Niagara Falls County Site Assessment- NFB & HTC Sites

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April 12, 2017

Weston Staffing for Niagara Falls County Site Assessments
May 7-May 20, 2017

- This assessment should be covered under existing assessment TDD Task Orders for both NFB & HTC Sites. **Do we need to amend scope of work on theses TDDs?**
- We will need two Weston Technicians for this work. Responsibilities will include:
  - Lead Weston
  - Technician who can use a mini excavator
  - Soil Sampling (mini excavator to perform sample pits is preferred)
  - Photo documentation
  - HpGe technician
  - Requesting utility mark outs
  - Data collection
  - Gamma surveying
  - Possibly utilizing RADECO and Air Particulate instrumentation
- IDIQ
  - I have been in contact with Tim Benton, Shawna Hoppe & Mark Pane in regard to performing assessment work in the Spring. IDIQ personnel may need to be used and I was ensured that this would be performed without much difficulty. I am requesting that Chad Conway be one of the technicians on the team due to his expertise with the HpGe. **<u>Are there any issues with this?</u>**

Lab Bid for Niagara Falls County Site Assessments
May 7-May 20, 2017

- We need to put out a new lab bid to replace PACE Labs for these two sampling event as well as for future lab analytical requests
- **Lab Selection**
  - We are requested that the lab be certified in both alpha and gamma spec analysis if possible
  - The lab should be capable of pulverizing and homogenizing slag/rock samples
- **Radionuclide List**
  - Bi-212, Cs-137, K-40, Pb-212, Pa-234m, Ra-226, Ra-228, Th-228, Th-230, Th-232, Th-234, Tl-208, U-233/234, U-235/236, U-238
- Lyndsey, please let us know if there are any missing or any other information needs to be included with this list request
- **Chain of Custodies**
  - The written sample prep and procedures given to the lab must be referenced in the Chain of Custody
  - The matrix should be described as soil/rock/slag.

Lab Bid for Niagara Falls County Site Assessments
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- **Sample Preparation Procedures**
  - There should only be one-16 ounce Jar of sample sent to lab from NFB & HTC Sites (**What jars are we using?).**
  - We are requesting that they run **our jar** for qualitative gamma spec initially prior to any sample preparation.
  - The entire contents of that container will then be pulverized and homogenized.
    - **No rocks should be removed.** We do not want the material going through a sieve. Removing the rock/slag will cause the sample to not be representative of what is actually at the site. If the material is pulverized and homogenized, that should be sufficient.
  - From that jar, appropriate sample amount be transfer to another container for 21 day ingrowth and then gamma spec.
  - Then the alpha spec aliquot will be taken from this pulverized jar content for analysis.

Radon Sampling/HpGe Niagara Falls County Site Assessments May 7-May 20, 2017

- Radon Subcontractor
  - We will need to sub out the radon specialist again to place canisters and send to laboratory for two homes on Roberts Avenue (HTC only)
  - We can base subcontract and amount of canisters on our last radon specialist bid at HTC Area 5 residence.
- We want to continue to upload data to the OneDrive/SharePoint. All Weston personnel and EPA Site personnel should have access to NFB and HTC OneDrive Folders. Please let me know if anyone does not. We want to have the most recent versions of documents there for easy access and organizational purposes.
- We will need to request utility mark outs in the areas where we are sampling
- We will be mostly working at the NFB Site the first week to get HpGe and Ludlum 2241 up and running while we obtain soil samples at NFB Site
- Germanium (HpGe)
  - Frank will be ordering a new liquid nitrogen tank to be delivered on 05/08/2017
  - I am suggesting we use the existing standard and dewar for this assessment unless Dave is able to mobilize.
  - Hopefully Dave will be available the morning of 05/08/2017 to work with Chad to start up instrument
  - Unlike the lab samples, we will be running all samples collected on the HpGe. The samples designated to be shipped to the lab will be analyzed on HpGe first. Other samples can wait for analysis.

NFB Site-Niagara Falls County Site Assessments
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- We will need to finalize a sampling plan with Lyndsey
  - Areas 1, 2, 3, 4, & 7
  - Lyndsey has created a draft sampling point map
    - There are 17 sample points as of now.
    - We need to decide how many samples are to be taken at each depth
  - Weston will need to rent a mini-excavator and one of the Weston personnel must be trained to operate.
    - We will be digging sample pits and photo documentation/measurements of each layer at each sample point is crucial
    - Spoils from the excavation will not be put back into the holes. This material will be put in super sacks, labeled and staged.
    - Backfill from the low concentration pile will be used to backfill sampling pits.

NFB Site Assessment Sample Point Locations

NFB Site-Niagara Falls County Site Assessments
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- We will have to revise existing figures/maps
  - Ben is working on updating the Area Map
    - We will use the newer google image

NFB Site-Niagara Falls County Site Assessments
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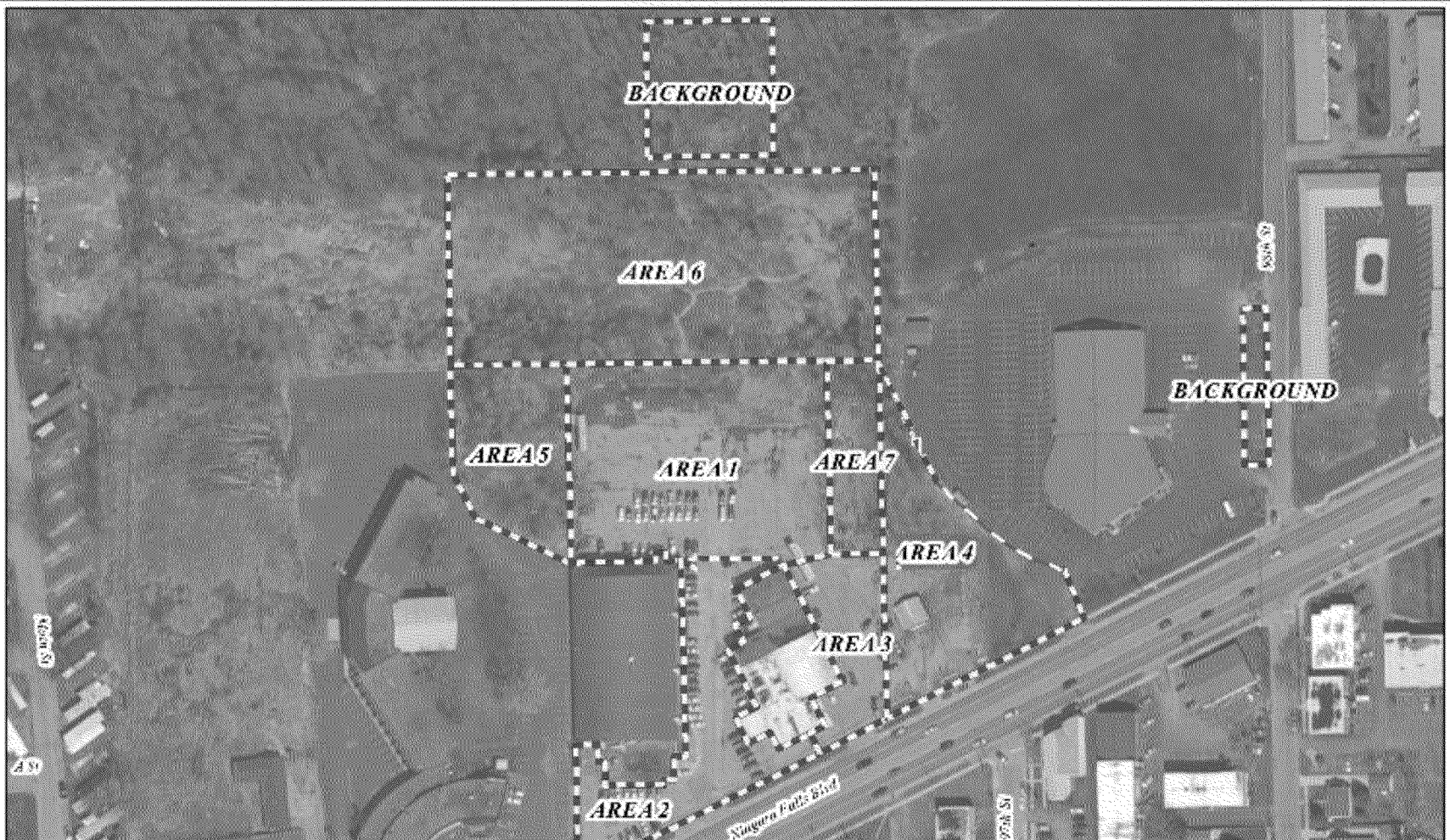
- We will have to revise existing figures/maps
  - Ben is working on updating the Area Map
    - Revision of some of the boundary lines as we discussed (Area 1 and Area 4)
    - Within the designated area boundaries, we need sampling areas of 2,000 square meters or less. So a larger Area may have several sub areas



NFB Site-Niagara Falls County Site Assessments
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- We will have to revise existing figures/maps
  - Ben is working on updating the gamma survey maps
    - Decreased color circle sizes to distinguish difference between gamma ranges

NFB Site-Niagara Falls County Site Assessments
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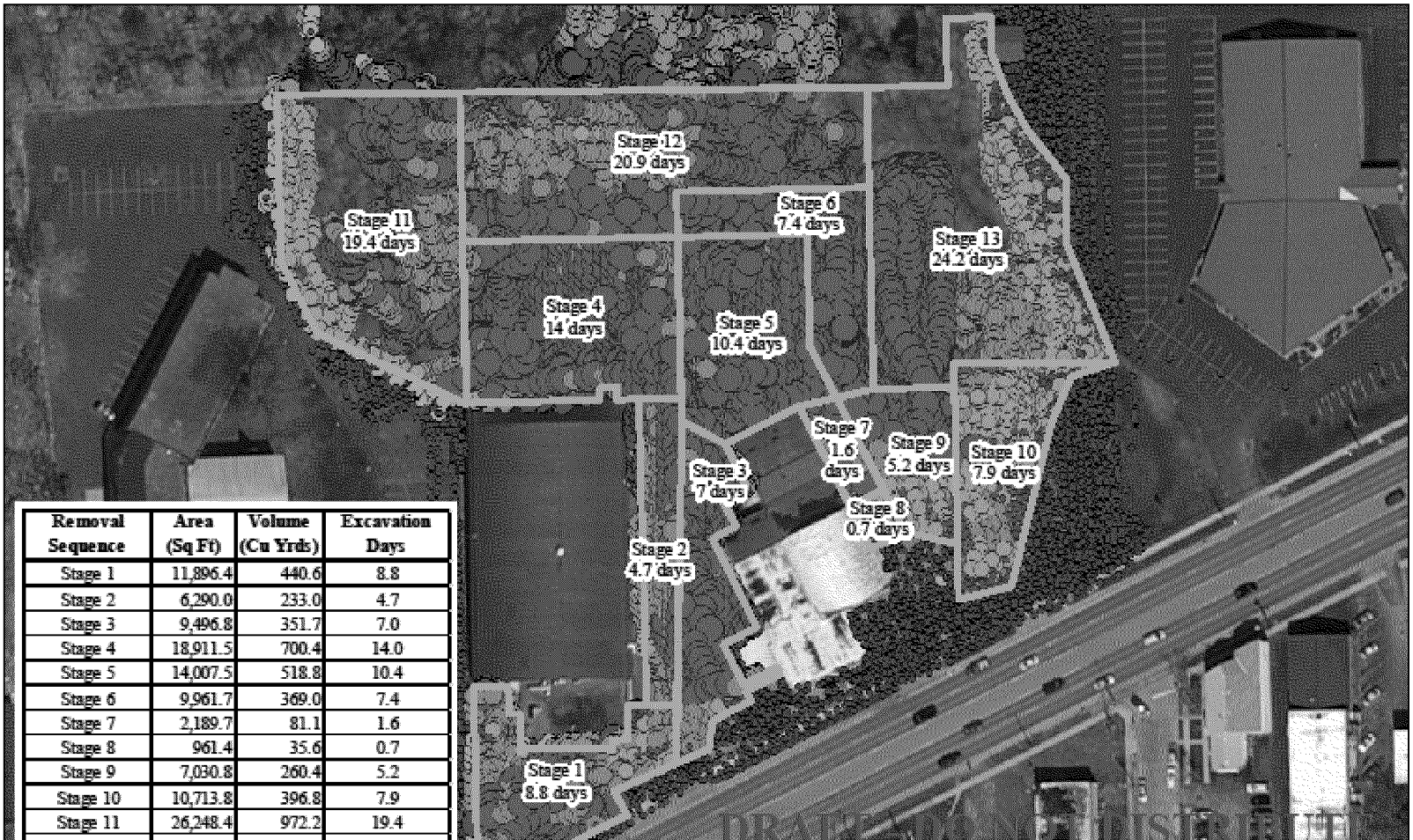
- We will have to revise existing figures/maps
  - Ben is working on updating the Area Map
    - These maps will be used to finalize our sampling plan, estimate our excavation costs, and organize our excavation area order



Removal Sequence	Area (Sq Ft)	Volume (Cu Yrds)	Excavation Days
Stage 1	11,896.4	440.6	8.8
Stage 2	6,290.0	233.0	4.7
Stage 3	9,496.8	351.7	7.0
Stage 4	18,911.5	700.4	14.0
Stage 5	14,007.5	518.8	10.4
Stage 6	9,961.7	369.0	7.4
Stage 7	2,189.7	81.1	1.6
Stage 8	961.4	35.6	0.7
Stage 9	7,030.8	260.4	5.2
Stage 10	10,713.8	396.8	7.9
Stage 11	26,248.4	972.2	19.4

HTC Site-Niagara Falls County Site Assessments
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- We will need to work with Lyndsey to develop soil sampling plans
  - Areas 1, 2, 4, 6, 7, & 9
  - Area 9 is portion of the roadway that has been added from our gamma survey
- Gamma Survey
  - We need to complete the gamma survey in Area 1
    - Ludlum 2241 3*3 NaI probe with GPS (Requested Unit from ERT/Dave)
    - The QC will need to be performed utilizing a background area at HTC
    - Lyndsey will have to go into more details on this for Weston
- We need to perform indoor gamma survey in the Roberts Ave residential homes
  - Since the driveways of Areas 6 & 7 exhibited elevated levels of gamma, these homes are now part of the site as is Area 5
  - We performed gamma survey in Area 5 home and therefore will perform the same in the Areas 6 & 7.
- Radon Sampling
  - We will need to perform radon sampling within Roberts Ave residential homes (Areas 6 & 7)
  - We should base the number of samples and other procedures on the subcontract for Area 5 indoor sampling event

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Legend

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OVERVIEW MAP