

Danielle Miles
Assistant Engineer, Division of Environmental Remediation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, NY 14414

Date: June 14, 2022
Our Ref: 30112357
Subject: Former Philips Display Components Facility (Site No. 850003)
Waste Pre-Characterization Activities Scope

Arcadis of New York, Inc.
855 Route 146
Suite 210
Clifton Park
New York 12065
Phone: 518 250 7300
Fax: 518 371 2757
www.arcadis.com

Dear Ms. Miles,

Arcadis of New York, Inc. (Arcadis) has prepared this letter on behalf of GTE Operations Support Incorporated (GTEOSI) for submission to the New York State Department of Environmental Conservation (NYSDEC) regarding design-phase activities that GTEOSI plans to implement this summer. Arcadis, on behalf of GTEOSI, will perform waste pre-characterization services to obtain information to support the design and implementation of remedial activities related to the historical outfalls within Operable Unit No. 2 (OU2) at the Former Philips Display Components Facility at 50 Johnston Street, Seneca Falls, New York (Site).

Characterizing waste in advance of remedial activities will allow for a more accurate understanding of future remediation costs (e.g., determining if a waste stream will be characterized as hazardous or non-hazardous), and will provide a potential reduction in remediation costs (e.g., allowing for direct-loading of excavated soil instead of stockpiling and double-handling). Waste pre-characterization activities include collection and laboratory analysis of soil samples, and coordination with disposal facilities regarding facility requirements and disposal of soils in accordance with Resource Conservation and Recovery Act (RCRA). In addition, sampling will be conducted in select excavation areas to supplement the delineation sampling previously performed during the Pre-Design Investigation (PDI); those sampling results may result in modification of the proposed excavation extents in the forthcoming 95% Remedial Design.

The findings from the waste pre-characterization activities and supplemental sampling will be incorporated into the remedial design and future project cost estimates.

Scope of Work

Waste pre-characterization sampling will be conducted for soils to be excavated as part of remedial actions for OU2 at the Site, which includes the historical outfall ditches. Remedial actions for OU2 include excavation and off-site disposal of soils in the drainage ditches downgradient of Historical Outfalls (HO) 2 through HO7 and within the 100-year floodplain in the drainage ditches downgradient of HO4 and HO5. PDI sampling results showed the following:

- Soils from historical outfall ditches HO2, HO4, and HO5, and soils from within the HO4 and HO5 ditches in the floodplain, will be managed as characteristic hazardous waste (Waste Code D006 – cadmium).

Waste pre-characterization sampling in these ditches will be conducted to confirm no underlying hazardous constituents (UHCs) are present.

- Soils from historical outfall ditches HO6 and HO7 will be characterized as either non-hazardous or hazardous based the results of waste pre-characterization sampling to be conducted. Samples will be analyzed following RCRA and disposal facility requirements, and analytical results will be compared to RCRA characteristic hazardous waste criteria.

Pre-characterization of soils from historical outfall HO3 is not necessary because, as described in the PDI Report, capping of historical outfall ditch HO3 is proposed instead of excavation due to access limitations. Some soil from historical outfall ditch HO3 may require off-site disposal (e.g., footing excavations); however, the quantity of soil that would be generated may reasonably be expected to be stockpiled on-site for ex-situ waste characterization or combined with another HO soil waste stream (with approval from the disposal facility).

This scope of work does not include pre-characterization of waste soils to be generated from OU1 (shallow excavation in the vicinity of Building 2 and excavation/drilling associated with in-situ thermal remediation). The anticipated volume of waste soil to be generated during OU1 remedial activities is relatively small compared to the volume of waste soil from OU2; therefore, waste soil from OU1 will be characterized during the implementation phase.

In addition to waste pre-characterization, soil samples will be collected from portions of historical outfalls HO6 and HO7 to verifying and possibly update the planned excavation extents.

Waste pre-characterization and supplemental sampling activities to be performed for OU2 are described below.

Soil Sampling

Soil sampling will be conducted using manual methods (e.g., shovel, slide hammer direct-push tooling, or hand auger) consistent with previous PDI soil sampling of OU2 soils. Where discussed below, a discrete soil sample refers to a soil sample collected at one location that is vertically composited over the entirety of the proposed excavation depth at that location (i.e., from the ground surface to the bottom of the proposed excavation). For each discrete soil sample location, the lower vertical limit of the sample will correspond to the excavation depths indicated in the PDI Report. If water is encountered at a discrete soil sample location prior to the target sample depth being achieved, the sample collection will continue to the target depth if technically feasible.

HO2, HO4, HO5, and Floodplain

Soils generated from anticipated remedial excavations for HO2, HO4, HO5, and the 100-year floodplain will be managed as characteristic hazardous waste. Waste pre-characterization soil sampling conducted as part of this scope of work will be used to obtain approval from a disposal facility to receive the waste. Sampling will include:

- One discrete soil sample from each historical outfall ditch at HO2, HO4, and HO5.
- Two discrete soil samples from excavation areas within the 100-year floodplain.

Discrete soil sample locations will be biased toward high concentration locations based on PDI soil sampling results. Each discrete soil sample will be analyzed for the following UHCs to determine the level of treatment required by the disposal facility:

- Toxicity Characteristic Leachate Procedure (TCLP) Metals by United States Environmental Protection Agency (USEPA) Methods 1311, 6010, and 7470.

- Total VOCs by USEPA Method 8260.
- Total semi-volatile organic compounds (SVOCs) by USEPA Method 8270.

In accordance with 40 CFR Part 268, analytical results will be compared to 10-times the universal treatment standards (UTSs) to determine if the soils can be managed under the alternative treatment standard for soil and sent directly to a Subtitle C landfill without treatment. If soils cannot be managed under the alternative treatment standards, the analyses will be used by the disposal facility to assess the associated treatment requirements.

A work permit will be obtained by Arcadis from the New York State Canal Corporation for work on canal corporation lands (which include the floodplain areas).

HO6 and HO7

Soils generated from anticipated remedial excavations for historical outfalls HO6 and HO7 will be managed as either hazardous or non-hazardous waste depending on the results of waste pre-characterization sampling. For the purposes of waste pre-characterization sampling, the collective area to be excavated at historical outfalls HO6 and HO7 is divided into seven excavation zones (Attachment 1). Ditch segments from the PDI phase have been either combined or divided to create excavation zones with similar volumes (400 cubic yards or less) and cadmium concentrations. Discrete soil samples will be collected within each excavation zone at multiple locations that are relatively evenly distributed laterally and that cover the range of ground surface elevations within each excavation zone.

A licensed land surveyor will mark the proposed discrete soil sample locations, and any locations that are relocated will be resurveyed after sampling is completed.

Subsamples from each discrete soil sample will be submitted both individually and as field-composited samples (one composite sample per excavation zone) to the laboratory. Each composite sample will be analyzed for the following waste pre-characterization analyses:

- TCLP Metals by USEPA Methods 1311, 6010, and 7470.
- TCLP VOCs by USEPA Methods 1311 and 8260.
- TCLP SVOCs by USEPA Methods 1311 and 8270.
- Polychlorinated biphenyls (PCBs) by USEPA Method 8280.

Analyses for pesticides and herbicides are not necessary based on generator knowledge.

Analytical results for each composite sample will be compared to RCRA characteristic hazardous waste criteria. If the analytical results indicate the soil is not a RCRA characteristic hazardous waste, then the soil (from that excavation zone) will be managed as non-hazardous waste. If the analytical results indicate the soil is a RCRA characteristic hazardous waste, then one of the discrete soil samples from that zone will be analyzed for the following UHCs to assess disposal facility treatment requirements:

- TCLP Metals by USEPA Methods 1311, 6010, and 7470.
- Total VOCs by USEPA Method 8260.
- Total SVOCs by USEPA Method 8270.

Four of the seven excavation zones (zones 2, 3, 5, and 6 from Attachment 1) include relatively large soil excavation volumes based on a single sample location during the PDI. As such, the discrete soil samples from excavation zones 2, 3, 5, and 6 will be analyzed for total cadmium by USEPA Method 6010 to further delineate the excavation area for historic outfalls HO6 and HO7. Total cadmium concentrations will be compared to the

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NYSDEC commercial soil cleanup objective (SCO). The total cadmium results will be used to supplement the existing soil sample results collected during the PDI phase, and the proposed excavation extents will be updated, if necessary, in the 95% Remedial Design.

Coordination and Reporting

Arcadis proposes to dispose of non-hazardous waste at the Waste Management, Inc. (WMI) High Acres Landfill in Fairport, New York. For hazardous waste, Arcadis proposes treatment of soils at the U.S. Ecology Michigan Disposal, Inc. (MDI) facility in Belleville, Michigan, with final disposal at the U.S. Ecology Wayne Disposal Inc. (WDI) facility in Wayne, Michigan. Prior to sampling, Arcadis will submit a written description of the waste pre-characterization sampling plan to WMI and MDI for review and approval.

The results of waste pre-characterization sampling, and any additional pre-delineation sampling, will be provided to NYSDEC in the 95% Remedial Design report

Please let us know if NYSDEC has any comments or questions regarding the above scope of work. Field work is tentatively planned for late July 2022.

Sincerely,
Arcadis of New York, Inc.



Mark Flusche, P.G., P.Hg.
Principal Hydrogeologist

Email: mark.flusche@arcadis.com
Direct Line: 518-250-7322
Mobile: 518-859-3579

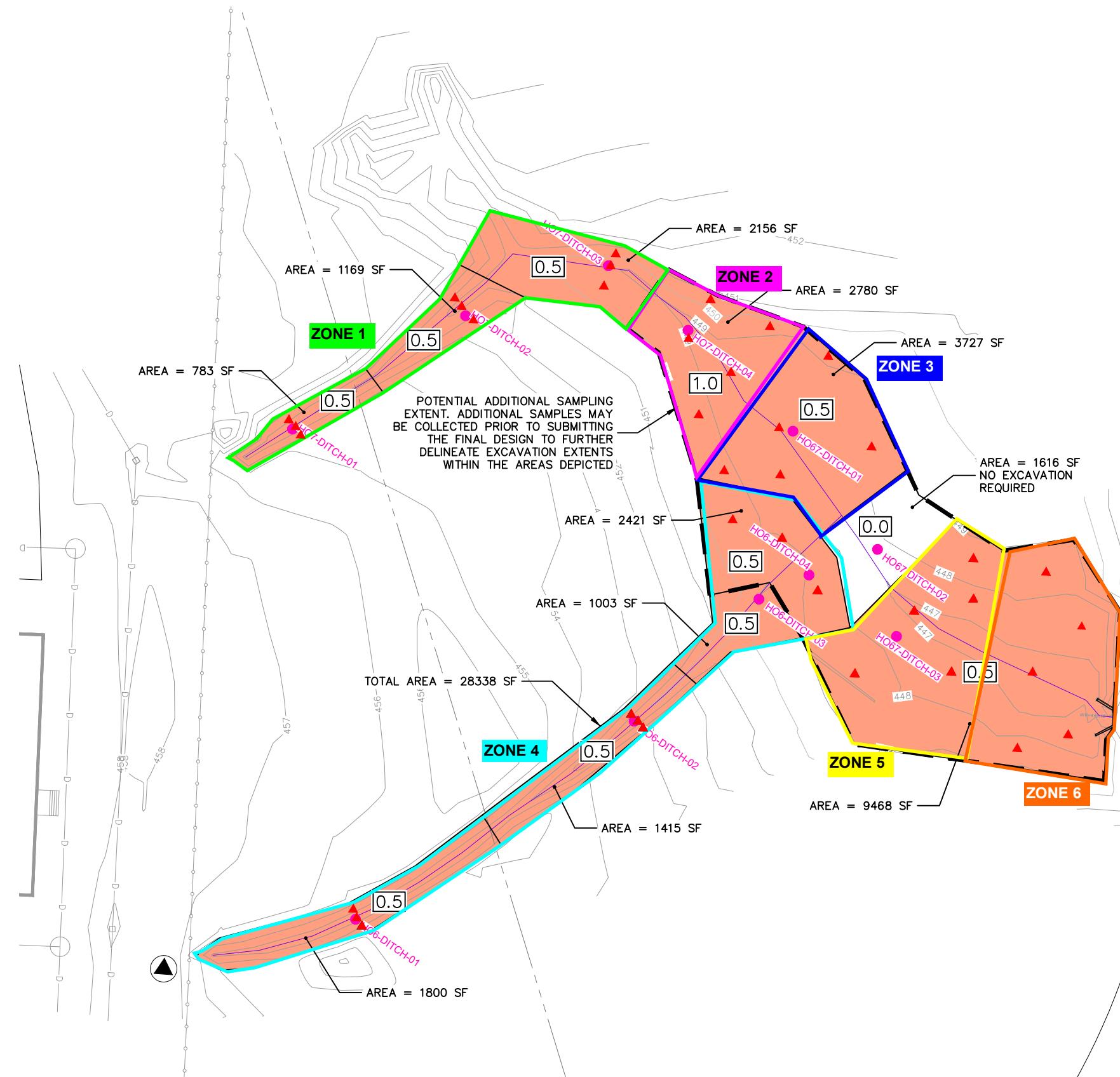
CC. Matthew Walsh (GTE Operations Support Incorporated)
Frank Stopper (GTE Operations Support Incorporated)

Enclosures:
Attachment 1

Attachment 1

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PILOTSTY ETABRI E: PI TEU III CTR B PILOTED: 3/8/2022 4:13 PM BY: STEINBERGER, GEORGE



LEGEND:

HISTORICAL OUTFALL DITCH SAMPLE
LOCATION

APPROXIMATE PROPOSED EXCAVATION
EXTENT AND DEPTH IN FEET BELOW
GROUND SURFACE A AT CENTERLINE OF
DITCH

OVERHEAD UTILITIES

MONITORING WELL

UTILITY POLE

CATCH BASIN

MANHOLE

CHAIN-LINK FENCE

STORM DRAIN

CULVERT

ELEVATION CONTOUR
CENTERLINE OF HISTORICAL OUTFALL DITCH
PROPOSED WASTE PRE-CHARACTERIZATION
SOIL SAMPLE LOCATION

1. ALL EXTENTS ARE APPROXIMATE. FINAL PROPOSED EXTENTS TO BE DETERMINED IN DESIGN DOCUMENTS BASED ON A DETAILED ASSESSMENT OF TOPOGRAPHY AND ANALYTICAL DATA

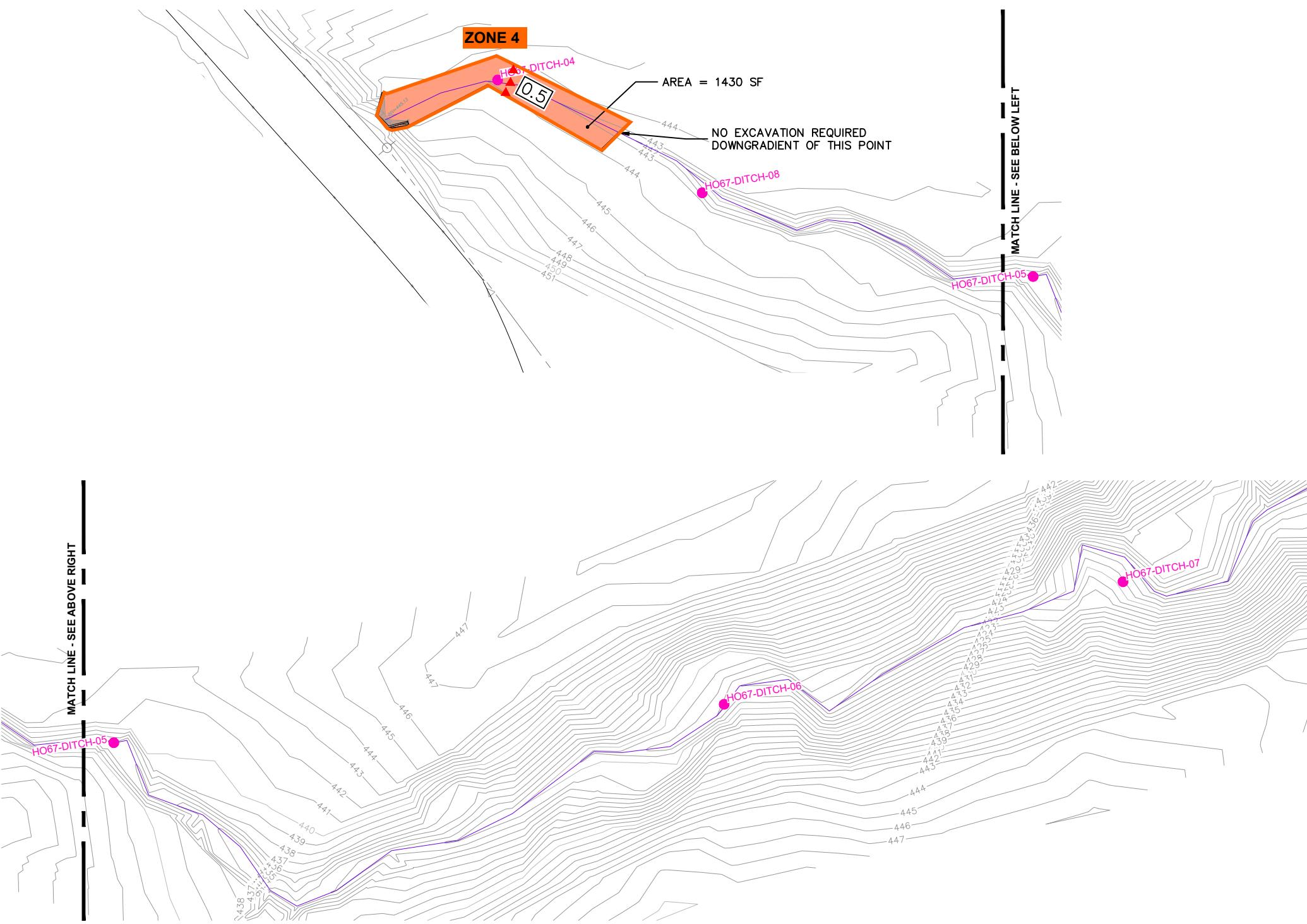
2. THE MAXIMUM LATERAL LIMITS OF EXCAVATION (IF INDICATED) ARE DETERMINED BASED ON THE EXTENT OF THE EXISTING HISTORICAL OUTFALL DITCHES IN ACCORDANCE WITH THE JULY 2019 CORRECTIVE ACTION WORK PLAN APPROVED BY THE NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH ON APRIL 13, 2020 (I.E., ALONG THE LENGTH OF THE DITCH AND UP THE SIDEWALL A MAXIMUM OF TWO FFT ABOVE THE CENTERLINE OF THE DITCH).

SF = SQUARE FOOT

GTE OPERATIONS SUPPORT INCORPORATED
FORMER PHILIPS DISPLAY COMPONENTS FACILITY
SENECA FALLS, NEW YORK

HISTORICAL OUTFALLS 6 AND 7 SAMPLING LOCATIONS AND PRELIMINARY PROPOSED EXCAVATION EXTENT

Attachment 1



**GTE OPERATIONS SUPPORT INCORPORATED
FORMER PHILIPS DISPLAY COMPONENTS FACILITY
SENECA FALLS, NEW YORK**

HISTORICAL OUTFALL 6/7 SAMPLING LOCATIONS AND PRELIMINARY PROPOSED EXCAVATION EXTENT