From:	Frank DeVita
To:	Dudek, Heidi M (DEC) (heidi.dudek@dec.ny.gov); Similo, Ashley
Cc:	Badalamenti, Salvatore; Burke, Gerard (DEC) (gerard.burke@dec.ny.gov); Myralee S. Machol (mmachol@glencovecda.org); Ellis Koch
Subject:	3398: FW: Glen Isle: Geotechnical Borings and Permeability Test Locations/Work Plan
Date:	Monday, April 06, 2015 2:25:11 PM
Attachments:	removed.txt ProposedGeotechBorings_LiTungsten.pdf ProposedTestPits_CC.pdf

Heidi/Ashley –

Thank you again for taking the time last Friday April 3, 2015 to review the Development Team's plans for completion of geotechnical borings/permeability tests at Captain's Cove Site. As discussed, provided below for your review please find the Development Team's proposed approach for completing these activities. Should you have any questions or require anything further please do not hesitate to contact me at (516) 364-9890 Ext. 3064 or on my cell at (516) 852-7228. Thanks again.

- Frank

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From: Ellis Koch [mailto:ellis.koch@gmail.com]
Sent: Monday, April 06, 2015 1:48 PM
To: Frank DeVita
Cc: Myralee Machol; Thomas C Graham; Shashank Nemichand; Derek Ersbak; James P. Rhodes; Tony Evangelista
Subject: Glen Isle: Geotechnical Borings and Permeability Test Locations and Work Plan

Frank, please forward this email to the Agencies summarizing the call we had Friday morning, April 3, 2015.

I want to thank the Agencies for the productive and expeditious call we had this morning concerning the geotechnical borings at Captain's Cove and the Creek Sediment Sampling Plan.

The call participants were Heidi-Marie Dudek and Gerard Burke for the DEC.
Ashley Similo for EPA.
Frank DeVita and myself for the Development Team.

I have summarized the steps agreed to for taking the borings and installing the permeability test pits. Please comment as needed if I have misstated something or omitted any of the steps.

Geotechnical borings:
After the call it was decided that borings will only be installed at locations already characterized. These will follow the protocols previously approved during the January 2014 work at OU-1. The borings will be advanced using mud rotary techniques without collecting any samples. All cuttings and mud will be contained and drummed for subsequent disposal.

One other regulated location, Parcel Lower C, was added to the geotechnical boring list, as shown on the attached Figure 1. No sampling will b done at this location as it has already been sampled.

Figure 1 shows another geotechnical boring proposed for the unregulated Sewage Pumping Station. This boring will be sampled using split spoon techniques to 2-ft below the watertable. The cores will be described, scanned with a PID, and observed for gross contamination. Samples will be collected at three depths, or where visual and/or PID readings indicate potential contamination is present. All cores will be analyzed for the full suite of constituents in Methods 8260, 8270, TAL metals, pesticides and PCBs.

Permeability Test Pits:
The locations of the permeability test pits are shown on the attached figure. The test pits will all be located in the Regulated parts of Captain's Cove and will follow the test pit protocol previously approved and submitted that is reproduced ahead.

The only modifications to that procedure are replacing the XRF meter with continuous soil sampling at 2-ft intervals; and not performing the radiological screening as those areas have already been remediated and cleared. The soil samples will be analyzed for total arsenic and lead.

Please contact me with any questions or comments. Otherwise, we will proceed to schedule the field work and will inform you of the schedule when it is firmed up with the subcontractors.

The test pit protocol that is currently approved is from the Pre-Construction Confirmatory / Insurance Data Gap Subsurface Investigation Work Plan, Section 4.4. It says:

"1.1 Test Pits

Exploratory test pits will be performed in areas of identified GPR anomalies. In addition, several test pits will be performed on the Gladsky ERP site and Li Tungsten's Parcel A and B for infiltration tests required for construction purposes. Test pits will follow the soil excavation protocols established in the Glen Cove Ferry Terminal Site Management Plan (**Appendix B**). General procedures are detailed below.

1.1.1 Test Pit Protocol

At each location a backhoe or equivalent will be utilized to perform the test pit. Prior to the excavation, 10-mil polyethylene sheeting, sufficiently large to hold the anticipated excavated soil will be laid on the ground in the area where the excavated soil will be placed. Each test pit will be performed in two foot lifts and placed on the polyethylene sheeting in individual piles.

During excavation, each two foot lift will be characterized and screened for the following:

- Visual signs of staining or discoloration
  - o Soils with staining or discoloration will be segregated
- Volatile organic vapors utilizing a photo-ionization detector (PID)
  - o Soils with reading above established background levels will be segregated
- OMMITED AS EXPLAINED ABOVE *(Metals utilizing a handheld XRF monitor*
  - *o Arsenic levels above 24 mg/kg will be segregated*
  - *o Lead levels above 400 mg/kg will be segregated*
- *Radiation screening utilizing a radiation rate meter/scale (In accordance with PWGC's Radiation Monitoring Plan (**Appendix C**))*
  - *o Counts above two times established background will be segregated)*

A test pit log will be developed for each location. The log will include classification of soil, screening results, and photographs of each two foot lift.

In addition, infiltration tests will be performed at several of the test pit locations. Water utilized for infiltration tests will be from a potable water supply. The amount of water used for each test will be recorded.

1.1.2 Backfill and Restoration

Excavated materials that fail the screening criteria shall be transported to a designated staging area for subsequent testing and analysis for off-site disposal or on-site reuse. Materials are to be staged on top of and covered with polyethylene sheeting. Ten (10) mil thick sheeting shall be used to cover the top of stockpiles. Forty (40) mil thick sheeting shall be placed beneath potentially or known contaminated material to prevent contact with undisturbed or clean soil. Stockpiles must be constructed to isolate the contaminated material from the environment.

Diversion measures must be employed to prevent storm water run-on and run-off to the stockpiles. Individual stockpiles of potentially contaminated soil shall not exceed a volume of 500 cubic yards.

Backfilling of test pits will be completed in accordance to the Captain's Cove Site Management Plan.

Off-Site Fill Material

1. Off-site fill must be uncontaminated pursuant to the remediation standards applicable to the Site. Off-site fill material to be used within the top two feet of final grade shall meet the requirements of NYSDEC Soil Cleanup Objectives (SCOs) for restricted residential land uses as defined in 6NYCRR Subpart 375.
2. Documentation of the quality of the off-site fill must be provided by a certification stating that it is clean material from a commercial or noncommercial source.
3. If documentation of the quality of the fill material cannot be provided, a backfill evaluation proposal, which identifies material characterization protocols, shall be submitted to and approved by the NYSDEC prior to the use of any backfill material.

On-Site Fill Material

1. On-site fill material may be reused for filling activities greater than two feet below final grade.
2. On-site fill material will be covered with a demarcation layer and two feet of clean soil meeting the requirements for off-site fill material described above."

Thanks.

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