MINOR

OPERATION AND MAINTENANCE

20-004

Activity Plan

254-5H Underground Storage Tank Sumps 3B & 3A Replacement

WORK ORDER NO: 01764394

SITE EVALUATION AREA

RCRA/CERCLA

Prepared by: _____ 2/10/2020
Environmental Compliance Authority — Date

Approved by: _____ 2/10/2020
Generator Certification Official — Date

Approved by: _____ 2/10/2020
Radiological Control Supervisor — Date

Approved by: _____ 2/10/20
Construction Discipline Engineer — Date

1.0 Introduction

The purpose of this Operation and Maintenance (O&M) Plan is for excavation of soil around Sump 3B and 3A of the 254-5H Underground Storage Tanks. Both sumps will be replaced on the work order. The excavation area will be approximately 4 feet deep around the perimeter of the sumps to allow removal and replacement of the plastic sumps. This is a minor intrusive activity because excavating around the existing sumps will disturb less than 10% of the surface area of the RCRA/CERCLA Unit.

The O&M Plan documents the guidance by which the excavation is to be performed within this RCRA/CERCLA Unit/SE Area. This plan will document whether hazards are present that would impact human health and the environment. This O&M Plan is defined as "minor intrusive activity" based on the soil removal meeting the definition of both "minor" and "intrusive" as defined in the SRS Operation and Maintenance Plan. This activity can be done per the WSRC-RP-96-45 "Plan for Performing Maintenance in Federal Facility Agreement Areas."

2.0 Area Description and Conditions

RCRA/CERCLA Unit/ SE Area	Assessment Status	Assessment Phase
591	H Area Process Sewer Lines as Abandoned, NBN	Pending
549	Eastern Groundwater Operable Unit	Pending

3.0 O&M Activity

A. O&M Activity Description

This project activity will require excavation of soil. The removal process will occur around the 254-5H UST Sumps. There will be approximately 400 cubic feet of soil removed during the excavation.

NOT ALL SOILS WILL BE RETURNED TO THE ORIGINAL LOCATION OF SOIL DISTURBANCE. THE AREA AROUND THE SUMPS WILL BE FILLED WITH GRAVEL AND EXCAVATED SOIL. DISPOSAL OF ANY REMAINING SOIL WILL BE PER THE ENVIRONMENTAL COMPLIANCE AUTHORITY (ECA) AND GENERATOR CERTIFICATION OFFCIAL (GCO).

B. O & M Activity Sampling and Monitoring for Health and Safety

Soil sampling will be conducted in accordance with 5Q1.2 Procedure 485 and Construction's Soil Sampling Plan (WO#01764394). Safety glasses and work gloves will be worn. Normal RCO coverage will be provided as determined by RCO. Radiological results can be found at Survey No. CANY-I-20200127-9.

C. Health and Safety Plan (HASP)

No Health and Safety Plan will be required due to the absence of chemical or radiological hazards to personnel. Previous soil disturbance work in this specific area have shown no chemical or radiological hazards.

D. Characterization and Sampling Plan for the Affected Area

Previous sampling campaigns (LEU Loading Project and Utility Pole Replacement Project, 254-5H Roadway Repair) have not shown indications of chromium, lead, or beta-gamma contamination.

E. Contaminated Materials Management and/or Disposal

Soil excavation is being performed in a non-radiological area. However, any soil removed will be managed based sampling and analysis. Clean soil and gravel will be returned to the excavation site. Contaminated soil will be dispositioned in accordance with the SRS 1S Manual per GCO instructions. A composite soil sample will be taken from the excavation to determine any there is any radiological contamination. Previous sample results have demonstrated the absence of radiological contamination.

F. Environmental Plans and Permit Modification Requests

Other environmental plans are not required for this activity. No permit modifications will be required because of this activity. Standard erosion control measures and storm water management (i.e. hay bales) will be used if required to avoid a sediment release to the streams.

4.0 Contingency Plan

If conditions change at any time during implementation of these activities such the any activity is no longer considered "minor" or any other unanticipated event occurs, the Environmental Compliance Authority shall be notified and shall:

- Immediately notify the SRNS-OSC. The SRNS-OSC will notify the DOE-OSC.
- Contain and stabilize the area, investigate as necessary to determine the necessary change in the activity plan, secure the area and stop work.
- Update the SRNS-OSC as to the findings and the requested path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

5.0 Documentation and Reporting

The Construction Discipline Engineer will maintain the documentation listed below with the work package until task completion. Upon completion, it will be transmitted to the SRNS-OSC. Documentation includes the following information:

- The signed O&M Plan,
- Any sampling and characterization data collected,
- Quantity of contaminated materials generated, and
- Storage and disposal location of contaminated materials.

Typical Soil Profile

Parameter/ Limit	Matrix	Result (Total mg/kg)	Result (TCLP mg/L)	Regulatory Limit (TCLP)
Ion Chromatography SW-846-9056				
Nitrate-N	Soil	2.0	NR	NA
Mercury Analysis 7471 Cold Vapor				
Mercury	Soil	0.584	0.03	0.20
Metal Analysis-ICP 6010 ICP SCAN				
Aluminum	Soil	19000	NR	NA
Antimony	Soil	0.42	0.02	
Arsenic	Soil	3.51	0.17	5.0
Barium	Soil	20.30	1.02	100
Beryllium	Soil	0.28	NR	
Boron	Soil	1.39	NR	
Cadmium	Soil	ND		1.0
Calcium	Soil	509.0	NR	
Chromium	Soil	16.60	0.83	5.0
Cobalt	Soil	0.64	NR	
Copper	Soil	10.20	NR	
Iron	Soil	16,300	NR	
Lead	Soil	7.47	0.37	5.0
Magnesium	Soil	295.0	NR	
Manganese	Soil	49.20	NR	
Molybdenum	Soil	ND		
Nickel	Soil	3.63	NR	
Potassium	Soil	228.0	NR	
Selenium	Soil	1.29	0.06	1.0
Silica	Soil	6590.0	NR	
Silver	Soil	ND		5.0
Sodium	Soil	19.0	NR	
Strontium	Soil	4.15	NR	
Thallium	Soil	ND		
Tin	Soil	ND		
Titanium	Soil	105.0	NR	
Uranium	Soil	ND		
Vanadium	Soil	42.70	NR	
Zinc	Soil	16.30	NR	

WSRC Subcontract No. AC23322, Job# 07082, March 26, 2007, GEL Laboratories, LLC

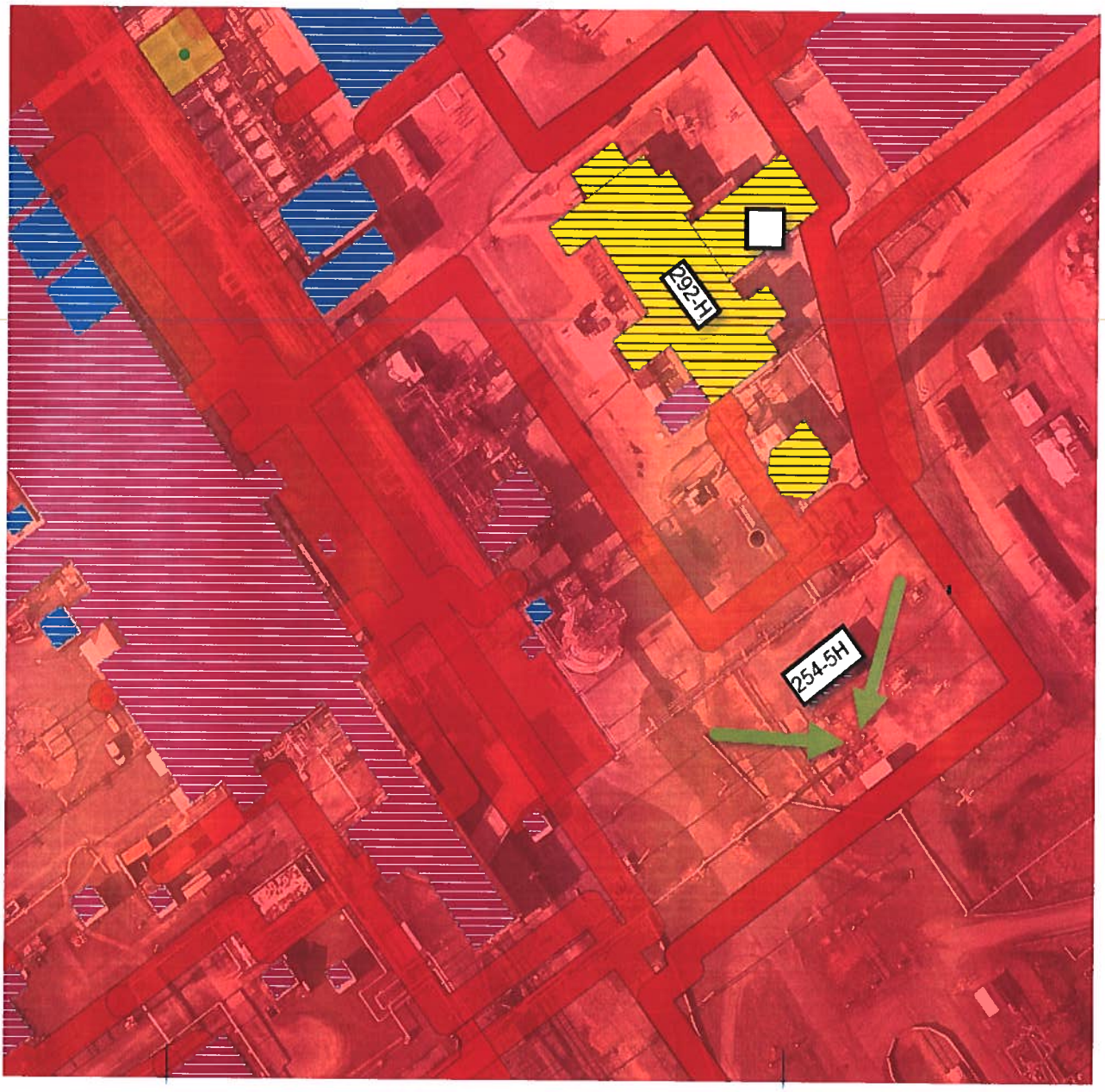
254-5H Underground Storage Tanks

(Looking South)

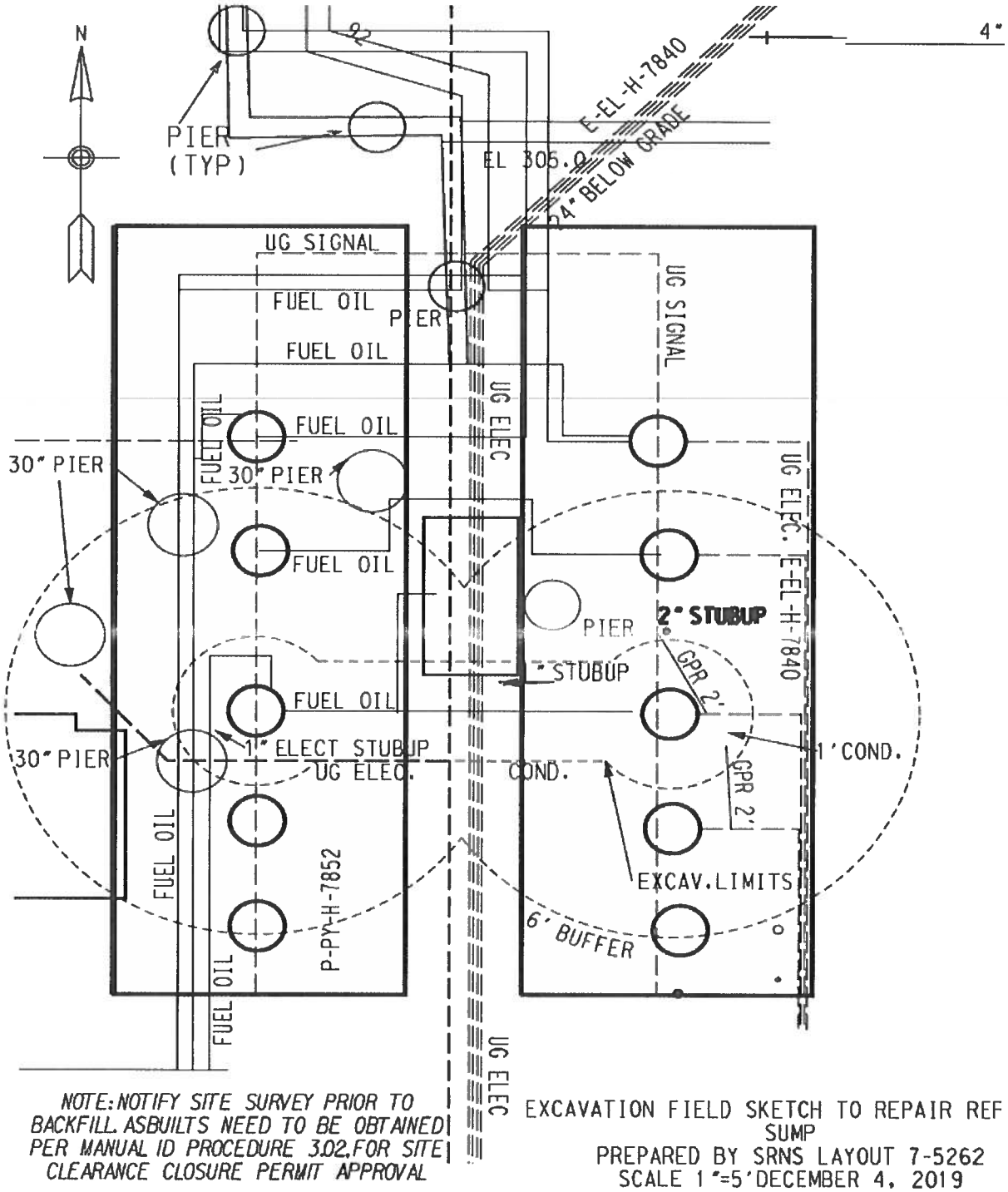


General Separations Area Waste Boundaries

Aerial View



Excavation Field Sketch



NOTE: NOTIFY SITE SURVEY PRIOR TO BACKFILL. ASBUILTS NEED TO BE OBTAINED PER MANUAL ID PROCEDURE 3.02, FOR SITE CLEARANCE CLOSURE PERMIT APPROVAL

EXCAVATION FIELD SKETCH TO REPAIR REF SUMP
PREPARED BY SRNS LAYOUT 7-5262
SCALE 1"=5' DECEMBER 4, 2019
REF DWG AS NOTED SITE MAP SHEET 07
JOB ID:113119 REV.2

NOTE: SCALE SHOWN ON THIS DRAWING IS ONLY APPLICABLE WHEN PLOTTED AT 8½" x 11" (ACTUAL DRAWING SIZE)

References

1. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 0 of Appendix C for Fiscal Year 2017.

2. SRNS-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U)*, December 15, 1996.

3. Asset Suite Work Order No: 01764394