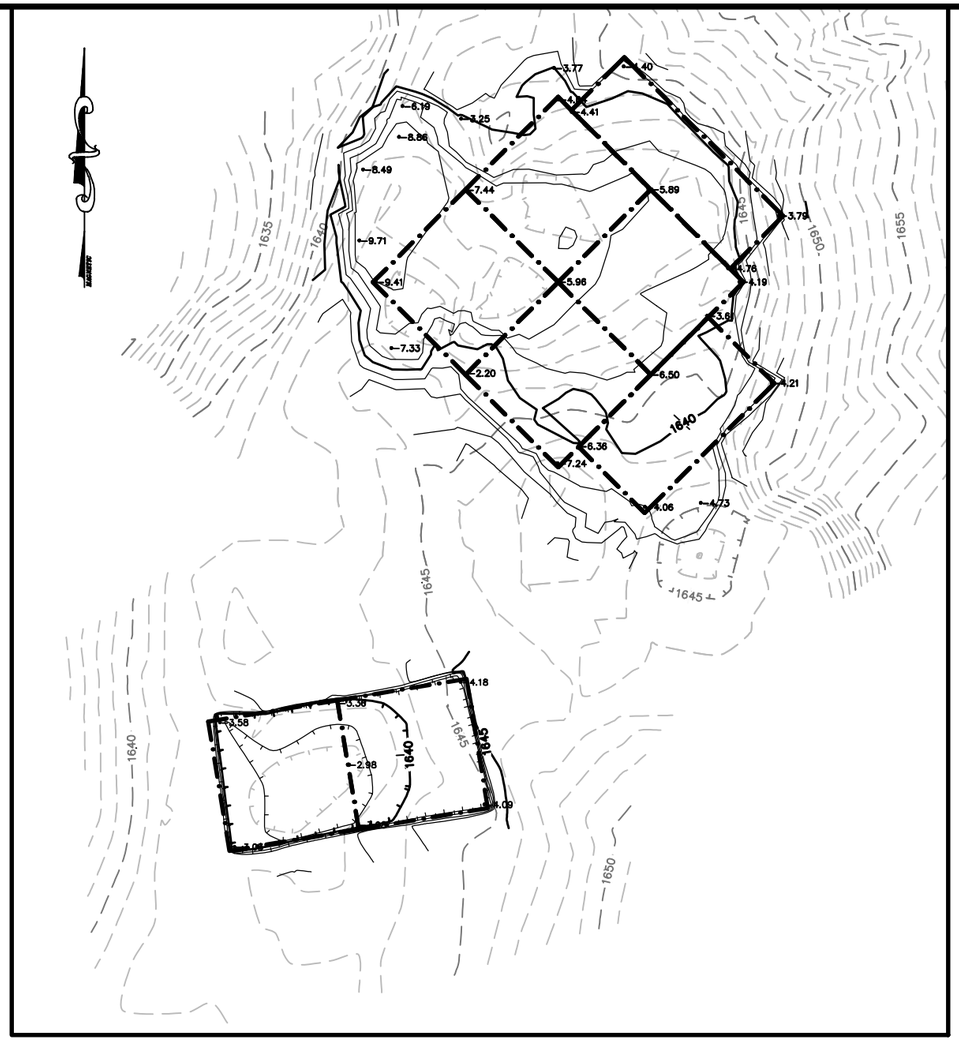
PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E54

DRAWN BY:	T.N. Fitzroy	DATE:	1-28-14
CHECKED BY:	R.P. HRENKO	DATE:	8-6-14
APPROVED BY:	A.E. PROCTOR	DATE:	8-6-14

FIGURE NUMBER 4

DRAWING NUMBER 01304E52



CALCIUM FLUORIDE
SLUDGE IN SITU STABILIZATION AREAS
1" = 20'

LEGEND:

- LIMITS OF IN SITU SOIL TREATMENT
- EXISTING GRADE CONTOUR
- EXISTING GRADE CONTOUR DEPRESSION
- 1640 EXCAVATED SOIL CONTOUR
- EXCAVATED SOIL CONTOUR DEPRESSION
- 6.36 EXCAVATED DEPTH

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

SCALE
20 0 20 40 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

CALCIUM FLUORIDE SLUDGE IN SITU STABILIZATION AREAS

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

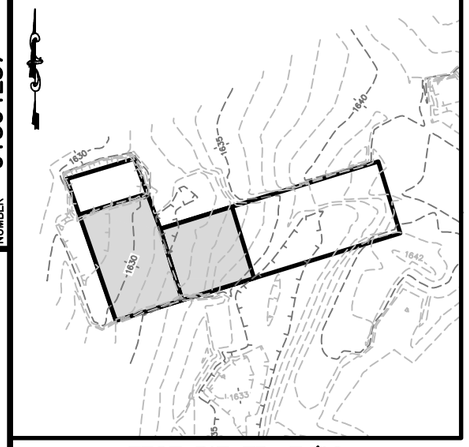
PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E52

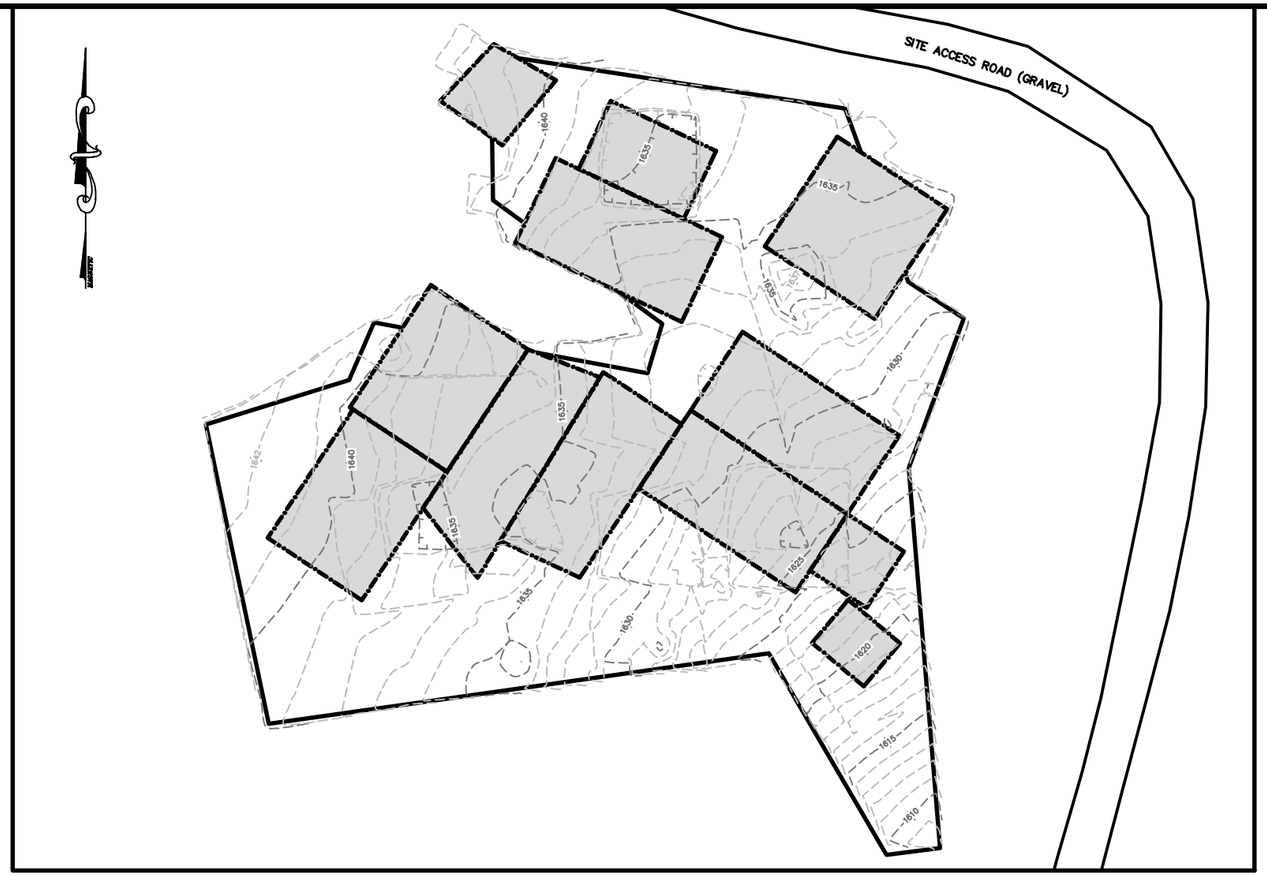
DRAWN BY:	D.J. Martino	DATE: 01-23-14	FIGURE NUMBER 5
CHECKED BY:	R.P. HRENKO	DATE: 8-6-14	
APPROVED BY:	A.E. PROCTOR	DATE: 8-6-14	

PLOT SCALE: 1=1

DRAWING NUMBER 01304E57



TEST PIT TP-7/16
1" = 20'



FORMER DRUM DISPOSAL AREA
1" = 20'

LEGEND:

- LIMITS OF SOIL TREATMENT
- 1640 EXISTING / EXCAVATED GRADE CONTOUR
- EXISTING / EXCAVATED GRADE CONTOUR DEPRESSION
- PROPOSED LIMITS OF SOIL EXCAVATION
- SOIL STABILIZATION AREAS

GENERAL NOTE:

1. DELINEATED SOIL STABILIZATION AREAS CORRESPOND TO ESTIMATED SOIL WEIGHTS NEEDED TO ACHIEVE 7 PERCENT MIXTURE USING 1 TON OF STABILIZING AGENT.
2. EXCAVATION AREAS WERE BACKFILLED IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.
3. OVERBURDEN WAS REMOVED IN TP-7/16 PRIOR TO PERFORMING SOIL STABILIZATION.

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

SCALE
20 0 20 40 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
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Fax: (412) 241-7500

TP-7/16 AND FDDA SOIL STABILIZATION AREAS

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

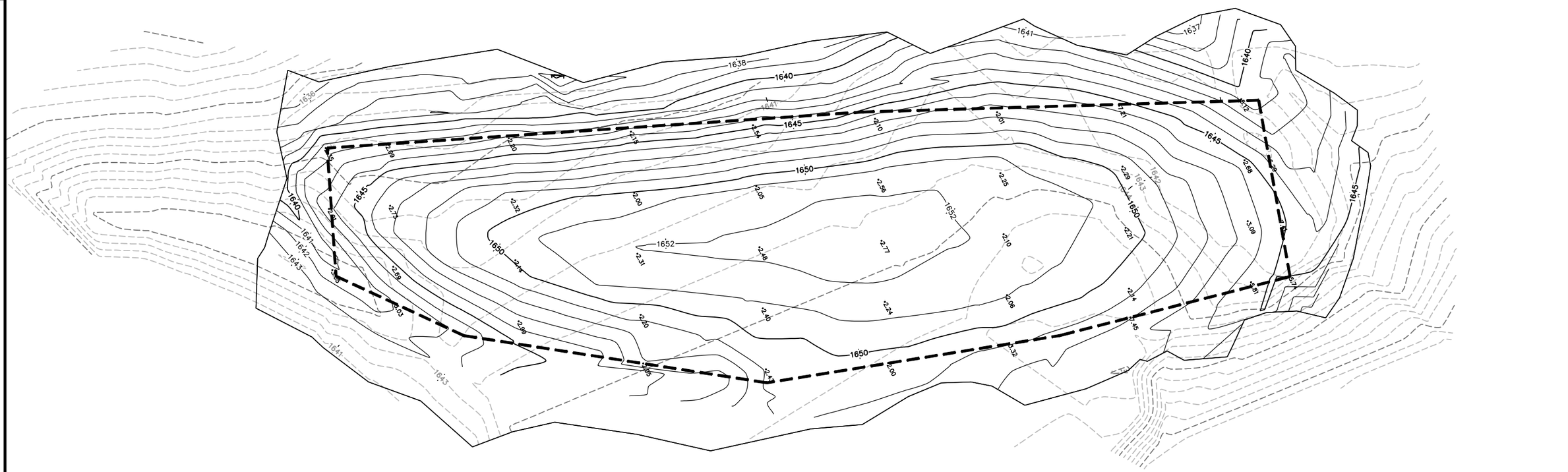
PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E57

DRAWN BY:	D.J. Martino	DATE: 1-22-14	FIGURE NUMBER
CHECKED BY:	R.P. HRENKO	DATE: 8-6-14	6
APPROVED BY:	A.E. PROCTOR	DATE: 8-6-14	

PLOT SCALE: 1=1

DRAWING NUMBER 01304E55



LEGEND:

—1640— EXISTING GRADE CONTOUR

EXISTING GRADE CONTOUR DEPRESSION

—1640— INTERMEDIATE GRADE PLACED SOIL CONTOUR

+1.62 INTERMEDIATE GRADE FILL THICKNESS

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	FINAL SURVEY	8–14–14	R.P.H.

A WOODARD & CURRAN COMPANY

FIGURE 7
WASTE PLACED SOILS
WASTE MANAGEMENT AREA
AS–BUILT

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

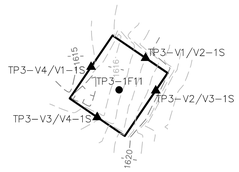
PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E55

DRAWN BY: T.N. Fitzroy	DATE: 1–28–14	FIGURE NUMBER 7
CHECKED BY: R.P. HRENKO	DATE: 8–14–14	
APPROVED BY: A.E. PROCTOR	DATE: 8–14–14	

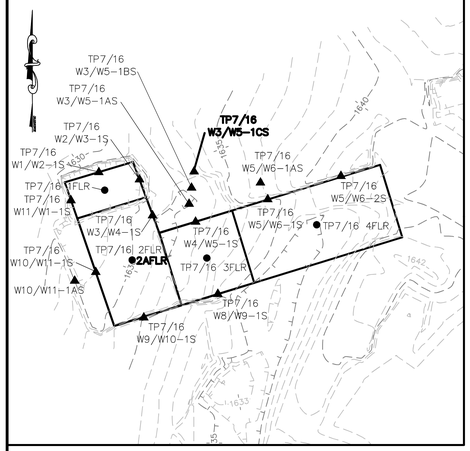
PLOT SCALE: 1=1

DRAWING NUMBER 01304E50



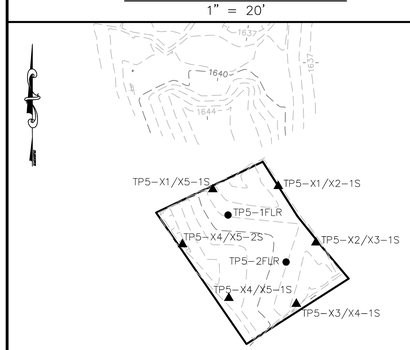
TEST PIT TP-3

1" = 20'



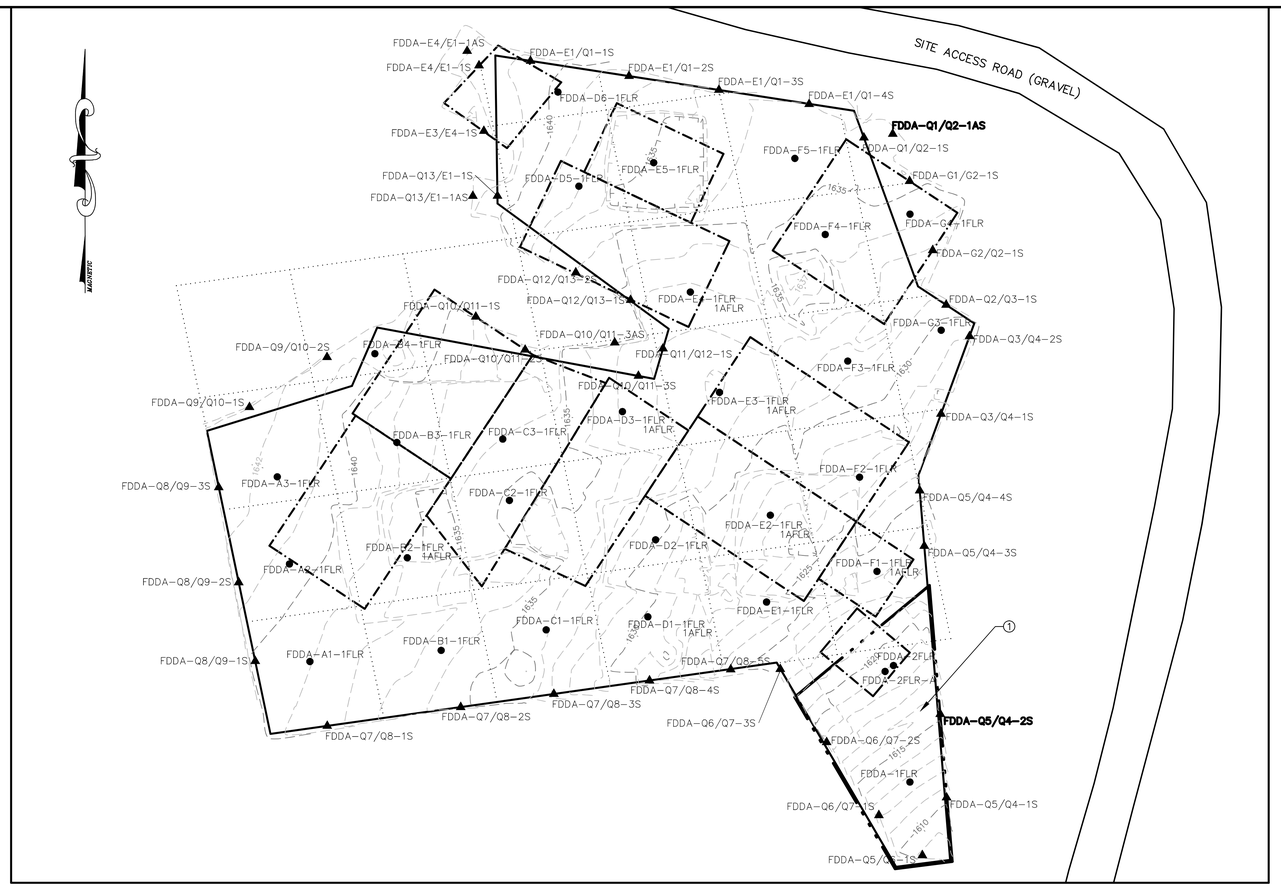
TEST PIT TP-7/16

1" = 20'



TEST PIT TP-5

1" = 20'



FORMER DRUM DISPOSAL AREA

1" = 20'

LEGEND:

- LIMITS OF IN SITU SOIL TREATMENT
- SAMPLE GRID
- —1640— EXISTING / EXCAVATED GRADE CONTOUR
- EXISTING / EXCAVATED GRADE CONTOUR DEPRESSION
- PROPOSED LIMITS OF SOIL EXCAVATION
- FDDA-F4-1FLR — FLOOR SOIL SAMPLE LOCATION
- FDDA-Q1/Q2-1S — SIDEWALL SOIL SAMPLE LOCATION
- **FDDA-Q1/Q2-1AS** — SCO SOIL SAMPLE EXCEEDANCE LOCATION

GENERAL NOTE:

1. DELINEATED IN SITU SOIL STABILIZATION AREAS CORRESPOND TO ESTIMATED SOIL WEIGHTS NEEDED TO ACHIEVE 7 PERCENT MIXTURE USING 1 TON OF STABILIZING AGENT.
2. EXCAVATION AREAS WERE BACKFILLED IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.
3. SAMPLE LOCATIONS IN **BOLD** AND SHADED INDICATE LOCATIONS SCO SOIL SAMPLE EXCEEDANCES LEFT IN PLACE AS APPROVED BY NYSDEC PROJECT MANAGER. RESULTS ARE INDICATED IN THE TABLE BELOW.

SPECIFIC NOTE:

① EXCAVATION COMPLETED PRIOR TO SEDIMENT TRAP 2 CONSTRUCTION AND ESTABLISHED SAMPLING GRID.

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

Restricted Use Soil Cleanup Objective - Commercial [6NYCRR Table 375-6.8(b)][a]	Total Cadmium (mg/kg)[b] 9.3	Total Lead (mg/kg) 1,000
Former Drum Disposal Area (FDDA):		
Sample ID/ Location	**Date**	**Result**
FDDA-Q5/Q6-1S[c]	8/7/2013	0.034 J[d] 7.4
FDDA-Q6/Q7-1S	8/7/2013	0.12 J 11
FDDA-Q6/Q7-2S	8/7/2013	0.050 J 6.4
FDDA-1Flr/Dup 1[c]	8/7/2013	0.29 J / 0.15 J 7.6 / 11
FDDA-1Flr/MS	8/7/2013	5.77 65.1
FDDA-1Flr/MSD	8/7/2013	5.91 66.3
FDDA-2Flr	8/7/2013	**21**[d] 16
FDDA-2FlrA	8/13/2013	1.1 7.8
FDDA-Q6/Q7-3S	8/7/2013	0.77 13
FDDA-Q5/Q4-1S	8/7/2013	3.3 18
FDDA-Q5/Q4-2S	8/7/2013	**9.6**[d] 16
FDDA-Q8/Q9-1S	8/27/2013	0.11 J 8.3 B
FDDA-Q8/Q9-2S	8/27/2013	3.7 13 B
FDDA-Q8/Q9-3S	8/27/2013	0.21 J 8.5 B
FDDA-Q7/Q8-1S	8/27/2013	0.43 J 8.9 B
FDDA-Q7/Q8-2S	8/27/2013	1.0 9.7 B
FDDA-Q7/Q8-3S	8/27/2013	2.2 18 B
FDDA-Q7/Q8-4S	8/27/2013	2.2 14
FDDA-Q7/Q8-5S	8/27/2013	0.66 9.7
FDDA-A1-1Flr	8/27/2013	0.63 U 8.4
FDDA-A2-1Flr	8/27/2013	1.5 11
FDDA-A3-1Flr	8/27/2013	3.4 20
FDDA-B1-1Flr	8/27/2013	0.72 7.6
FDDA-C1-1Flr	8/27/2013	3.9 11
FDDA-D1-1Flr	8/27/2013	**12** 11
FDDA-D1-1AFlr	9/6/2013	1.5 7.3
FDDA-E1-1Flr	8/27/2013	0.13 J 7.8
FDDA-Q10-1S	8/27/2013	0.13 J 16
FDDA-Q5/Q4-3S	9/6/2013	5.6 13
FDDA-Q5/Q4-4S	9/6/2013	0.38 J 11
FDDA-Q3/Q4-1S/Dup 3[c]	9/6/2013	0.99 / 1.3 11 / 9.0
FDDA-Q3/Q4-1S/MS	9/6/2013	11.8 F 57.8
FDDA-Q3/Q4-1S/MSD	9/6/2013	55.2 F 58.3
FDDA-Q3/Q4-2S	9/6/2013	0.74 6.6
FDDA-Q2/Q3-1S	9/6/2013	0.59 7.2
FDDA-F1-1Flr	9/6/2013	**100** 20
FDDA-F1-1AFlr	9/12/2013	0.27 J 15
FDDA-F2-1Flr	9/6/2013	1.4 12
FDDA-F3-1Flr	9/6/2013	0.42 J 9.4
FDDA-G3-1Flr	9/6/2013	0.91 8.8
FDDA-B2-1Flr	9/10/2013	**220** 32
FDDA-B2-1AFlr	10/10/2013	0.55 U 18
FDDA-B3-1Flr/Dup 4[c]	9/10/2013	3.3 / 1.1 9.3 / 9.4
FDDA-B3-1Flr/MS	9/10/2013	7.01 F 57.6
FDDA-B3-1Flr/MSD	9/10/2013	5.64 F 53.9
FDDA-B4-1Flr	9/10/2013	0.16 8.6

Former Drum Disposal Area (FDDA): (Continued)		
Sample ID/ Location	**Date**	**Result**
FDDA-C2-1Flr	9/10/2013	0.95 12
FDDA-C3-1Flr	9/10/2013	0.46 J 11
FDDA-D2-1Flr	9/10/2013	0.095 J 13
FDDA-D3-1Flr	9/10/2013	**55** 19
FDDA-D3-1AFlr	9/18/2013	1.3 19
FDDA-D5-1Flr	9/10/2013	6.3 9.4
FDDA-D6-1Flr	9/10/2013	8.6 10
FDDA-E2-1Flr	9/10/2013	**23** 13
FDDA-E2-1AFlr	9/18/2013	0.14 J 11
FDDA-E3-1Flr	9/10/2013	**110** 33
FDDA-E3-1AFlr	9/18/2013	0.096 J 14
FDDA-E4-1Flr/Dup 5[c]	9/10/2013	**130 / 94** 31 / 26
FDDA-E4-1Flr/MS	9/10/2013	115 F 79.1 F
FDDA-E4-1Flr/MSD	9/10/2013	134 77.8
FDDA-E4-1AFlr/Dup 6[c]	10/10/2013	1.5 / 0.64 17 / 18
FDDA-E4-1AFlr/MS	10/10/2013	6.50 65.9
FDDA-E4-1AFlr/MSD	10/10/2013	7.43 65.2
FDDA-E5-1Flr	9/10/2013	0.083 J 9.4
FDDA-F4-1Flr	9/10/2013	9.0 9.6
FDDA-F5-1Flr	9/10/2013	3.8 13
FDDA-G4-1Flr	9/10/2013	1.2 6.8
FDDA-Q9/Q10-2S	9/10/2013	0.15 J 11
FDDA-Q10/Q11-1S	9/10/2013	2.5 15
FDDA-Q10/Q11-2S	9/10/2013	0.25 J 16
FDDA-Q10/Q11-3S	9/10/2013	**29** 38
FDDA-Q10/Q11-3AS	9/18/2013	0.69 17
FDDA-Q11/Q12-1S	9/10/2013	1.5 14
FDDA-Q12/Q13-1S	9/10/2013	4.6 15
FDDA-Q12/Q13-2S	9/10/2013	0.052 J 14
FDDA-Q13/E1-1S	9/10/2013	**300** 53
FDDA-Q13/E1-1AS	9/18/2013	5.6 29
FDDA-E3/E4-1S	9/10/2013	0.77 7.3
FDDA-E4/E1-1S	9/10/2013	**21** 12
FDDA-E4/E1-1AS	9/18/2013	0.60 11
FDDA-E1/Q1-1S	9/10/2013	2.7 10
FDDA-E1/Q1-2S	9/10/2013	0.67 7.5
FDDA-E1/Q1-3S	9/10/2013	9.0 14
FDDA-E1/Q1-4S	9/10/2013	1.2 8.5
FDDA-Q1/Q2-1S	9/10/2013	**24** 18
FDDA-Q1/Q2-1AS	9/18/2013	**9.6** 26
FDDA-G1/G2-1S	9/10/2013	0.62 13
FDDA-G2/Q2-1S	9/10/2013	3.4 14

Test Pit 3:		
Sample ID/ Location	**Date**	**Result**
TP3-V1/V2-1S	8/27/2013	2.4 16
TP3-V2/V3-1S	8/27/2013	2.7 15
TP3-V3/V4-1S	8/27/2013	3.0 17 B
TP3-V4/V1-1S	8/27/2013	0.57 U 6.9 B
TP3-1Flr	8/27/2013	5.8 23 B
Test Pit 5:		
Sample ID/ Location	**Date**	**Result**
TP5-X1/X5-1S	8/16/2013	0.24 J 11 B
TP5-X1/X2-1S	8/16/2013	0.65 12 B
TP5-X2/X3-1S	8/16/2013	1.6 24 B
TP5-X3/X4-1S/Dup 2[c]	8/16/2013	7.4 / 5.4 11 B / 13 B
TP5-X3/X4-1S/MS	8/16/2013	14.4 F 62.8
TP5-X3/X4-1S/MSD	8/16/2013	20.3 F 61.7
TP5-X4/X5-1S	8/16/2013	0.31 J 12 B
TP5-X4/X5-2S	8/16/2013	1.6 17 B
TP5-1Flr	8/16/2013	0.46 J 14 B
TP5-2Flr	8/16/2013	0.30 J 14 B
Test Pit 7/16:		
Sample ID/ Location	**Date**	**Result**
TP7/16-W1/W2-1S	9/6/2013	1.8 7.0
TP7/16-W2/W3-1S	9/6/2013	5.9 11
TP7/16-W3/W4-1S	9/6/2013	**24** 77
TP7/16-W4/W5-1S	9/6/2013	**49** 150
TP7/16-W3/W5-1AS	9/18/2013	**76** 140
TP7/16-W3/W5-1BS	10/15/2013	**18** 91
TP7/16-W3/W5-1CS	10/23/2013	**10** 60 B
TP7/16-W8/W9-1S	9/6/2013	3.9 18
TP7/16-W9/W10-1S	9/6/2013	1.7 12
TP7/16-W10/W11-1S	9/6/2013	**20** 47
TP7/16-W10/W11-1AS	9/18/2013	0.37 8.8
TP7/16-W11/W1-1S	9/6/2013	0.055 J 7.5
TP7/16-1Flr	9/6/2013	0.34 J 6.5
TP7/16-2Flr	9/6/2013	**18** 91
TP7/16-2AFlr	9/18/2013	***11*** 74
TP7/16-3Flr	9/6/2013	2.3 9.5
TP7/16-W5/W6-1S	10/15/2013	**42** 140
TP7/16-W5/W6-1AS	10/23/2013	1.3 23 B
TP7/16-W5/W6-2S	10/15/2013	0.53 U 14
TP7/16-4Flr	10/15/2013	0.58 U 3.3

Table Notes:

(a) NYCRR, Title 6, Part 375, Subpart 375-6.8(b): Restricted Use Soil Cleanup Objectives - Commercial.
(b) "mg/kg" is milligram per kilogram, or parts per million (ppm).
(c) "S" in sample ID name indicates a sidewall sample. "Flr" in sample ID name indicates a floor sample.
(d) Laboratory data qualifiers are as follows:
"J" and "UJ" - represent a value that is estimated . Data present a usable estimation of the conditions being measured.
"U" - Indicates the parameter was not detected above the laboratory detection limit.
"B" - Indicates that the compound was found in the laboratory blank.
"F" - MS or MSD exceeds the control limits.
(e) Indicates tha a duplicate sample was collected.
(f) Bold results indicate an exceedance of the Restricted Use Soil Cleanup Objective - Commercial which was subsequently excavated.
(g) Bold and Shaded result Idicates an exceedance of the Restricted Use Soil Cleanup Objective-Commercial which was left in place.

SCALE
20 0 20 40 FEET

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
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SUMMARY OF POST-EXCAVATION SAMPLE POINTS MEETING SCO AND RESTRICTED SCO EXCEEDANCES - COMMERCIAL

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

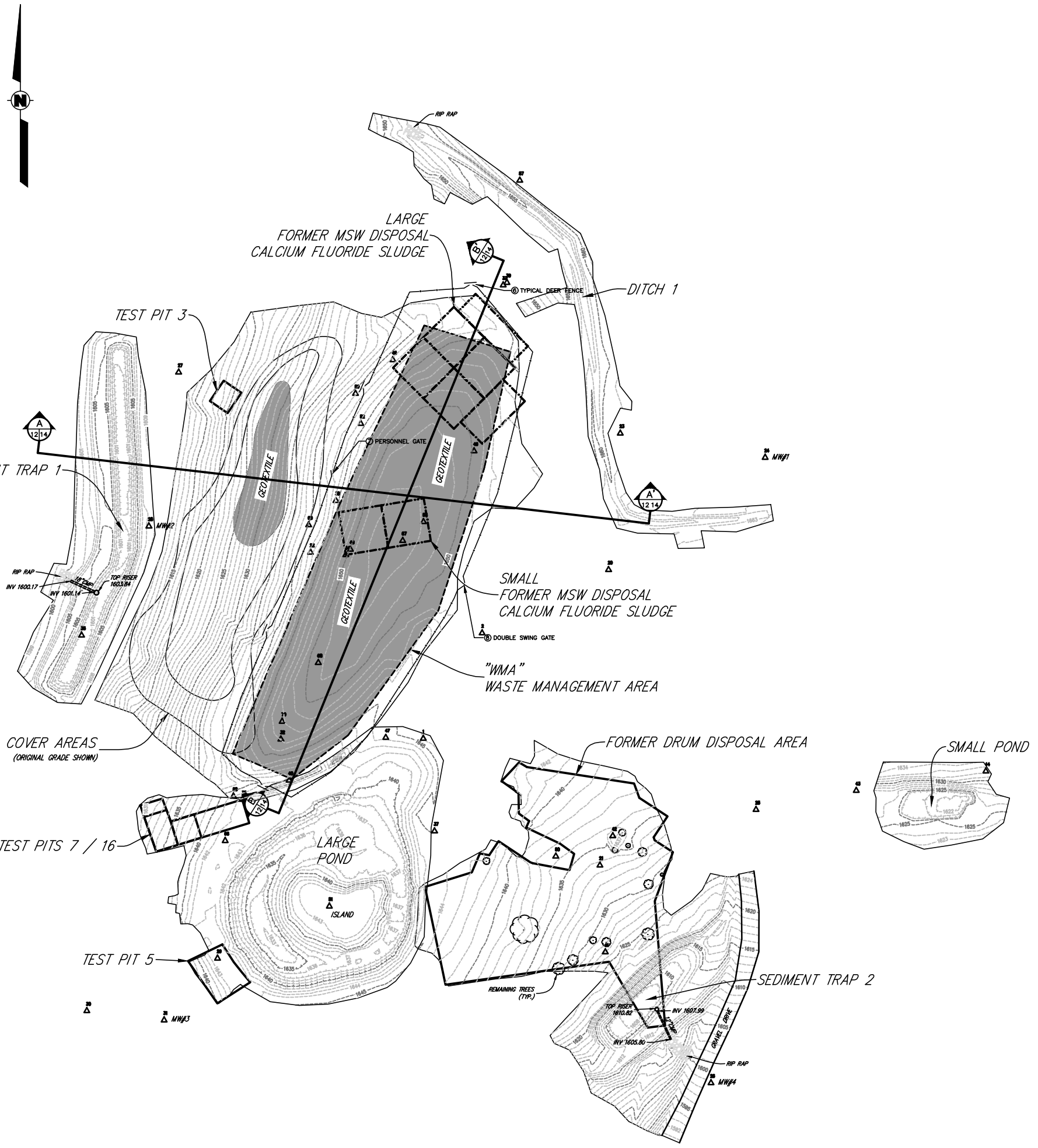
PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E50

DRAWN BY:	*D.J. Martino*	DATE: *1-22-14*	FIGURE NUMBER 8
CHECKED BY:	*R.P. HRENKO*	DATE: *8-6-14*	
APPROVED BY:	*A.E. PROCTOR*	DATE: *8-6-14*	

PLOT SCALE: 1=1

DRAWING NUMBER 01304E59



HORIZONTAL/VERTICAL DATUM NOTE:

VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88/GEOID12A) MINUS 0.2'.

HORIZONTAL CONTROL IS REFERENCED TO AN APPROXIMATE UTM ZONE 18 COORDINATE SYSTEM.

SITE PLAN (CUMMINGS RITTER) NORTH

PRIMARY CONTROL MONITORING WELLS 1–4
REMAINING SURVEY CONTROL POINTS NOT VERIFIED

SURVEY CONTROL POINT TABLE

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	15341493.72	1110567.93	1646.22	CP–PK
2	15341578.47	1110615.75	1648.78	CP–PK
20	15341630.93	1110718.51	1661.68	CP–IR
21	15341390.70	1110711.43	1634.90	CP–N
22	15341645.09	1110476.29	1638.97	CP–N
23	15341741.87	1110727.97	1661.85	CP–N
24	15341722.20	1110845.76	1668.15	HUNT–MW1
25	15341435.86	1110838.37	1631.25	CP–N
26	15341213.68	1110801.74	1601.90	HUNT–MW4
27	15341791.44	1110369.07	1613.70	CP–N
28	15341668.32	1110344.88	1610.27	HUNT–MW2
29	15341315.02	1110400.68	1644.99	CP–N
30	15341272.28	1110294.46	1628.12	CP–N
31	15341264.78	1110357.27	1636.86	HUNT–MW3
32	15341493.07	1110452.20	1640.97	CP–N
33	15341882.33	1110632.67	1648.97	CP–N

SURVEY CONTROL POINT TABLE

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
34	15341643.01	1110504.92	1642.46	CP–N
35	15341577.83	1110280.24	1604.02	CP–N
36	15341444.09	1110420.95	1643.89	CP–N
37	15341418.47	1110577.07	1644.95	CP–N
38	15341687.09	1110486.95	1642.57	CP–N
39	15341884.37	1110635.88	1649.64	CP–N
40	15341459.71	1110468.78	1645.63	CP–N
41	15341320.09	1110715.81	1626.72	CP–N
42	15341414.49	1110721.88	1639.35	CP–N
43	15341451.36	1110919.80	1627.31	CP–N
44	15341467.11	1111025.15	1632.49	CP–N
45	15341801.57	1110543.18	1643.28	CP–N
46	15341727.39	1110809.22	1646.67	CP–N
47	15341494.49	1110537.41	1644.45	CP–N
49	15341647.47	1110508.75	1645.34	CP–N
50	15341397.93	1110675.60	1635.62	CP–N
51	15341357.34	1110491.60	1644.22	CP–N
52	15341749.81	1110517.11	1643.55	CP–N
53	15341669.86	1110568.09	1648.88	CP–N
57	15341947.43	1110646.30	1661.66	CP–N

SURVEY CONTROL POINT TABLE

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
58	15341448.74	1110413.65	1641.68	CP–N
59	15341774.11	1110512.80	1640.73	CP–N
60	15341667.34	1110474.69	1640.10	CP–PK
66	15341410.60	1110408.88	1642.64	CP–N
67	15341654.60	1110551.15	1651.19	CP–N
68	15341555.32	1110482.58	1650.06	CP–N
70	15341507.57	1110453.20	1652.46	CP–PK

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

SCALE
40 0 40 80 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	FINAL SURVEY	8–14–14	R.P.H.

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PLACEMENT OF FILL AS–BUILT

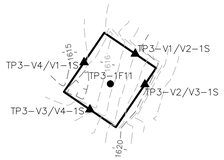
TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

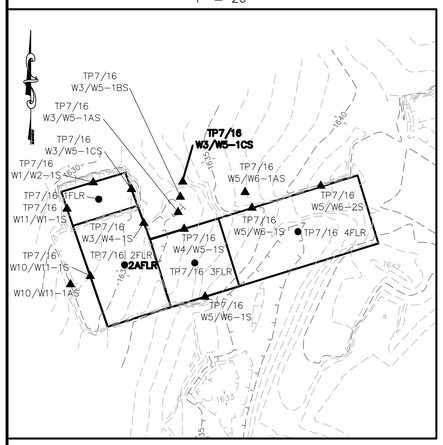
AUTOCAD FILE NUMBER: 01304E59

DRAWN BY:	T.N. Fitzroy	DATE: 1–30–14	FIGURE NUMBER 9
CHECKED BY:	R.P. Hrenko	DATE: 8–14–14	
APPROVED BY:	A.E. Proctor	DATE: 8–14–14	

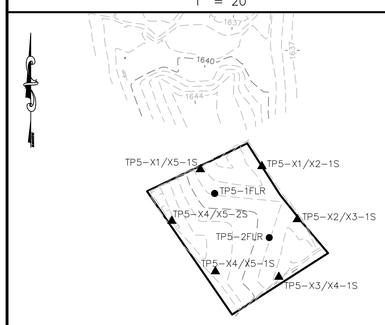
DRAWING NUMBER 01304E60



TEST PIT TP-3
1" = 20'

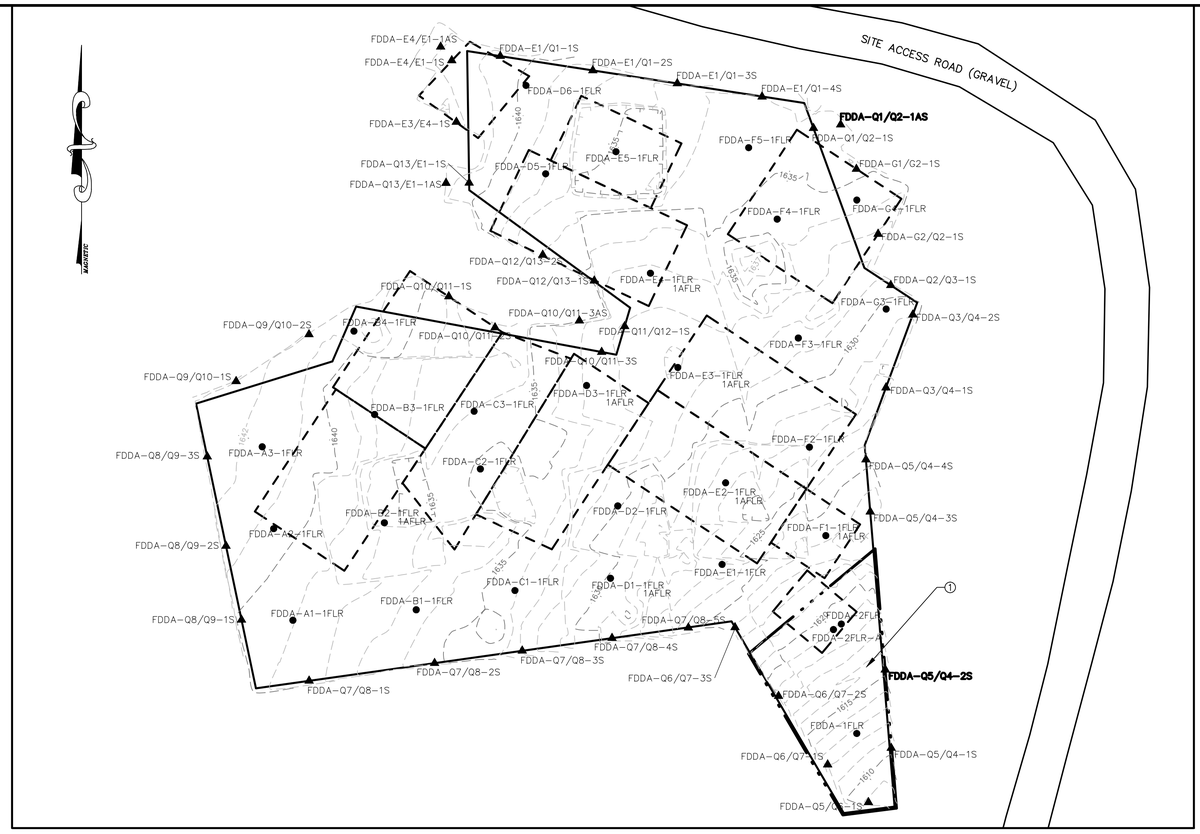


TEST PIT TP-7/16
1" = 20'



TEST PIT TP-5
1" = 20'

PLOT SCALE: 1=1



FORMER DRUM DISPOSAL AREA
1" = 20'

LEGEND:

- LIMITS OF IN SITU SOIL TREATMENT
- SAMPLE GRID
- EXISTING / EXCAVATED GRADE CONTOUR
- EXISTING / EXCAVATED GRADE CONTOUR DEPRESSION
- PROPOSED LIMITS OF SOIL EXCAVATION
- FDDA-F4-1FLR — FLOOR SOIL SAMPLE LOCATION
- FDDA-Q1/Q2-1S — SIDEWALL SOIL SAMPLE LOCATION
- **FDDA-Q1/Q2-1AS** — SCO SOIL SAMPLE EXCEEDANCE LOCATION

GENERAL NOTE:

1. DELINEATED IN SITU SOIL STABILIZATION AREAS CORRESPOND TO ESTIMATED SOIL WEIGHTS NEEDED TO ACHIEVE 7 PERCENT MIXTURE USING 1 TON OF STABILIZING AGENT.
2. EXCAVATION AREAS WERE BACKFILLED IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.
3. SAMPLE LOCATIONS IN **BOLD** INDICATE LOCATIONS SCO SOIL SAMPLE EXCEEDANCES LEFT IN PLACE AS APPROVED BY NYSDEC PROJECT MANAGER. RESULTS ARE INDICATED IN THE TABLE BELOW.

SPECIFIC NOTE:

① EXCAVATION COMPLETED PRIOR TO SEDIMENT TRAP 2 CONSTRUCTION AND ESTABLISHED SAMPLING GRID.

TOPOGRAPHY REFERENCE:

TOPOGRAPHIC FEATURES PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.

Unrestricted Use Soil Cleanup Objective [6NYCRR Table 375-6.8(a)](b)	Total Cadmium (mg/kg) 2.5	Total Lead (mg/kg) 63
Former Drum Disposal Area (FDDA):		
Sample ID/ Location	**Date**	**Result**
FDDA-Q5/Q6-1S[e]	8/7/2013	0.034 J	7.4
FDDA-Q6/Q7-1S	8/7/2013	0.12 J	11
FDDA-Q6/Q7-2S	8/7/2013	0.050 J	6.4
FDDA-1Flr/Dup 1[d]	8/7/2013	0.29 J / 0.15 J	7.6 / 11
FDDA-1Flr/MS	8/7/2013	5.77	65.1
FDDA-1Flr/MSD	8/7/2013	5.91	66.3
FDDA-2Flr	8/7/2013	**21**	16
FDDA-2FlrA	8/13/2013	1.1	7.8
FDDA-Q6/Q7-3S	8/7/2013	0.77	13
FDDA-Q5/Q4-1S	8/7/2013	**3.3**[h]	18
FDDA-Q5/Q4-2S	8/7/2013	**9.6**	16
FDDA-Q8/Q9-1S	8/27/2013	0.11 J	8.3 B
FDDA-Q8/Q9-2S	8/27/2013	**3.7**	13 B
FDDA-Q8/Q9-3S	8/27/2013	0.21 J	8.5 B
FDDA-Q7/Q8-1S	8/27/2013	0.43 J	8.9 B
FDDA-Q7/Q8-2S	8/27/2013	1.0	9.7 B
FDDA-Q7/Q8-3S	8/27/2013	2.2	18 B
FDDA-Q7/Q8-4S	8/27/2013	2.2	14
FDDA-Q7/Q8-5S	8/27/2013	0.66	9.7
FDDA-A1-1Flr	8/27/2013	0.63 U	8.4
FDDA-A2-1Flr	8/27/2013	1.5	11
FDDA-A3-1Flr	8/27/2013	**3.4**	20
FDDA-B1-1Flr	8/27/2013	0.72	7.6
FDDA-C1-1Flr	8/27/2013	**3.9**	11
FDDA-D1-1Flr	8/27/2013	**12**	11
FDDA-D1-1AFlr	9/6/2013	1.5	7.3
FDDA-E1-1Flr	8/27/2013	0.13 J	7.8
FDDA-Q9/Q10-1S	8/27/2013	0.13 J	16
FDDA-Q5/Q4-3S	9/6/2013	**5.6**	13
FDDA-Q5/Q4-4S	9/6/2013	0.38 J	11
FDDA-Q3/Q4-1S/Dup 3[d]	9/6/2013	0.99 / 1.3	11 / 9.0
FDDA-Q3/Q4-1S/MS	9/6/2013	11.8 F	57.8
FDDA-Q3/Q4-1S/MSD	9/6/2013	55.2 F	58.3
FDDA-Q3/Q4-2S	9/6/2013	0.74	6.6
FDDA-Q2/Q3-1S	9/6/2013	0.59	7.2
FDDA-F1-1Flr	9/6/2013	**100**	20
FDDA-F1-1AFlr	9/12/2013	0.27 J	15
FDDA-F2-1Flr	9/6/2013	1.4	12
FDDA-F3-1Flr	9/6/2013	0.42 J	9.4
FDDA-G3-1Flr	9/6/2013	0.91	8.8
FDDA-B2-1Flr	9/10/2013	**220**	32
FDDA-B2-1AFlr	10/10/2013	0.55 U	18
FDDA-B3-1Flr/Dup 4[d]	9/10/2013	**3.3** / 1.1	9.3 / 9.4
FDDA-B3-1Flr/MS	9/10/2013	7.01 F	57.6
FDDA-B3-1Flr/MSD	9/10/2013	5.64 F	53.9
FDDA-B4-1Flr	9/10/2013	0.16	8.6

Former Drum Disposal Area (FDDA): (Continued)			
Sample ID/ Location	**Date**	**Result**	
FDDA-C2-1Flr	9/10/2013	0.95	12
FDDA-C3-1Flr	9/10/2013	0.46 J	11
FDDA-D2-1Flr	9/10/2013	0.095 J	13
FDDA-D3-1Flr	9/10/2013	**55**	19
FDDA-D3-1AFlr	9/18/2013	1.3	19
FDDA-D5-1Flr	9/10/2013	**6.3**	9.4
FDDA-D6-1Flr	9/10/2013	**8.6**	10
FDDA-E2-1Flr	9/10/2013	**23**	13
FDDA-E2-1AFlr	9/18/2013	0.14 J	11
FDDA-E3-1Flr	9/10/2013	**110**	33
FDDA-E3-1AFlr	9/18/2013	0.096 J	14
FDDA-E4-1Flr/Dup 5[d]	9/10/2013	**130 / 94**	31 / 26
FDDA-E4-1Flr/MS	9/10/2013	115 F	79.1 F
FDDA-E4-1Flr/MSD	9/10/2013	134	77.8
FDDA-E4-1AFlr/Dup 6[d]	10/10/2013	1.5 / 0.64	17 / 18
FDDA-E4-1AFlr/MS	10/10/2013	6.50	65.9
FDDA-E4-1AFlr/MSD	10/10/2013	7.43	65.2
FDDA-E5-1Flr	9/10/2013	0.083 J	9.4
FDDA-F4-1Flr	9/10/2013	**9.0**	9.6
FDDA-F5-1Flr	9/10/2013	**3.8**	13
FDDA-G4-1Flr	9/10/2013	1.2	6.8
FDDA-Q9/Q10-2S	9/10/2013	0.15 J	11
FDDA-Q10/Q11-1S	9/10/2013	2.5	15
FDDA-Q10/Q11-2S	9/10/2013	0.25 J	16
FDDA-Q10/Q11-3S	9/10/2013	**29**	38
FDDA-Q10/Q11-3AS	9/18/2013	0.69	17
FDDA-Q11/Q12-1S	9/10/2013	1.5	14
FDDA-Q12/Q13-1S	9/10/2013	**4.6**	15
FDDA-Q12/Q13-2S	9/10/2013	0.052 J	14
FDDA-Q13/E1-1S	9/10/2013	**300**	53
FDDA-Q13/E1-1AS	9/18/2013	**5.6**	29
FDDA-E3/E4-1S	9/10/2013	0.77	7.3
FDDA-E4/E1-1S	9/10/2013	**21**	12
FDDA-E4/E1-1AS	9/18/2013	0.60	11
FDDA-E1/Q1-1S	9/10/2013	**2.7**	10
FDDA-E1/Q1-2S	9/10/2013	0.67	7.5
FDDA-E1/Q1-3S	9/10/2013	**9.0**	14
FDDA-E1/Q1-4S	9/10/2013	1.2	8.5
FDDA-Q1/Q2-1S	9/10/2013	**24**	18
FDDA-Q1/Q2-1AS	9/18/2013	**9.6**	26
FDDA-G1/G2-1S	9/10/2013	0.62	13
FDDA-G2/Q2-1S	9/10/2013	**3.4**	14

Test Pit 3:			
Sample ID/ Location	**Date**	**Result**	
TP3-V1/V2-1S	8/27/2013	2.4	16
TP3-V2/V3-1S	8/27/2013	**2.7**	15
TP3-V3/V4-1S	8/27/2013	**3.0**	17 B
TP3-V4/V1-1S	8/27/2013	0.57 U	6.9 B
TP3-1Flr	8/27/2013	**5.8**	23 B
Test Pit 5:			
Sample ID/ Location	**Date**	**Result**	
TP5-X1/X5-1S	8/16/2013	0.24 J	11 B
TP5-X1/X2-1S	8/16/2013	0.65	12 B
TP5-X2/X3-1S	8/16/2013	1.6	24 B
TP5-X3/X4-1S/Dup 2[d]	8/16/2013	**7.4 / 5.4**	11 B / 13 B
TP5-X3/X4-1S/MS	8/16/2013	14.4 F	62.8
TP5-X3/X4-1S/MSD	8/16/2013	20.3 F	61.7
TP5-X4/X5-1S	8/16/2013	0.31 J	12 B
TP5-X4/X5-2S	8/16/2013	1.6	17 B
TP5-1Flr	8/16/2013	0.46 J	14 B
TP5-2Flr	8/16/2013	0.30 J	14 B
Test Pit 7/16:			
Sample ID/ Location	**Date**	**Result**	
TP7/16-W1/W2-1S	9/6/2013	1.8	7.0
TP7/16-W2/W3-1S	9/6/2013	**5.9**	11
TP7/16-W3/W4-1S	9/6/2013	**24**	**77**
TP7/16-W4/W5-1S	9/6/2013	**49**	**150**
TP7/16-W3/W5-1AS	9/18/2013	**76**	**140**
TP7/16-W3/W5-1BS	10/15/2013	**18**	**91**
TP7/16-W3/W5-1CS	10/23/2013	**10**	60 B
TP7/16-W8/W9-1S	9/6/2013	**3.9**	18
TP7/16-W9/W10-1S	9/6/2013	1.7	12
TP7/16-W10/W11-1S	9/6/2013	**20**	47
TP7/16-W10/W11-1AS	9/18/2013	0.37	8.8
TP7/16-W11/W1-1S	9/6/2013	0.055 J	7.5
TP7/16-1Flr	9/6/2013	0.34 J	6.5
TP7/16-2Flr	9/6/2013	**18**	**91**
TP7/16-2AFlr	9/18/2013	**11**	**74**
TP7/16-3Flr	9/6/2013	2.3	9.5
TP7/16-W5/W6-1S	10/15/2013	**42**	**140**
TP7/16-W5/W6-1AS	10/23/2013	1.3	23 B
TP7/16-W5/W6-2S	10/15/2013	0.53 U	14
TP7/16-4Flr	10/15/2013	0.58 U	3.3

Table Notes:
(a) NYCRR, Title 6, Part 375, Subpart 375-6.8(b): Restricted Use Soil Cleanup Objectives - Commercial.
(b) NYCRR, Title 6, Part 375, Subpart 375-6.8(a): Unrestricted Use Soil Cleanup Objectives.
(c) "mg/kg" is milligram per kilogram, or parts per million (ppm).
(d) Samples were collected X inches below ground surface.
(e) "S" in sample ID name indicates a sidewall sample. "Flr" in sample ID name indicates a floor sample.
(f) Laboratory data qualifiers are as follows:
"J" and "UJ" - represent a value that is estimated. Data present a usable estimation of the conditions being measured.
"U" - Indicates the parameter was not detected above the laboratory detection limit.
"B" - Indicates that the compound was found in the laboratory blank.
"F" - MS or MSD exceeds the control limits.
(g) Indicates tha a duplicate sample was collected.
(h) **Bolded** results indicate an exceedance of the corresponding Soil Cleanup Objective.

SCALE
20 0 20 40 FEET

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

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Fax: (412) 241-7500

SUMMARY OF POST-EXCAVATION SAMPLE POINTS MEETING SCO AND UNRESTRICTED SCO EXCEEDANCES

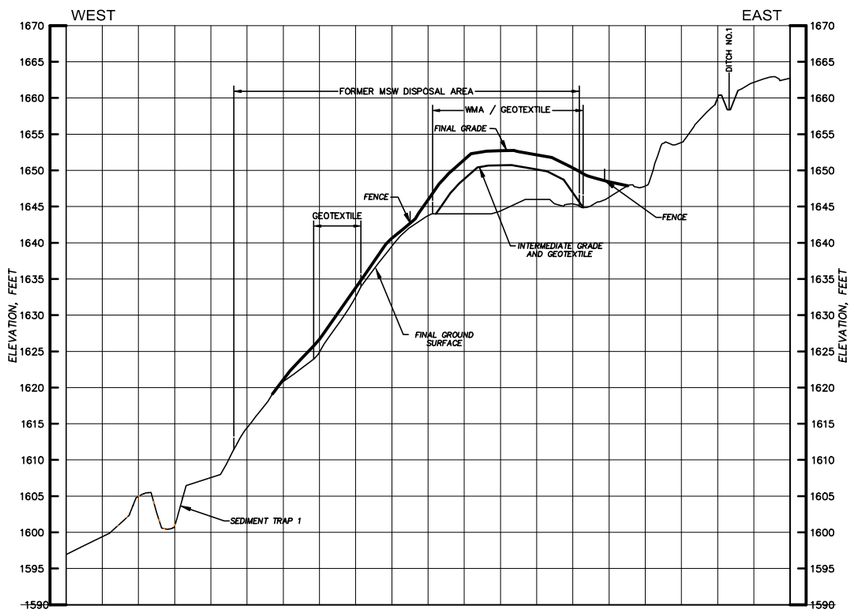
TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

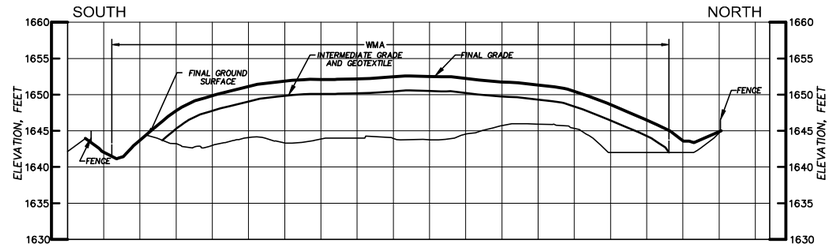
AUTOCAD FILE NUMBER: 01304E60

DRAWN BY: *D.J. Martino*	DATE: *1-22-14*	FIGURE NUMBER 10
CHECKED BY:	DATE:	
APPROVED BY:	DATE:	

AUTOCAD FILE NUMBER 01304E53



SECTION A (12|14)
WEST AND EAST



SECTION B (12|14)
SOUTH AND NORTH

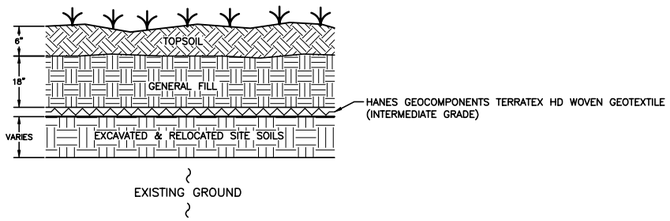
5X VERTICAL EXAGGERATION

HORIZONTAL SCALE
50 0 50 100 FEET

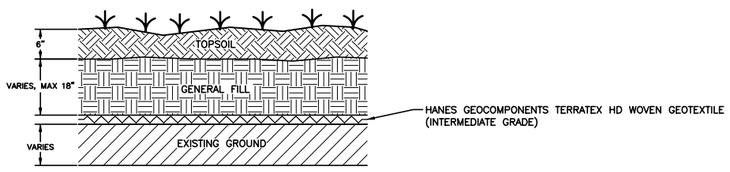
VERTICAL SCALE
10 0 10 20 FEET

GENERAL NOTE:

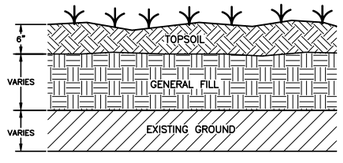
1. SURVEY INFORMATION FOR SECTIONS A AND B WERE PROVIDED BY HUNT ENGINEERS ARCHITECTS & LAND SURVEYORS, PC.



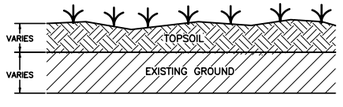
DETAIL 1
WASTE MANAGEMENT AREA
(NTS)



DETAIL 2
FORMER MSW AREA DISPOSAL PLACEMENT OF >6" GENERAL FILL PLUS 6" TOPSOIL
(NTS)



DETAIL 3
FORMER MSW DISPOSAL AREA PLACEMENT OF <6" GENERAL FILL AND 6" TOPSOIL
(NTS)



DETAIL 4
FORMER MSW DISPOSAL AREA PLACEMENT OF NO GENERAL FILL AND <6" TOPSOIL
(NTS)

--

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	FINAL SURVEY	8-14-14	R.P.H

CUMMINGS RITER CONSULTANTS, INC.
A WOODARD & CURRAN COMPANY
300 Penn Center Blvd.
Suite 800
Pittsburgh, PA 15235
(412) 241-4500
Fax: (412) 241-7500

SOIL COVER CROSS-SECTIONS AND DETAILS

TOWNLEY HILL ROAD DUMP SITE
TOWN OF CATLIN, NEW YORK

PREPARED FOR
CBS CORPORATION
PITTSBURGH, PENNSYLVANIA

AUTOCAD FILE NUMBER: 01304E53

DRAWN BY:	D.J. Martino	DATE: 01-27-14	FIGURE NUMBER
CHECKED BY:	R.P. HRENCKO	DATE: 08-14-14	11
APPROVED BY:	A.E. PROCTOR	DATE: 08-14-14	

PLOT SCALE: 1=2

APPENDIX A: SURVEY MAP, METES AND BOUNDS

HORIZONTAL/VERTICAL DATUM NOTE:

VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

HORIZONTAL CONTROL IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).

LEGEND:

- EXISTING IRON ROD
- DEED AND/OR MAP LINE
- N/F — NOW OR FORMERLY
- O/H — OVERHEAD UTILITY LINE
- UTILITY POLE
- WIRE FENCE
- DECIDUOUS TREE WITH WIRE FENCE
- UTILITY POLE ANCHOR
- MONITORING WELL

1.188 ACRES
(WMA ONLY)

WMA LINE TABLE		
LINE #	BEARING	DISTANCE
L1	N21°18'31"E	404.85
L2	N86°30'49"E	63.44
L3	S38°28'08"E	72.51
L4	S13°52'14"W	115.96
L5	S23°19'33"W	115.81
L6	S33°16'30"W	107.68
L7	S44°33'05"W	44.04
L8	S57°37'18"W	39.84
L9	N69°26'49"W	49.73
L10	N30°24'15"W	23.13

0.835 ACRES
(MSW ONLY)

MSW LINE TABLE		
LINE #	BEARING	DISTANCE
L11	N68°41'29"W	103.84
L12	N21°18'31"E	350.11
L13	S68°41'29"E	103.84
L14	S21°18'31"W	350.11

OTHER LANDS OWNED BY:
NORTHWOODS HUNTING INC.
F.1059, P.57D
TAX ID NO. 26.00-1-45.2

PROPERTY LINE LOCATION OF TAX ID NO. 26.00-1-45.1 IS TAKEN FROM SOUTHERN TIER CENTRAL GIS PORTAL.
NOTE: A WRITTEN LEGAL DESCRIPTION SPECIFIC TO THIS 28.16 ACRES PARCEL HAS NOT BEEN FOUND IN THE CHEMUNG COUNTY CLERK'S OFFICE.

- W O O D E D -

OTHER LANDS OWNED BY:
NORTHWOODS HUNTING INC.
F.1059, P.57D
TAX ID NO. 26.00-1-45.2

PROPERTY LINE LOCATION OF TAX ID NO. 26.00-1-45.1 IS TAKEN FROM SOUTHERN TIER CENTRAL GIS PORTAL.
NOTE: A WRITTEN LEGAL DESCRIPTION SPECIFIC TO THIS 28.16 ACRES PARCEL HAS NOT BEEN FOUND IN THE CHEMUNG COUNTY CLERK'S OFFICE.

- W O O D E D -

OTHER LANDS OWNED BY:
NORTHWOODS HUNTING INC.
F.1059, P.57D
TAX ID NO. 26.00-1-45.2

LANDS OWNED BY:
NORTHWOODS HUNTING INC.
F.1059, P.57D
TAX ID NO. 26.00-1-45.1

28.16 ACRES (OVERALL)

NOTE: A WRITTEN LEGAL DESCRIPTION SPECIFIC TO THIS 28.16 ACRES PARCEL HAS NOT BEEN FOUND IN THE CHEMUNG COUNTY CLERK'S OFFICE.

N/F
WILLIAM PETRASEK
L.562, P.557 & L.343, P.428

N/F
MICHAEL OVERHISER AND DIANNA OVERHISER
INST. #200711131

N/F
MICHAEL OVERHISER AND DIANNA OVERHISER
INST. #200711131

11.291 ACRES
(ENVIRONMENTAL EASEMENT ONLY)

S73°33'43"E 112.38'
N8°40'54"E 153.48'
N79°39'07"E 284.52'
S43°29'07"E 633.93'
N2°05'57"W 279.72'
N21°08'09"W 325.53'
S84°44'27"W 303.92'
N24°16'24"W 220.77'
S2°47'35"E 191.91'

S50°19'16"W 57.55'
S50°20'27"W 57.57'
S51°05'19"W 56.23'
S51°54'35"W 55.51'
S51°55'01"W 52.78'
S50°46'18"W 54.33'
S49°50'32"W 51.90'
S47°57'07"W 48.58'

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13 L14

FORMER MSW DISPOSAL AREA
WASTE MANAGEMENT AREA
"RESTRICTED USE AREA"
"RESTRICTED USE AREA"

6" TOPSOIL
18" MAX. GENERAL FILL (VARIES)
WOVEN GEOTXTILE
EXISTING GROUND (VARIES)
AREA: 3705 SQ.FT.

6" TOPSOIL
18" MAX. GENERAL FILL (VARIES)
WOVEN GEOTEXTILE
EXCAVATED AND RELOCATED SOILS (VARIES)
EXISTING GROUND (VARIES)
AREA: 51740 SQ.FT.

6" TOPSOIL
GENERAL FILL (VARIES)
EXISTING GROUND (VARIES)
AREA: 11115 SQ.FT.

< 6" TOPSOIL
EXISTING GROUND (VARIES)
AREA: 12830 SQ.FT.

6' HIGH CHAIN LINK FENCE

GRAVEL ACCESS DRIVE

APPROXIMATE POND LIMITS
LARGE POND
ISLAND

APPROXIMATE POND LIMITS
SMALL POND

WMA & MSW POB
N809163.5688'
E718871.2605'

2,090' TO CENTER LINE INT. WITH BREED HOLLOW RD.

POINT OF BEGINNING
N809022.8971'
E719538.0134'

NOTE: ALL ENGINEERING CONTROL AREAS AND DATA SHOWN ABOVE ARE FROM LOCATIONS MADE DURING EXCAVATION AND CONSTRUCTION.

TOWNLEY HILL ROAD
(ASSUMED 49.5' WIDE)

ASPHALT ROAD
ASSUMED ROAD BOUNDARY
EDGE OF WOODED AREA

O/H

GRID NORTH
N
NY CENTRAL ZONE

ENVIRONMENTAL EASEMENT DESCRIPTION:

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Catlin, County of Chemung and State of New York, bounded and described as follows:

Beginning at a point on the center line of Townley Hill Road, said point being westerly, along said center line, a distance of 2,090 feet from the intersection with the center line of Breed Hollow Road;

Thence the following eight (8) courses and distances along the above mentioned center line of Townley Hill Road:
1) S 50° 19' 16" W, a distance of 57.55 feet to a point;
2) S 50° 20' 27" W, a distance of 57.57 feet to a point;
3) S 51° 05' 19" W, a distance of 56.23 feet to a point;
4) S 51° 54' 35" W, a distance of 55.51 feet to a point;
5) S 51° 55' 01" W, a distance of 52.78 feet to a point;
6) S 50° 46' 18" W, a distance of 54.33 feet to a point;
7) S 49° 50' 32" W, a distance of 51.90 feet to a point;
8) S 47° 57' 07" W, a distance of 48.58 feet to a point;

Thence the following nine (9) courses and distances through lands owned by Northwoods Hunting Inc. (L.1059, P.57D):
1) N 24° 16' 24" W, a distance of 220.77 feet to a point;
2) S 84° 44' 27" W, a distance of 303.92 feet to a point;
3) N 21° 08' 09" W, a distance of 325.53 feet to a point on the westerly boundary of tax parcel 26.00-1-45.1;
4) N 02° 05' 57" W, along said westerly tax parcel boundary, a distance of 279.72 feet to a point;
5) N 79° 39' 07" E, a distance of 284.52 feet to a point;
6) N 08° 40' 54" E, a distance of 153.48 feet to a point;
7) S 73° 33' 43" E, a distance of 112.38 feet to a point;
8) S 43° 29' 07" E, a distance of 633.93 feet to a point;
9) S 02° 47' 35" E, a distance of 191.91 feet to the first above described center line and the point of beginning; containing 11.291 acres, more or less.

DEED REFERENCE:

COUNTY OF CHEMUNG TO NORTHWOODS HUNTING INC. BY QUIT CLAIM DEED RECORDED IN THE CHEMUNG COUNTY CLERK'S OFFICE ON JULY 6, 1999 IN FICHE 1059 OF DEEDS AT PAGE 57D.

Record legal description as recited in the quit claim deed referenced above: "All that Tract, Piece or Parcel of Land, situate in the Town of Catlin, County of Chemung and State of New York, vacant land located at 153 Townley Hill Road - Tax Map #26.00-1-45 - Account #001230000 and being a parcel of one hundred twenty-six (126) acres, be the same more or less, on the Townley Road, bounded on the north by lands now or formerly of Kimble, on the east by lands now or formerly of Voorhees, on the south by lands now or formerly of Seeley, and on the west by lands now or formerly of Stevens.

SUBJECT, however, to rights and easements of record.

BEING the same premises conveyed to James C. Case by Warranty Deed dated August 27, 1969 and recorded September 22, 1969 in the Chemung County Clerk's Office on September 22, 1969 in Book 600 of Deeds at Page 1172.

This property is conveyed subject to a documented hazardous waste site situated on the parcel. This site is specifically named the 'Townley Hill Road Dump Site'.

New York State Department of Environmental Conservation Site Number 808006 said site consists of approximately 10 acres and until fully remediated, no residence or other structure may be built on the 10 acre site which should be fenced to exclude possible human contact from the site.

Subject to all prior restrictions, covenants, and easements as previously recorded."

TITLE SEARCH:

AN ABSTRACT OF TITLE WAS NOT PROVIDED FOR THIS SURVEY. THIS MAP IS SUBJECT TO ANY AND ALL RIGHTS OF WAYS, EASEMENTS OR ANY OTHER ENCUMBRANCES THAT AN UPDATED ABSTRACT OF TITLE MAY REVEAL.

CERTIFICATION:

TO THE PEOPLE OF THE STATE OF NEW YORK THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. THIS IS TO CERTIFY THAT I AM A NEW YORK STATE LICENSED LAND SURVEYOR AND THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION ON AUGUST 20, 2014 USING FIELD NOTES FROM AN INSTRUMENT SURVEY COMPLETED ON MAY 5, 2014.

SIGNED: _____
TIMOTHY A. OLMSTEAD, L.S. 050161

REVISED ON NOVEMBER 20, 2014 TO ADD RECORD LEGAL DESCRIPTION AND MODIFY CERTIFICATION.

STATE OF NEW YORK
TIMOTHY A. OLMSTEAD
050161
LICENSED LAND SURVEYOR

"Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyors seal is a violation of section 7209, sub-division 2, of the New York State Education Law."

"Copies from the original of this survey map not marked with an original of the land surveyor's inked seal or his embossed seal, shall not be considered to be a valid true copy."

SCALE IN FEET
0 37.5 75 150 225
1 INCH = 75 FEET
(2.54 CM = 22.860 M)

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HUNT
ENGINEERS•ARCHITECTS•SURVEYORS
AIRPORT CORPORATE PARK, 100 HUNT CENTER
HORSEHEADS, NEW YORK 14845
607•358•1000
FAX•358•1800

SURVEY MAP PREPARED FOR:

ENVIRONMENTAL EASEMENT DESCRIPTION SITE #808006

KNOWN AS TOWNLEY HILL ROAD DUMP SITE
LOCATED AT 153 TOWNLEY HILL ROAD
SITUATE IN:
TOWN OF CATLIN, COUNTY OF CHEMUNG, STATE OF NEW YORK

SCALE:	DWG.BY:	CHK.BY:	TAX PARCEL NO:	JOB NO:
1" = 75'	T.A.O./J.R.H.	G.L.T.	26.00–1–45.1	5607–001