Minor
OPERATION AND MAINTENANCE
Activity Plan

F-Area Road Widening
Site Evaluation Area 276 & RCRA/CERCLA Units 2, 18, 72, 141, 280, 284, & 563

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Natasha McCants, Project Manager, SRPPF Date

1. INTRODUCTION

This Operation and Maintenance (O&M) Plan for the F-Area Road Widening project will provide a means by which soil/media disturbance can commence within 200 feet of Site Evaluation Area (SEA) 276 and RCRA/CERCLA Units 2, 18, 280, and 284 and within 20 feet of RCRA/CERCLA Units 72, 141, 563 while protecting human health and the environment and minimizing impacts to long term characterization and remediation efforts. This O&M Plan is characterized as "minor intrusive" because less than 10 percent of the Site Evaluation Area (SEA) will be disturbed.

This O&M plan is NOT a release to work. Before any work begins, a work package must be developed and approved by all applicable reviewers (ECA, RP, IH, Safety, etc.). Please do not commence any land disturbance without approval.

2. AREA DESCRIPTION AND CONDITIONS

The SRPPF project requires an increased number of personnel traveling in and out of F-Area. To support the increased traffic, the road will be widened in certain areas to support extra acceleration, turning, and roadway lanes.

The planned road widening disturbs land within 200 feet of the F-Area Acid/Caustic Basin, the Old Radioactive Burial Ground, and the F-Area Ash Basin. Road widening will also be within 20 feet of F-Area Hazardous Waste Management Facility Inactive Process Sewer, F-Area Inactive Process Sewer Lines from Building to Security Fence, and F-Area Process Sewer Lines. All units are listed below:

- F-Area Acid/Caustic Basin (904-74G, Units 2 & 284) – **RCRA/CERCLA Unit**
- Old Radioactive Waste Burial Ground (including solvent tanks 650-01E-22E) (643-E, Unit 18) – **RCRA/CERCLA Unit**
- F-Area Hazardous Waste Management Facility Inactive Process Sewer Line (081-1F, Unit 72) – **RCRA/CERCLA Unit**
- F-Area Inactive Process Sewer Lines from Building to Security Fence (081-1F, Unit 141) – **RCRA/CERCLA Unit**

- F-Area Retention Basin (281-0F, Unit 280) – **RCRA/CERCLA Unit**
- F-Area Process Sewer Lines (Unit 563) – **RCRA/CERCLA Unit**
- F-Area Ash Basin (288-0F, Unit 276) – **SEA**

A detailed map of the planned roadway expansion is located in Figure 6 on page 9. General locations where road widening will occur within buffer zones of waste units are shown below.

Figure 1. General Location of Land Disturbance near Units 72, & 563

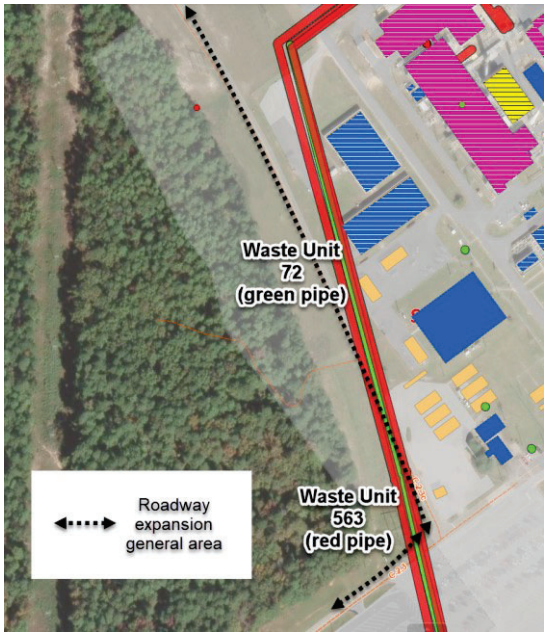


Figure 2. General Location of Land Disturbance near Units 141 & 563

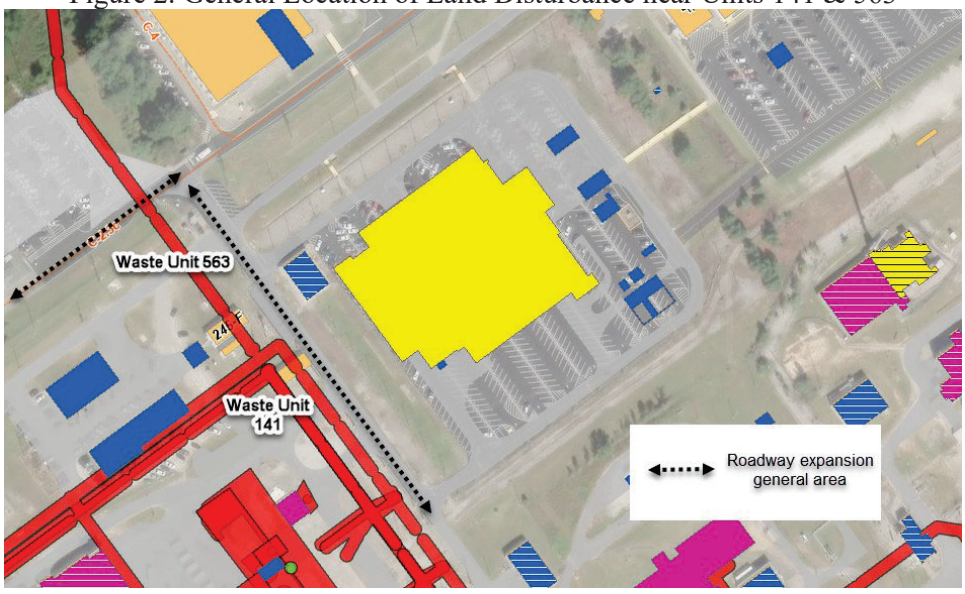


Figure 3. General Location of Land Disturbance near Units 2, 276, & 284

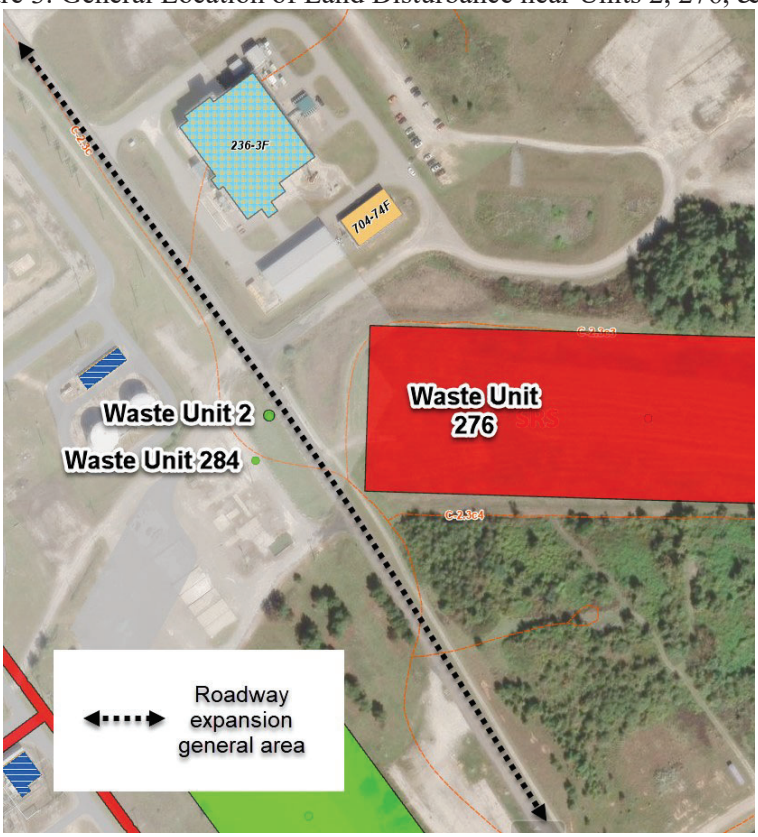
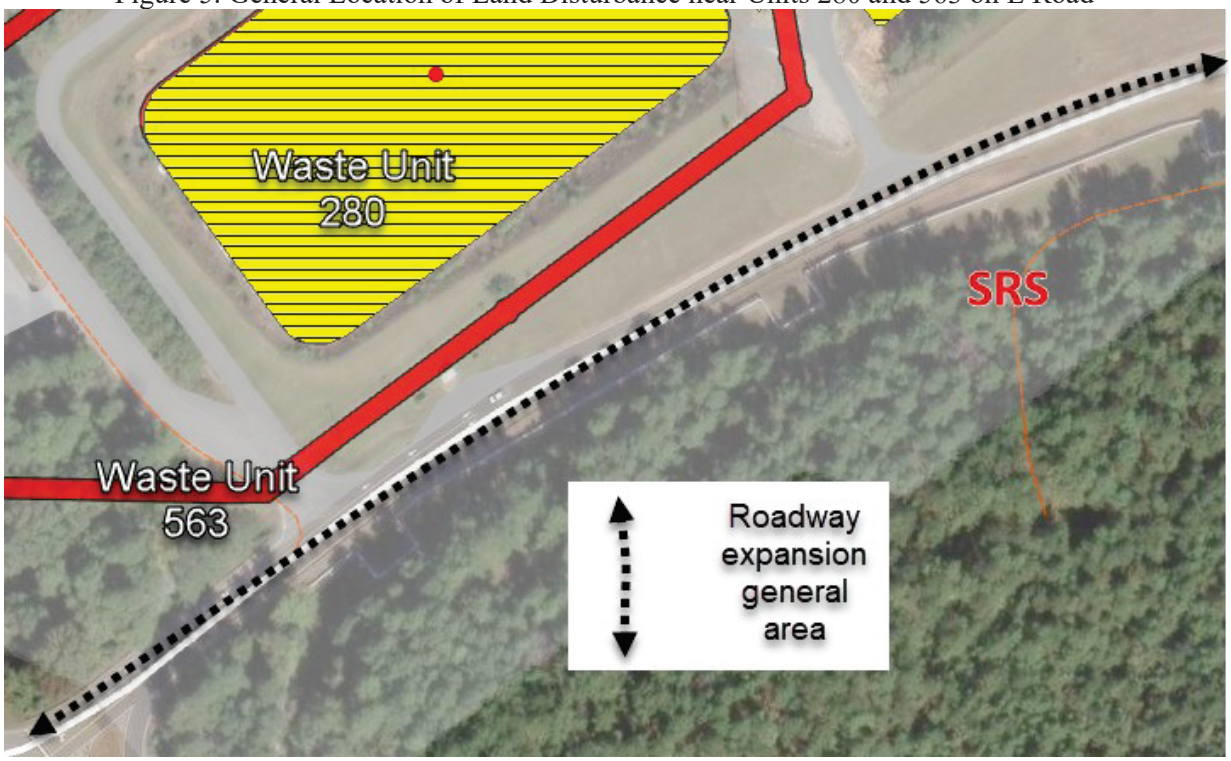


Figure 4. General Location of Land Disturbance near Units 18 & 563



Figure 5. General Location of Land Disturbance near Units 280 and 563 on E Road



The waste units that are required to be in the O&M plan have a few contaminants of concern. The Old Radioactive Waste Burial Ground (Unit 18) shown above had use as an unlined burial trench for solid radioactive waste. It also had a burn area and solvent tanks S-01 (605-01E) through S-22 (605-22E).

F-Area Hazardous Waste Management Facility Inactive Process Sewer Line (Unit 72) transported contaminated wastewater to seepage basins, making the primary contaminants radionuclides. The F-Area Inactive Process Sewer Lines from Building to Security Fence (Unit 141) also transported contaminated wastewater. It's primary contaminants of concern are radionuclides. The F-Area Process Sewer Lines (Unit 563) also have radionuclide contaminants.

The F-Area Acid/Caustic Basin (Units 2 & 284) had disposal of caustic agents which are the primary contaminants of concern. The F-Area Ash Basin (Unit 276) has the primary contaminants of toxic metals. The F-Area Retention Basin (Unit 280) was used to store contaminated cooling water from Separations. Safety and health concerns are primarily from personnel exposure to radionuclides, corrosives, and metals.

3. O&M ACTIVITY

A. O&M Activity Description

The planned soil disturbing activity in the buffer zone of SEA 276 and RCRA/CERCLA Units 2, 18, 72, 141, 280, 284, & 563 involves minor disturbance to widen roads and install acceleration, turning, and extra lanes. The depth of disturbance will fluctuate throughout the planned roadway expansion, with a maximum depth of 9-10 feet at one point where a domestic water line near the F-Area gas station will need to be lowered. All other disturbances will not breach any of the waste units themselves.

This activity is expected to begin in October 2025 and complete by September 2026. If this work scope requires significant change for any reason, the SRNS On-Scene Coordinator (OSC) will be contacted to determine if modifications to this O&M Plan are required.

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

Radiological Protection (RP) will monitor the water and/or soil removal activities for radioactive contamination per their standard procedures. If radiological contamination is encountered, RP will determine if protective equipment and personnel access restrictions are required.

The work area will be barricaded with rope or rigid handrail to ensure that access is controlled. This is due to personnel safety around the work area.

Worker health and safety will be described and controlled, as required, in the work package, and the Assisted Hazards Analysis (AHA).

C. Health and Safety Plan

The health and safety concern for this O & M Plan primarily involves worker exposure to potential radiological, corrosive, and metal contamination. RP shall be available for any questions or oversight requested during the land disturbance process.

The Work Order and/or AHA for these activities will contain instructions to comply with this plan.

The safety requirements and personal protective equipment described in these documents is appropriate for the potential hazards of the waste units

D. Characterization and Sampling Plan for the Affected Area within SEA 105

RP will create a sampling plan and characterization of any waste generated will be completed by the ECA.

E. Contaminated Materials Management and/or Disposal

If all SEA soil/media are determined to be "clean" by RP, normal waste disposal practices may be applied, as determined by SRPPF ECA. If soil/media are determined to be contaminated, contact SRPPF ECA for further guidance.

F. Environmental Plans and Permit Modification Requests

The soil disturbing aspect of this task is not expected to involve environmental plans/permits or other required maintenance and inspections. The lowering of the domestic line is considered a maintenance activity and does not require a SCDES permit. Project will involve the site infrastructure design authority for domestic water distribution system.

The Site Use/Site Clearance Permit process has been completed for this activity.

4. CONTINGENCY PLAN

If at any time during the implementation of the activity, the conditions change, such that the activity is no longer considered "minor" (is greater than 10% of a waste unit area impacted or disturbed) or any other unanticipated event occurs, the Facility Operations Manager or the ECA 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. DOCUMENTATION & REPORTING

The SRPPF ECA will transmit the following close-out documentation to the SRNS-OSC by the 20th day of the month following the month that the land disturbing activity was completed:

- the signed O&M Plan,

- any sampling and characterization data collected,

- quantity of contaminated materials generated, and

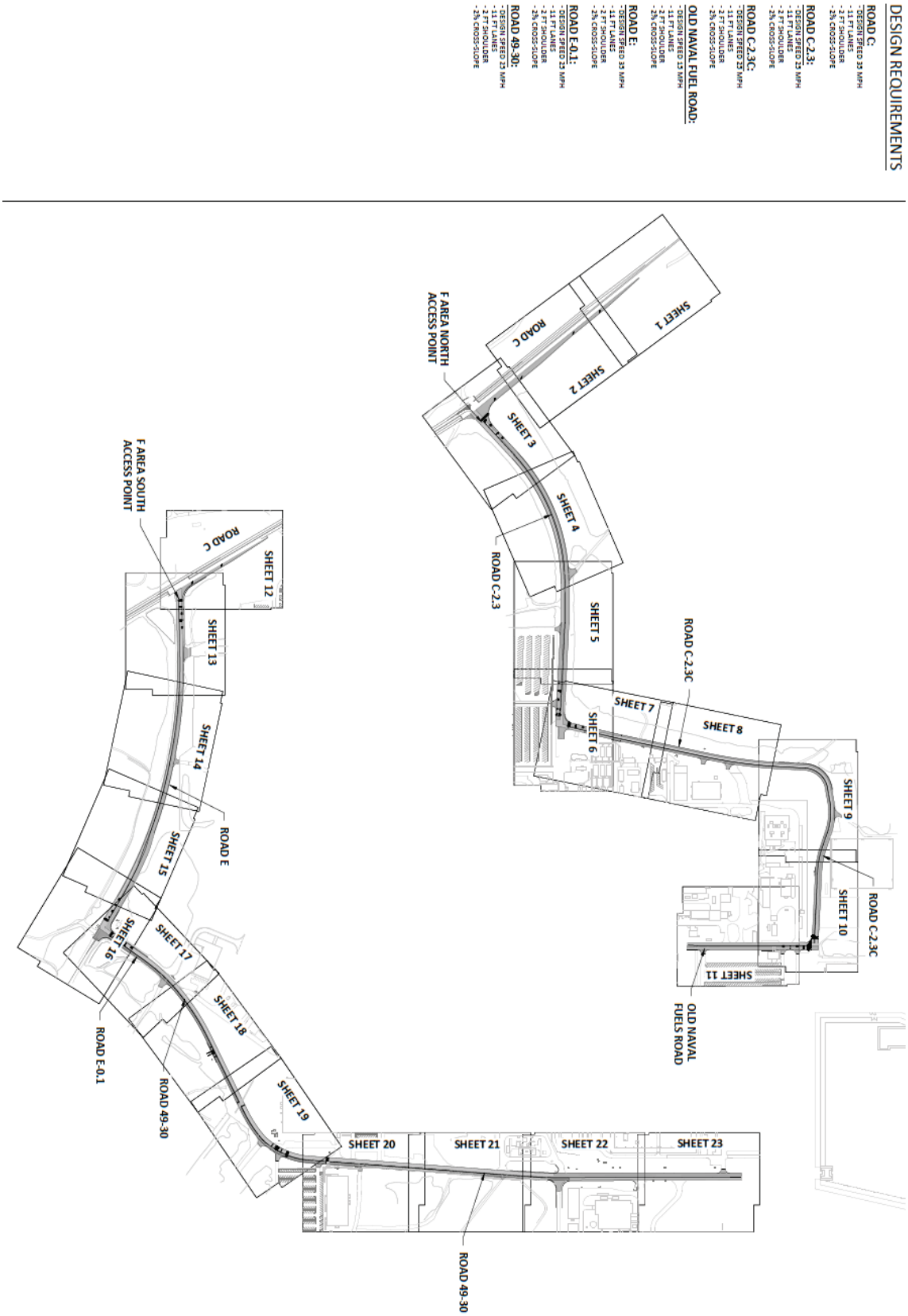
- treatment, storage, and disposal location of contaminated material.

References

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

WSRC-OS-94-42, Federal Facility Agreement for the Savannah River Site, August 16, 1993.

Figure 6. Entire Roadway Expansion Plans


DESIGN REQUIREMENTS
ROAD C:
- DESIGN SPEED 35 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
ROAD C-2.3:
- DESIGN SPEED 25 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
ROAD C-2.3C:
- DESIGN SPEED 25 MPH
- 11 FT LANES
- 1 FT SHOULDER
- 2% CROSS-SLOPE
OLD NAVAL FUEL ROAD:
- DESIGN SPEED 35 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
ROAD E:
- DESIGN SPEED 35 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
ROAD E-0.1:
- DESIGN SPEED 35 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
ROAD 49-30:
- DESIGN SPEED 25 MPH
- 11 FT LANES
- 2 FT SHOULDER
- 2% CROSS-SLOPE
F AREA NORTH ACCESS POINT
F AREA SOUTH ACCESS POINT
ROAD C
ROAD C-2.3
ROAD C-2.3C
ROAD E
ROAD E-0.1
ROAD 49-30
OLD NAVAL FUELS ROAD
SHEET 1
SHEET 2
SHEET 3
SHEET 4
SHEET 5
SHEET 6
SHEET 7
SHEET 8
SHEET 9
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