

Procurement Specification/Statement of Work (SOW) Cover Sheet

Proc. Ref. E7, 2.14

1. Title			
Decommissioning of Building 607-14D, Chemical Feed Facility			
2. Specification/SOW Number		3. Revision	5. Functional Classification
G-SOW-D-00014		0	GS
6. Requester Department		7. Requester Division	
EC&ACP		M&O	
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1.0 SCOPE

1.1 General Description

1.1.1 Summary

- 1.1.1.1 Provide labor, materials, and services required for the Decommissioning of Building 607-14D as defined in the procurement documentation including this Statement of Work (SOW).

1.2 General Description of Services

- 1.2.1 This SOW describes the activities required for the safe Decommissioning of Building 607-14D, Chemical Feed Facility, in D-Area of the Savannah River Site (SRS).
- 1.2.2 The work to be performed includes demolition, management of non-friable asbestos, and removal of the building and all associated appurtenances (such as equipment, pole supports, bollards, conduit bridges, etc.) as described herein.
- 1.2.3 The proposed decommissioning end state for the below-grade structures ancillary to 607-14D, which have no defined or anticipated future missions, is In Situ Decommissioning. The below-grade structures are essentially concrete and/or steel. Demolition is therefore impractical, and consequently, a portion of each structure will remain intact after decommissioning, though not readily visible. Below grade equipment was removed during the deactivation process. Below-grade spaces of the 607-15D Sanitary Waste Treatment Plant and the Disinfection Pit/UV Disinfection Chamber have been filled to grade with rock, gravel, and/or cementitious material. 607-15D will be capped with concrete.
- 1.2.4 The proposed decommissioning end-state for Building 607-14D, along with any associated fencing, pole supports, bollards, conduit bridges, etc., which have no defined or anticipated future missions, is "Demolish" to, but not including, the concrete slab(s)/ foundations and removal from the site.

1.3 Facility Descriptions

- 1.3.1 **Building 607-14D** and its remnant ancillary structures comprise what remains of the D-Area Sanitary Waste Treatment System. The facility is located on the SRS in South Carolina, at the southwest corner of 400-D Area (See Attachment 5.1, Figures 1 and 2). The facility received effluent sanitary waste from D-Area facilities for process and discharge. Different portions of the facility were constructed at different times over the life of D-Area in response to necessary upgrades. All facilities listed were permitted under Industrial Wastewater Treatment (IWT) Permits. (See Attachment 5.1, Figures 1-13).
 - 1.3.1.1 Building 607-14D includes the following ancillary structures:
 - A. Remnants of Building 607-15D, 20,000 GPD Sanitary Wastewater Treatment Plant
 - B. Remnants of Building 607-12D, Sanitary Wastewater Pumping Station
 - C. Remnants of Building 607-7D, Sewage Treatment Plant Blower Cabinets
 - D. Remnants of Building 607-2D, Sewage Lift Station #2

1.3 Facility Descriptions (Continued)

- E. Remnants of the Disinfection Pit
 - F. Remnants of the 483-6D Surge Basin
 - G. Light Poles and Lights
- 1.3.1.2 The 607-14D Chemical Feed Facility (607-14D) was permitted under SCDHEC Permit No. 10,526. Subsequently, an automatic sodium hypochlorite feed system was added under SCDHEC Permit No. 14,318 to disinfect the effluent from the 607-15D Sanitary Wastewater Treatment Plant. The 483-6D Surge Basin was permitted under SCDHEC Permit No. 18078-IW. All facilities other than 607-14D and its ancillary remnants were previously decommissioned under the SRS D-Area Sanitary Waste Treatment Plant (607-14D, 607-15D) Closure Plan, Rev. 2, and the SRS D-Area Surge Basin (483-6D), Replace Surge Basin Liner Closure Plan, Rev. 2. The 607-14D Chemical Feed Facility was deactivated under the same Closure plan, but not decommissioned. 607-14D and remnant ancillary structures make up what remains of the overall system still to be decommissioned within the scope of this project. Decommissioning activities performed within this project scope serve as the final closure for the wastewater facilities and associated permits listed above.
- 1.3.1.3 Prior to installation of the 607-15D Sanitary Waste Treatment Plant, 607-7D was the operational sewage treatment plant. 607-7D was removed from service and decommissioned in 1993. Refer to Attachment 5.1, Figures 1 and 2 for layout of the structures of the facility.
- 1.3.1.4 Building 607-14D, Chemical Feed Building is built on a concrete slab. The lower portions of the walls (up to about 18" above the slab) are masonry block. The remainder of the structure is constructed of metal and composite materials. (See Attachment 5.1, Figures 3 and 4).
- 1.3.1.5 The structure is approximately 16' by 20' and approximately 13' high. There is a 10' roll-up door on the east side of the structure. Outside the roll-up door, on either side, are two bollards, 4" diameter and 30" above grade. There are concrete steps with a handrail to the south door of the building.
- 1.3.1.6 The structure was formerly provided with electrical supply at 480V (3-phase) and domestic water. There is a domestic water isolation valve and an electrical disconnect on the southeast corner of the structure. There was also a domestic water isolation valve approximately 25' to the south of the structure that is associated with the structure.
- 1.3.1.7 The building contains a soda ash mixing tank, two soda ash transfer pumps, a lab bench and sink, one floor drain, one collection sump, and a chemical storage area.
- 1.3.1.8 Lighting inside the structure was from fluorescent lamps, while lighting on the outside of the building (east, south, and west) is high pressure sodium lamps mounted on the structure.
- 1.3.1.9 The soda ash mixing tank is a fiberglass resin tank that is approximately 5.5' in diameter and approximately 5' tall, with a capacity of approximately 500 gallons. The mixing tank has a 120 volt (V), top-mounted, angled-entry agitator. The two soda ash transfer pumps are small, 120V pumps (with oil removed). (See Attachment 5.1, Figure 5).
- 1.3.1.10 The sump is approximately 2' by 2' and 3' deep. It had a 120V sump pump (w/oil removed) that discharged to the sanitary waste treatment plant, 607-15D. (See Attachment 5.1, Figure 6).

1.3 Facility Descriptions (Continued)

- 1.3.1.11 The chemical storage area was located on the east side of the building and is elevated to about 24" above grade. The chemical storage area used to contain soda ash in 55-pound paper bags, Klaraid™ in 45-pound plastic jugs and chlorine pellets in 5-pound plastic containers.
- 1.3.1.12 The 607-15D, Sanitary Waste Treatment Plant is a package treatment plant that was installed, placed into operation in 1993 and since decommissioned under an IWT Permit interim closure plan. The structure is approximately 50' by 16' and 12' deep, disregarding handrail and equipment height atop the structure. The majority of the 12' deep structure is below grade. (See Attachment 5.1, Figures 7 and 8).
- 1.3.1.13 The structure is primarily epoxy-coated carbon steel. The walkway gratings atop the structure are made of aluminum. The top of the structure is within 4" to 6" inches of being level with grade. The more visible portions of the structure are the handrails and above grade equipment.
- 1.3.1.14 The treatment plant has four (4) major sections: (1) the chlorine diffuser, (2) the clarifier, (3) the aeration tank and (4) the surge tank.
- 1.3.1.15 The sewage inlet to the structure was via a 4" pipe at the north end of the structure. The treated effluent was discharged via a 6" pipe at the outlet of the weir on the south end of the structure. There was a 4" air inlet below grade on the east side of the surge tank from the surge tank blowers. There was another 4" air inlet below grade in the aeration tank from the aeration blowers.
- 1.3.1.16 The 607-15D structure was decommissioned under the IWT Permit interim closure plan. The 607-15D basin was pumped and rinsed with a pump truck and sludge transported to the SRS Central Sanitary Wastewater Treatment Facility. The in-ground basin was then filled to just above grade with a combination of gravel and rip rap. Remnants remaining to be decommissioned following implementation of the IWT Permit interim closure plan are handrail, conduit, panels, racks, piping, lighting, and equipment.
- 1.3.1.17 On the east side of 607-15D are the blowers for the aeration and surge tanks (See Attachment 5.1, Figure 9). There are two blowers for each. The two easternmost blowers (frontmost in Figure 9), the surge tank blowers, are remnants of the 607-7D sanitary waste treatment plant. The aeration blowers are closer to 607-15D (See Attachment 5.1, Figure 2). The only remnants of concern associated with the aeration and surge tank blowers remaining following implementation of the IWT Permit interim closure plan are the blowers, conduit, panels, racks, piping, and lighting. Nothing else associated with 607-7D remains.
- 1.3.1.18 There is a presence of non-friable asbestos in 607-7D (Reference 2.4.2.5).
- 1.3.1.19 To the south of Building 607-15D was the disinfection pit. The disinfection pit was an open, concrete, below-grade structure. It has now been filled in with gravel under the IWT Permit interim closure plan. The pit used to go to approximately 6 feet below grade and was approximately 8' by 28'. (See Attachment 5.1, Figure 10).
- 1.3.1.20 Along the east side of the pit was the ultraviolet (UV) disinfection chamber. Effluent sewage passed through the chamber while being exposed to ultraviolet light for disinfection and was discharged to outfall D-01. There were metal steps leading down into the pit.

1.3 Facility Descriptions (Continued)

- 1.3.1.21 There was a sump in the bottom of the pit that was covered with a galvanized metal grate. The sump was equipped with a 120V sump pump that discharged to the treatment plant, 607-15D. Handrails surround the entirety of the pit, with an opening at the former step location. Remnants remaining following implementation of the IWT Permit interim closure plan are handrail, conduit, panels, racks, piping, and lighting.
- 1.3.1.22 Station 607-12D is an abandoned-in-place sanitary sewage lift station located to the south side of Building 607-14D (See Attachment 5.1, Figure 11). The station was in use until 1993, when 607-2D was brought online to replace it. Station 607-12D was then abandoned. The concrete pad for the station is 10' by 10'. The interior pit is 6' in diameter and 6'6" deep. The shell of the pit is 6" thick reinforced concrete.
- 1.3.1.23 Located above grade at Station 607-12D are 2-motors and pumps (with oil removed), a hose rack, pipes and conduit. On the electrical panel are two combination starters for the pumps, two junction boxes, and a receptacle. Remnants remaining following implementation of the IWT Permit interim closure plan are pumps, motors, conduit, panels, racks, and piping.
- 1.3.1.24 Station 607-2D was the operational lift station for the sanitary sewage waste treatment plant (See Attachment 5.1, Figure 12). The lift station contained two lifting pumps (with oil removed) for transfer of the sanitary wastewater to the 607-15D treatment plant. The basin of the lift station was constructed of reinforced concrete and located mostly below grade. The upper rim of the lift station extends to about 9" above ground level (already decommissioned under the IWT Permit interim closure plan). The lift station pumps were located below grade inside the lift station. The lift station control panel is located adjacent to the lift station on the northeast and is above grade. Approximately 8' to the south of the lift station is a process water connection and a hose rack (See Attachment 5.1, Figure 12). The lift station pumps were removed, and the station filled with gravel under the IWT Permit interim closure plan. Remnants remaining following implementation of the IWT Permit interim closure plan are the control panel, conduits, hose rack, and process water piping.
- 1.3.1.25 Additional sanitary sewage treatment system related items included in the scope of this evaluation include the following:
- A. The diverter valve operators are located on the east side of the area between the disinfection pit and Building 607-15D (See Attachment 5.1, Figure 2). There were two (2) valve operators. The operators are in a round housing and extend to about 30" above grade (See Attachment 5.1, Figures 7 and 10).
 - B. The junction box located on the east side of the area between the disinfection pit and Building 607-15D. The junction box is a below grade structure that is covered by a painted, carbon steel plate. The curb of the structure above grade is approximately 2' by 2' square (See Attachment 5.1, Figure 10).
 - C. The sounding tube at the southeast corner of Building 607-15D (See Attachment 5.1, Figure 7). The sounding tube is approximately 4" diameter and extends to about 30" above grade.
 - D. All pole-mounted light fixtures and support poles.
- 1.3.1.26 The 483-6D Surge Basin was permitted under SCDHEC IWT Permit No. 18078-IW.
- 1.3.1.27 The basin provided a buffer from the large flow rates required to backwash the filtration systems from the 483-D Surface Water Treatment and the 483-7D Domestic Water

1.3 Facility Descriptions (Continued)

Treatment Plants. It also provided short-term storage of the wastewaters and residual sludge generated as by-products of the filtration processes.

- 1.3.1.28 An Interim Closure Plan, SRS D-Area Surge Basin (483-6D), Replace Surge Basin Liner Closure Plan, Rev. 2, was submitted to SCDHEC on December 20, 2012. Subsequently, the Surge Basin was closed in accordance with the IWT Permit interim closure plan. For safety reasons, platform handrails must remain in place following decommissioning of the Surge Basin remnants due to the height of the platform above the surrounding grade. Remnants associated with the platform remaining following implementation of the IWT Permit interim closure plan are the conduit, panels, racks, piping, and lighting.
- 1.3.1.29 Within Building 607-14D are the only apparent sites of chemical contamination for the structures of this evaluation. The soda ash transfer pumps have leaked lubricating oil to the pedestals on which they are mounted. There are no apparent cracks in the concrete slab of the building for contaminants to migrate through. For the purposes of this SOW, these sites will be cleaned with a strong surfactant (i.e. BioSolve®) during decommissioning.
- 1.3.1.30 D-Area power has been globally disconnected from the electrical grid, thereby rendering 607-14D and its ancillary structures electrically “cold & dark”. Fuses for subject equipment have also been removed. All subject facilities have been isolated mechanically. Deenergized power, control wiring and instrumentation are currently abandoned in place. Mechanical equipment, structures and instrumentation are currently closed to a safe state and abandoned in place. All activities to date have been completed in accordance with the approved SCDHEC IWT Interim Closure Plan. Remnants remaining following implementation of the IWT Permit interim closure plan (i.e., handrail, conduit, panels, racks, piping, lighting, etc.) will be removed down to top of concrete pad(s) or grade as applicable and openings greater than 2” plugged and grouted, thereby completing “final” IWT Permit Closure.

2.0 REFERENCES

2.1 Definitions

2.1.1 Acronyms

~	approximate, approximately
ACM	Asbestos Containing Material
BMP	Best Management Practice
CFR	Code of Federal Regulations
CMC	Commercial Metal Company
D&D	Deactivation and Decommissioning
D&R	Dismantlement and Removal
EC&ACP	Environmental Compliance and Area Completion Projects
EDR	Engineering Document Requirements
ft	foot, feet
FPP	Fire Protection Plan
GCO	Generator Certification Official (for SRS waste)

2.1 Definitions (Continued)

HSO	Health and Safety Officer
HVAC	Heating Ventilation and Air Conditioning
in.	inch, inches
kVA	kilovolt-amps
NCR	Non-Conformance Report
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos Containing Material
PCBs	Polychlorinated Biphenyls
PDF	portable document format
PHSS	Packaging, Handling, Shipping, and Storage Requirements (PHSS)
PO	purchase order
SC	(State of) South Carolina
SCDHEC	South Carolina Department of Health and Environmental Control
SDDR	Supplier Deviation Disposition Request
SOW	Statement of Work
SRNS	Savannah River Nuclear Solutions, LLC
SRS	Savannah River Site
STR	Subcontract Technical Representative
TSP	Task Specific Plan
WPP	Worker Protection Plan

2.1.2 Terms

- 2.1.2.1 Administrative Hold Point: A designated verification beyond which work does not proceed until verification is performed and documented by a Subcontract Technical Representative.
- 2.1.2.2 Repro: Reproducible paper copy.
- 2.1.2.3 Verification: The act of reviewing, inspecting, testing, checking, auditing, or otherwise determining and documenting whether items, processes, services, or documents conform to specified requirements.
- 2.1.2.4 Competent Person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsafe, unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them - usually also identified as "Qualified" (29 Code of Federal Regulations [CFR] 1926.32 incl.1101).
- 2.1.2.5 Qualified (Person): One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.
- 2.1.2.6 Engineering Survey/Report: The Subcontractor shall be required to prepare an engineering survey/report that addresses the requirements of 29 CFR 1926.850(a). Prior to permitting employees to start demolition operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure.

2.1 Definitions (Continued)

Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed and outlines the methods, equipment to be used and sequence of events for all dismantlement and removal activities, including but not limited to removal and placement in supplied containers of all recyclables, removal and handling of any hazardous materials, segregation, appropriate size reduction and disposition of all materials, etc. Also include as a minimum a proposed layout/location for office trailers, toilet facilities, equipment staging area, material staging area(s), etc. A competent (qualified) person shall perform the survey.

- 2.1.2.7 Facility: Any building, structure, or other improvement to real property including their functional systems and equipment; site development features such as landscaping, roads, walks, and parking areas; outside lighting and communications systems; central utility plants; utility supply and distribution systems; and other physical plant features. For purposes of this SOW, this facility consists of the structures, appurtenances, equipment, etc. identified within the body of this SOW and its Attachment A.

2.2 Codes / Standards

2.2.1 General

- 2.2.1.1 Use the edition in effect at date of contract award unless noted otherwise.

A. Material standard editions dated within the previous 10 years from the date of contract award are acceptable.

- 2.2.1.2 Obtain SRNS acceptance for Codes / Standards not required by this specification prior to use.

- 2.2.1.3 Obtain SRNS acceptance for editions and/or addenda of Codes / Standards not specifically authorized by this specification prior to use.

2.2.2 Required National Codes / Standards

- 2.2.2.1 None

2.3 Orders / Regulations

2.3.1 Regulations

- 2.3.1.1 10 CFR 851 – Worker Safety and Health Program

- 2.3.1.2 29 CFR 1910 – Occupational Safety and Health Standards (OSHA)

- 2.3.1.3 29 CFR 1926 – Safety and Health Regulations for Construction

A. 29 CFR 1926 Subpart T – Demolition

B. 29 CFR, 1926.32, 1101 (Labor, Definitions), including Subpart Z, Asbestos

- 2.3.1.4 40 CFR Part 61.145 Standard for Demolition and Renovation

- 2.3.1.5 S.C. Reg. 61-107.19, Solid Waste Landfill Regulation”

- 2.3.1.6 South Carolina Department of Health and Environmental Control (SCDHEC) Stormwater Management Best Management Practice Handbook, (2006)

2.4 SRNS Documents

2.4.1 Drawings (for Subcontractor reference)

- 2.4.1.1 W742023, Rev. 18, dated 2/2/1993 "Savannah River Plant Bldg. 607-14D Area 400D, Chemical Feed Facilities Equipment & Piping Power (U)"
- 2.4.1.2 W739807, Rev. 49, dated 4/6/1983 "Savannah River Plant Bldg. 607-14D Area 400D, Chemical Feed Facilities Site Plan – D, A & C Civil"
- 2.4.1.3 S5-4-1225, Rev. 6, dated 4/6/1993 "Bldg. 607-15D, Package Wastewater Treatment Plant, Blower EQ. Pad & Misc. Details (U)"
- 2.4.1.4 S5-4-1226, Rev. 2, dated 4/6/1993 "Bldg. 607-15D, Package Wastewater Treatment Plant, Sections In Detail (U)"
- 2.4.1.5 S5-4-1227, Rev. 5, dated 11/29/1993 "Bldg. 607-15D, Package Wastewater Treatment Plant, Blower EQ. Pad & Misc. Details (U)"
- 2.4.1.6 S5-4-654, Rev.9, dated 12/13/1976 "Sanitary Wastewater Containment"
- 2.4.1.7 W448596, Rev. 28, dated 6/19/1984 "Savannah River Plant Bldg. 607-2D&7D San. Trtmt. Facilities Plot Plan Sheet 2 Civil and Power"

2.4.2 Documents

2.4.2.1 OSR 45-4, 2016, Supplier Deviation Disposition Request (SDDR)

A. With instructions

- 2.4.2.2 Q-APG-D-00024, Rev. 1, dated February 11, 2021, "Baseline Asbestos Inspection Report of Building 607-14D"
- 2.4.2.3 Q-APG-D-00028, Rev. 1, dated February 16, 2021, "Baseline Asbestos Inspection Report of Building 607-15D"
- 2.4.2.4 Q-APG-D-00032, Rev. 1, dated February 16, 2021, "Baseline Asbestos Inspection Report of Building 607-12D"
- 2.4.2.5 Q-APG-D-00034, Rev. 1, dated February 16, 2021, "Baseline Asbestos Inspection Report of Building 607-7D"
- 2.4.2.6 Q-APG-D-00035, Rev. 1, dated February 17, 2021, "Baseline Asbestos Inspection Report of Building 607-2D"
- 2.4.2.7 Q-APG-D-00041, Rev. 0, dated February 16, 2021, "Baseline Asbestos Inspection Report of D-Area Disinfection Pit"
- 2.4.2.8 Q-APG-D-00033, Rev. 1, dated February 17, 2021, "Baseline Asbestos Inspection Report of 483-6D"
- 2.4.2.9 V-PCOR-D-00042, Rev. 0, dated July 1, 2014, "Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings"
- 2.4.2.10 V-PMP-D-00046, Rev. 0, dated May 27, 2021, "Decommissioning End Points Document Building 607-14D, Chemical Feed Facility"
- 2.4.2.11 Q-SDD-D-00016, Rev. 0, dated April 22, 2021, "Engineering Survey and Interference Report for 607-14D Chemical Feed Facility and Ancillary Facilities"
- 2.4.2.12 G-FDE-D-00053, Rev. 0, dated February 23, 2021, "Facility Decommissioning Evaluation (FDE) Plant 607-14D, Chemical Feed Facility"

2.4 SRNS Documents (Continued)

- 2.4.2.13 E-SDD-D-00001, Rev. 1, dated August 19, 2020, "Verification of Hazardous Energy Isolations for Building 484-D Powerhouse and Ancillary Buildings"
- 2.4.2.14 E-SDD-D-00002, Rev. 1, dated March 31, 2021, "Closeout of Verification Document for Building 484-D Powerhouse and Ancillary Buildings"
- 2.4.2.15 S-EHS-D-00001, Rev. 1, dated October 2009, "Hazards Survey for D-Area"
- 2.4.2.16 SDD-2005-00170, Rev. 2, dated October 22, 2020, "Environmental Compliance and Area Completion Projects (EC&ACP) Deactivation and Decommissioning (D&D) Policy on Decommissioning End Points for Slabs, Pits, Basements and Basins (U)"

3.0 WORK REQUIREMENTS

3.1 General Scope

- 3.1.1 Employ all measures as required to protect personnel and the environment during the performance of this decommissioning work.
 - 3.1.1.1 Prescriptive worker safety requirements are identified in 29 CFR 1926.
 - 3.1.1.2 Provide all management, labor, materials, tools, equipment, supervision and services required for the completion of this SOW.
 - 3.1.1.3 Work shall be performed in accordance with all applicable OSHA, SCDHEC and S.C. construction/demolition regulations and codes.
 - 3.1.1.4 SRNS furnished material, equipment, services
 - A. SRS specific requirements for Subcontractor work on SRS in accordance with Special Provisions / Field Conditions which may include:
 - 1. General Employee Training
 - 2. Remote Worker Training
 - 3. Emergency Response Briefing
 - 4. Site Badging
 - 5. Site Clearance Permit(s)
 - 6. EC&ACP Waste Generator/Waste Verifier Training and Area Specific Training
 - B. Asbestos project design/management services to represent SRNS for the duration of these demolition activities, if any asbestos containing material (ACM) or presumed asbestos containing material (PACM) is subsequently identified during performance of this subcontract.
 - C. Receptacles/Accumulation Areas, as necessary, for all light bulbs, ballasts, etc.
 - D. Containers/roll-off pans for disposition of all recyclable materials and universal waste.
 - E. STR will provide OSR Form 4-356s for shipments of recyclable materials.
 - F. Special Waste Manifests/Worksheets for the disposition of special waste materials to the Three Rivers Landfill.
 - G. As built the final Demolition configuration and closure of the Site Clearance Permit(s) for the building within the scope of this SOW.
 - H. Work completed prior to Subcontractor mobilization shall include:

3.1 General Scope (Continued)

1. Isolate, relocate and/or eliminate all power/communication systems.
2. Building mechanically and electrically isolated rendering them "Cold and Dark."

3.1.1.5 Subcontractor furnished material, equipment, and/or services

- A. Generators, as needed, qualified to site requirements
- B. Hazardous material such as fluorescent bulbs, thermostats with mercury switches, circuit boards may still require removal as universal waste prior to demolition. For light ballasts that remain in the building, the ballasts will be removed and inspected to determine if they contain polychlorinated biphenyls (PCB). Any switches that remain in the building will also be inspected for mercury.
- C. Containers/roll-off pans, skid pans, and trucks for collection, transportation, and disposal of waste materials and debris (other than as specified in Sections 3.1.1.4.C. and 3.1.1.4.D.).
- D. Tools, equipment, and consumables for non-radiological demolition work
- E. Portable toilets for work location
- F. Worker break/change facilities
- G. All required personal protective safety equipment
- H. All other required safety equipment
- I. Prepare an Engineering Survey (Section 2.1.2.6) as required by 29 CFR 1926, Subpart T, for inclusion in the Subcontractor's Worker Protection Plan (Reference 3.1.1.7.G.)

3.1.1.6 Prepare and submit a Fire Protection Plan (FPP) that defines and establishes the process and program for protecting life and property from fire during demolition activities.

- A. The FPP shall outline the assignments of key personnel in the event of a fire and provide an evacuation plan for workers on the site.
- B. The FPP may be included in the Worker Protection Plan (WPP) and shall consider requirements, programs and life safety plans already in place as well as adherence to all applicable OSHA guidelines.
- C. Work shall be performed in accordance with the approved and accepted FPP.
 1. Where guidelines are or may be in conflict, the strictest criteria shall apply.
- D. The FPP shall specifically address and include as a minimum the following:
 1. Implementation of 29 CFR 1926 requirements.
 2. Use of and adherence to S.C. Reg. 61-107.19
 3. Control of exits in and around the facilities
 4. Control of transient combustibles (wood, paper, plastic, oily rags, etc.)
 5. Control of flammable/combustible liquids
 6. Temporary enclosures – self-extinguishing polyethylene
 7. Temporary barricades
 8. Use/refueling of internal combustion engines

3.1 General Scope (Continued)

9. Smoking in designated areas
 10. Temporary lighting
 11. Maintenance of access around the building for firefighting purposes
 12. Hot work operations:
 - a. Generate and submit a Hot Work Permit Procedure.
 - b. Notify the SRNS STR that the permit is in place prior to beginning hot work.
- 3.1.1.7 Prepare a WPP and submit for the dismantlement and removal of Building 607-14D and all associated appurtenances as described herein (see Section 1.3).
- A. The WPP shall cover the entire scope of field activities, potential hazards and describe the measures to be implemented to safeguard the health and welfare of workers in this Decommissioning effort.
 - B. As noted in 3.1.1.6.B, the WPP may also include the FPP.
 - C. No work will be allowed to start until WPPs have been reviewed and accepted by SRNS.
 - D. Include WPPs for the Subcontractor and any Sub-tier Subcontractors (if not covered by the Subcontractor's WPP) completely describing all measures in place to ensure the safety and wellbeing of those involved in these activities.
 - E. Work shall be performed in accordance with approved and accepted WPPs.
 - F. Describe the implementation requirements of 10 CFR 851, 29 CFR 1910 and 29 CFR 1926 for this demolition scope.
 - G. Include the Engineering Survey required by 29 CFR 1926, Subpart T.
 - H. Proposed location(s) for parking individual workers' vehicles.
 - I. Proposed location(s) for lay-down and material sorting/segregating areas.
 - J. Proposed areas for loading SRNS supplied skid pans.
 - K. Proposed areas for loading Subcontractor supplied skid pans, containers/roll-off pans, trucks, etc.
- 3.1.1.8 Prepare and submit Task Specific Plans (TSPs) including any other safety and health provisions described in this SOW as necessary for each specific task/job.
- A. No task work will be allowed to start until TSPs have been reviewed and accepted by SRNS.
 - B. Include TSPs for the Subcontractor and any Sub-tier Subcontractors that describe in detail how each aspect of the work will be handled by the performing entity.
 - C. TSP shall demonstrate how the requirements of the Decommissioning End Points Document (References 2.4.2.10) shall be met.
 - D. Work shall be performed in accordance with SRNS approved and accepted TSPs
- 3.1.1.9 Verify the existing physical conditions, utilities, dimensions and details affecting the work in each facility/area/site of this project.

3.1 General Scope (Continued)

- 3.1.1.10 Prepare a Decommissioning Plan and Activities Schedule which identify in detail the step-by-step activities relative to the dismantlement and removal of Building 607-14D and all associated appurtenances including, but not limited to:
- A. Mobilization/demobilization,
 - B. Staffing level to meet project schedule,
 - C. Removal, collection, packaging and transportation for final disposition of materials identified as:
 - 1. Hazardous and universal waste materials discovered during decommissioning that were not previously removed by SRNS.
 - 2. Recyclable metals: All brass will require segregation for metal recycle through the salvage yard. Scrap metals will be size reduced and segregated through the salvage yard. Leaded joints will be segregated and managed per GCO direction.
 - 3. Plugging and grouting openings through the floor slab and surrounding ground such as drainpipes, conduits, etc.
 - D. No decommissioning activities shall start until the Plan has been reviewed and accepted by SRNS.
- 3.1.1.11 Inform the SRNS Subcontract Technical Representative (STR) immediately of any spills or releases to the environment (air, water, soil, slab, etc.), regardless of amount.
- A. STR will provide guidelines for any required remedial action.
 - B. Subcontractor is responsible for performing remedial actions.
- 3.1.1.12 Install sediment control Best Management Practice (BMP) as required around storm water drainage system prior to starting any demolition activities.
- A. Prepare and submit placement, sizing, and modifications of Sediment Control BMPs. Additional information on the design and proper use of Sediment Control BMPs can be found in SCDHEC Stormwater Management BMP Handbook.
 - B. BMP Description:
 - 1. Inlet protection is achieved by placing a temporary filtering device around any inlet to trap sediment.
 - 2. The mechanism shall prevent sediment from entering inlet structures.
 - C. Inspect/document every 7 calendar days and after a storm event of 0.5 inch or greater.
 - D. Remove accumulated sediment once it reaches 1/3 the height of the inlet filter.
 - E. Sediment tubes may be installed in conjunction with or in place of a silt fence to provide additional protection to the storm water system
- 3.1.1.13 Obtain demolition permits as required by South Carolina Department of Health and Environmental Control (SCDHEC) Codes and Regulations, SC Reg. R61-86.1, Section V for Building 607-14D.
- A. In accordance with 40 CFR Part 61.145 permit shall be requested at least ten (10) working days before any demolition begins.
 - B. Submit two (2) copies of the SCDHEC approved demolition permit to SRNS.

3.1 General Scope (Continued)

- 3.1.1.14 All demolition work shall be performed, as a minimum, in compliance with 29 CFR 1926, Subpart T and the demolition permit.
- 3.1.1.15 Work shall be performed in accordance with all applicable OSHA and S.C. construction/demolition regulations, codes, permits and guidelines.
- 3.1.1.16 Implement waste management requirements to handle, segregate, package, and containerize waste materials as directed by the SRNS GCO and described in ACP Waste Generator/Waste Verifier Training and Area Specific Training.
- 3.1.1.17 Submit copies of the Three Rivers Sanitary Landfill scale ticket for each Three Rivers waste shipment.
- 3.1.1.18 Building demolition shall be accomplished using heavy equipment and/or hand demolition as necessary or as identified and approved in TSPs.
- 3.1.1.19 Demolish, remove and dispose of Building 607-14D within the scope of this SOW (excluding the building's concrete slabs). Fill the building sump with grout up to top of slab elevation. Demolish, remove and dispose of all above ground appurtenances and equipment as described in the body of this SOW and as shown in the Attachment 5.1 photos in accordance with SRNS approved Decommissioning End Points Documents and all applicable SRS, Federal, State, and local rules and regulations.
- 3.1.1.20 Recycling containers for scrap metal will be provided by SRNS via the Commercial Metal Company (CMC) which has a recycling contract with SRNS.
- 3.1.1.21 All hazardous materials (such as light bulbs, fluorescent tubes, light ballasts, lead pipe joints, etc.) shall be removed and placed in receptacles provided by SRNS prior to decommissioning to insure there is no cross contamination.
 - A. All light bulbs (incandescent bulbs, fluorescent bulbs, fluorescent tubes, emergency lights, strobe lights, etc.) shall be counted and verified by subcontractor during the removal process and shall be removed from their housings and placed in containers provided by SRNS to be managed as universal waste by SRNS.
 - B. Exact quantity of light bulbs, by type, shall be counted and verified by the subcontractor during the removal process.
 - 1. **ADMINISTRATIVE HOLDPOINT** - Verification and count of light bulbs by GCO (incandescent bulbs, fluorescent bulbs, fluorescent tubes, emergency lights, strobe lights, etc.) prior to removal by SRNS from mutually agreed upon temporary storage area and relocation to a designated material hold area prior to final disposition by SRNS.
 - C. Light ballasts shall be removed, segregated by PCB containing and non-PCB containing, and placed in containers provided by SRNS for final disposition.
 - D. Exact quantity of ballasts, by type, shall be counted and verified by the subcontractor during the removal process.
 - 1. **ADMINISTRATIVE HOLDPOINT** - Verification and count by GCO of light ballasts prior to removal by SRNS from mutually agreed upon temporary storage area and relocation to a designated material hold area prior to final disposition by SRNS.
 - 2. **ADMINISTRATIVE HOLDPOINT** – For any ballasts found to be leaking, the Subcontractor shall immediately communicate the condition to the STR and the STR will immediately notify the GCO for appropriate management determination.

3.1 General Scope (Continued)

- E. Cut and segregate any lead pipe joints.
 - 1. **ADMINISTRATIVE HOLDPOINT** - Verification by GCO. If pipe joints are found to be lead containing, then collect the item(s) and contact GCO for pick up and disposal options.
- 3.1.1.22 All demolition work shall be planned and supervised by a “Competent Person”.
 - A. This person shall ensure an engineering survey of the building and associated appurtenances listed in Attachment 5.1 is performed.
 - B. The Subcontractor shall be required to prepare an engineering survey/report that outlines the methods, equipment to be used and sequence of events for all deactivation, dismantlement and removal activities, including but not limited to removal and placement in supplied containers of all recyclables, removal and handling of any hazardous materials, segregation, appropriate size reduction and disposition of all materials, etc. Also, include as a minimum a proposed layout/location for office trailers, toilet facilities, equipment staging area, material staging area(s), etc.
 - C. Submit a copy of the Engineering survey or surveys.
 - D. This survey does not require Subcontractor to prepare any drawings.
- 3.1.1.23 Deactivation work (if required) to be performed includes removal of all remaining hazardous materials (such as light bulbs, fluorescent tubes, light ballasts, lead (including pipe joints), emergency lights, light ballasts (PCB and non-PCB), and brass valves). All deactivation activities shall be performed in accordance with an SRNS approved Deactivation Plan and all applicable Federal, State, and local rules and regulations.
 - A. Scrap materials removed during deactivation shall be reduced in size, as necessary.
- 3.1.1.24 Ensure the building slab/foundation are free of all debris and floor coverings at conclusion of demolition activities.
- 3.1.1.25 Ensure all floor penetrations (electrical conduit, piping, floor drains, etc.) have been cut flush with the top of the floor slab or grade, as applicable, and are plugged/filled with non-shrink grout or concrete.
- 3.1.1.26 Ensure any oil stains discovered on the concrete slabs are cleaned using a strong surfactant (i.e. BioSolve®) as part of the final clean-up of the concrete slabs and surrounding area.
- 3.1.1.27 Ensure all protrusions (anchor bolts, etc.) are cut flush with the top of concrete or grade, as applicable, where equipment, structural steel, supports, etc. are removed.
- 3.1.1.28 Any curbing remaining on the building slab or area around the building shall be breached or cleaved at as many locations as necessary to ensure drainage of rainwater.
- 3.1.1.29 Minimize interference with other personnel, roads, streets, etc. during all demolition activities.
- 3.1.1.30 Remove the diverter valve operators and remove or cut off to grade and grout the operator housings located on the east side of the area between the disinfection pit and Building 607-15D.

3.1 General Scope (Continued)

- 3.1.1.31 Remove the cover of the junction box located on the east side of the area between the disinfection pit and Building 607-15D. The junction box will be grouted to the top of the curb.
- 3.1.1.32 The sounding tube at the southeast corner of Building 607-15D will be removed or cut off to grade and grouted.
- 3.1.1.33 All pole-mounted light fixtures are to be removed as Universal Waste. Support poles are to be removed or cut off to grade and grouted (if hollow).
- 3.1.1.34 Following decommissioning of 607-15D, rip-rap and gravel will be removed from within the 607-15D structure down to a minimum of six inch (6") below the top of the side walls and replaced with compacted crusher run material up to the top of the side walls. The structure will then be capped with a 6" thick, reinforced concrete slab, as specified in the 607-15D IWT Permit Interim Closure Plan.
- 3.1.1.35 Work area is not a guaranteed/exclusive work zone accessible only to the Subcontractor and his/her sub-tiers. SRNS will respect the boundaries of the area. However, there may be occasions where Fire and Rescue and/or Security forces require access to the area. Other access by SRNS Engineering and Operations personnel will be limited to as necessary by agreement (such as Asbestos Designer, SRNS Safety, GCO, etc.).
- 3.1.1.36 The subcontractor is responsible for providing Safety Data Sheets, maintaining a chemical inventory of all chemicals brought on site and removing all chemicals at the end of the project.

3.2 Quality Requirements

- 3.2.1 This SOW is a Level 3 procurement – no quality requirements are applicable.

3.3 Site Conditions

- 3.3.1 See Special Provisions / Field Conditions

3.4 Period of Performance / Schedule

- 3.4.1 From the date of award through completion of field activities, including SRNS acceptance, work shall be completed as specified in Subcontract Field Conditions. Demobilization shall be within thirty (30) days of accepted project completion

3.5 Key Personnel Qualification / Certification

- 3.5.1.1 Subcontractor may employ the services of a qualified sub-tier subcontractor to perform the work under this subcontract if approved by SRNS
- 3.5.1.2 Copies of required licenses and worker qualifications shall be submitted to SRNS with the proposal.
- 3.5.1.3 Subcontractor shall have successfully completed projects of similar scope and magnitude within the last five (5) years.
- 3.5.1.4 Subcontractor shall submit qualification documentation with the proposal, including all sub-tier subcontractors, with three (3) references from clients for jobs/projects of similar scope and magnitude.

3.5 Key Personnel Qualification / Certification (Continued)

- 3.5.1.5 These engineers/supervisors are expected to possess a minimum of a bachelor's degree in Engineering and a minimum of five (5) years of experience in similar operations.
 - A. Personnel with extensive experience but without a degree may be submitted for consideration.
- 3.5.2 Every supervisor, worker, building inspector, or management planner shall have any current, required license(s) specific to the duties performed under the license for completion of activities required by this SOW.
- 3.5.3 Assign a full-time Health and Safety Officer (HSO) to the project.
 - 3.5.3.1 The HSO shall have documented evidence of field experience as HSO in areas with comparable demolition activities.
 - 3.5.3.2 Submit HSO resume with proposal
- 3.5.4 Assign a Project Manager/Superintendent who will be responsible for overall contract administration, scheduling and record keeping as well as managing the day-to-day activities of work.
 - 3.5.4.1 The Project Manager/Superintendent shall have demonstrated ability to conduct and manage the project via previous experience with similar projects.
 - 3.5.4.2 Submit Project Manager/Superintendent resume with proposal
- 3.5.5 Assign a full-time competent person/supervisor in accordance with referenced codes, standards, procedures and regulations.
 - 3.5.5.1 Due to the relatively small size of this project, the competent person/supervisor and Project Manager/Superintendent may all be the same person if qualified and accepted as such by SRNS.
 - 3.5.5.2 This/these individuals shall by reason of experience, training, or education be able to identify unsafe fire/life safety acts or conditions and have the authority to "Stop Work" and/or take other corrective action(s), as needed.
 - 3.5.5.3 Submit resume(s) with proposal

3.6 Deliverables and Submittals

- 3.6.1 Required Submittals:
 - 3.6.1.1 Review all documents for completion prior to submission and certify conformance of documents to SOW requirements by signature of the Subcontractor's Authorized Engineering Representative.
 - 3.6.1.2 See Attachment 5.2 "Engineering Document Requirement (EDR)" for deliverables required for this SOW.
 - 3.6.1.3 List the following on each submittal transmittal cover letter:
 - A. Document category number, and applicable SOW Section and paragraph number.
 - B. Document description.
 - 3.6.1.4 Reference the following information on transmittal letters, submittals and other correspondence:

3.6 Deliverables and Submittals (Continued)

Date of transmittal,
Sequence page number and total number of pages on each page,
Subcontractor Name, _____
SRNS Purchase Order (PO) No.: _____ (Defined on Award)
SRNS Project No.: _____ (Defined on Award)
SRNS Project Title: _____ (Defined on Award)
Subcontractor's Order Number: _____

A. Transmit with a completed Transmittal Letter.

3.6.1.5 Provide documentation in unprotected Adobe Acrobat – Portable Document Format (PDF), unless specifically directed otherwise.

- A. Use the latest version available at time of subcontract award.
- B. Files shall print legibly on 8.5 in. by 11 in., 11 in. by 17 in., or 22 in. by 34 in.
- C. Title for PDF file: "SRS PO ..."
 - 1. Append the SRS PO number to end of file name.
 - 2. No symbols such as "&" or "," (comma) can be in the PDF file name.
- D. Include only 1 PO related information per email.
 - 1. Don't send in multiple PO numbers in a single email.
 - 2. Each email is converted to a single vendor package number and assigned to one PO number.
- E. Only PDFs can be sent into email account noted below.
 - 1. Excel, Word, CADD and TIFF formatted files cannot be received.
- F. Zip files
 - 1. Multiple PDF files related to identified SRS PO are acceptable.
 - 2. Include only PDF files - folders within a zip file are unacceptable.
- G. Maximum email size limit: 30 megabytes
- H. Verify each file is virus free.

3.6.1.6 Provide formal transmittal of documentation in Adobe Acrobat (PDF attached to an email (unless directed otherwise by the STR) sent to vendordocuments@srs.gov for:

- A. EDR submittals,
- B. SDDR forms.
- C. Use black markings on white paper.
- D. Paper submittals with less than 30% recycled content are acceptable.

3.7 Packaging, Handling, Shipping, and Storage Requirements (PHSS)

None specified

3.8 Deviations

3.8.1 SDDR Preparation

3.8 Deviations (Continued)

- 3.8.1.1 Prepare a SDDR for each proposed exception to this SOW
 - A. Applies to proposed deviations after award of contract.
- 3.8.2 Perform the following for each deviation;
 - 3.8.2.1 Identify SOW and revision number.
 - 3.8.2.2 Identify criteria that cannot be met by item and SOW section number.
 - 3.8.2.3 Present explanation for the deviation.
 - 3.8.2.4 Present proposal for resolution of the deviation.
 - 3.8.2.5 Present price and schedule adjustment for the proposed resolution of the deviation.
 - 3.8.2.6 Do not perform work on, remove, or install any item for which a SDDR is submitted until a written disposition of the SDDR is received from SRNS.
 - 3.8.2.7 Submit SDDR to STR for disposition prior to SDDR implementation.
- 3.8.3 Nonconformance
 - 3.8.3.1 Identify on a SDDR.
 - 3.8.3.2 Include supporting technical justification when requesting acceptance of a "Use-As-Is" or "Repair" disposition.
 - 3.8.3.3 Attach a copy of the Non-Conformance Report (NCR)
 - 3.8.3.4 Submit SDDR with NCR to STR for disposition prior to SDDR implementation.
- 3.8.4 Prior to close-out
 - 3.8.4.1 Complete the SDDR(s), if any, in accordance with the SDDR instructions.
 - 3.8.4.2 Provide completed SDDR(s) to the STR or with turn-over package.

4.0 ACCEPTANCE OF SERVICES

4.1 Inspection / Examination / Testing

- 4.1.1 Final Acceptance Inspection of New, Altered, or Dispositioned Facilities or Equipment per Manual 8Q, Procedure 51.

4.2 SRNS Surveillance and Audits

- 4.2.1 SRNS STR Verification
 - 4.2.1.1 Verification by GCO of light bulbs (incandescent bulbs, fluorescent bulbs, fluorescent tubes, infrared heat lamp bulbs, emergency lights, strobe lights, etc.) with STR oversight.
 - 4.2.1.2 Verification and count by GCO of Light ballasts with STR oversight.
 - 4.2.1.3 Verification that no internal or external insulation is included with the recyclable waste.
 - 4.2.1.4 Verifications per each respective Decommissioning End Points Document.

4.3 Final Acceptance Method

- 4.3.1 Acceptance of Services
 - 4.3.1.1 Successful completion of a walk down of the facilities by the STR and Subcontractor after completion of all SOW related activities.

4.3 Final Acceptance Method (Continued)

- 4.3.1.2 Confirmation that all submittals have been accepted by SRNS.
- 4.3.1.3 Confirmation that all decommissioning end points have been completed.
- 4.3.1.4 Confirmation of satisfactory performance in accordance with procurement contract as documented by the STR and the SRNS procurement representative, per Manual 11B, Procedure 7.3.
- 4.3.1.5 Successful completion
 - A. Services will be accepted based on achieving the requirements of this SOW, including complete removal and disposal of all specifically identified materials and equipment, clean-up of the facilities, final removal of all equipment and materials utilized in performance of this work, and completion of all punch list items.
 - B. A Final Acceptance Inspection of New, Altered or Dispositioned Facilities or Equipment per Manual 8Q, Procedure 51 will be conducted by applicable SRNS representatives and the performing entity to confirm satisfactory safe condition and proper disposition of facilities listed in the SOW prior to final acceptance.

5.0 ATTACHMENTS

5.1 Photos and Drawings

5.2 Engineering Document Requirements with Instructions (2 Pages)

5.3 Asbestos Management Program Aid (2 Pages)

Attachment 5.1 – Photos and Drawings

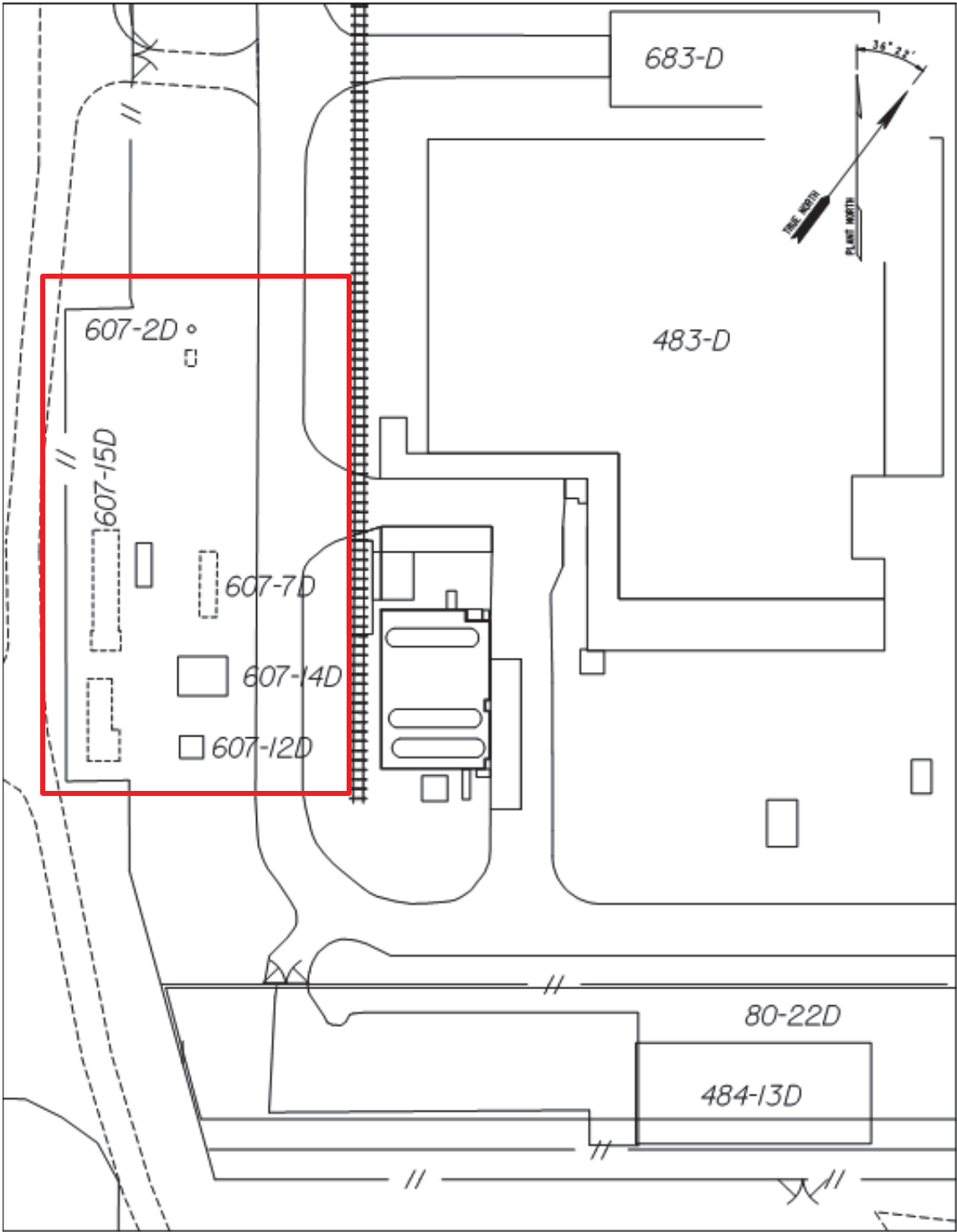


Figure 1. D-Area Wastewater Treatment Facilities Locations

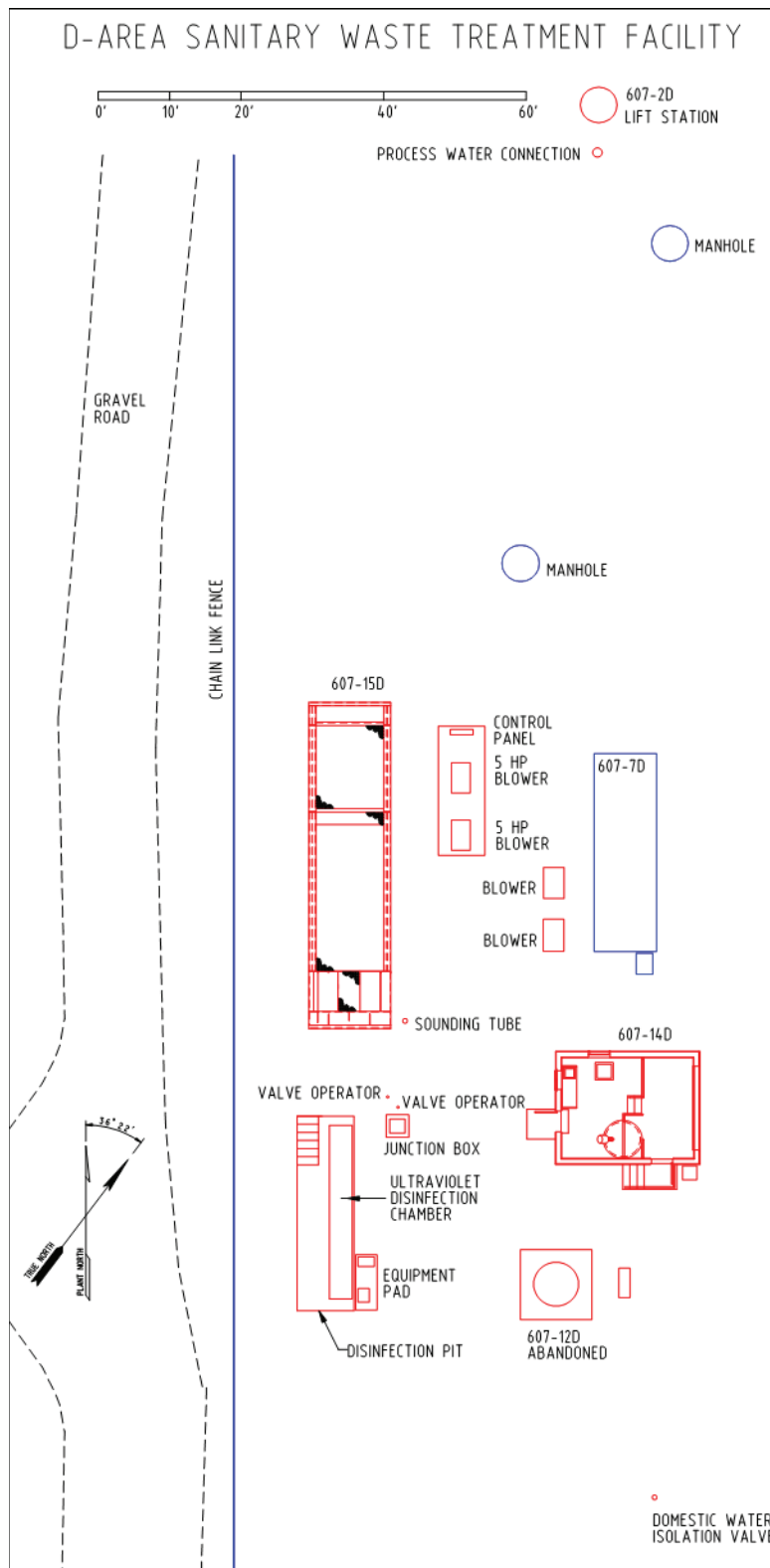


Figure 2. D-Area Wastewater Treatment Facilities Area



Figure 3. Building 607-14D, Chemical Feed Building

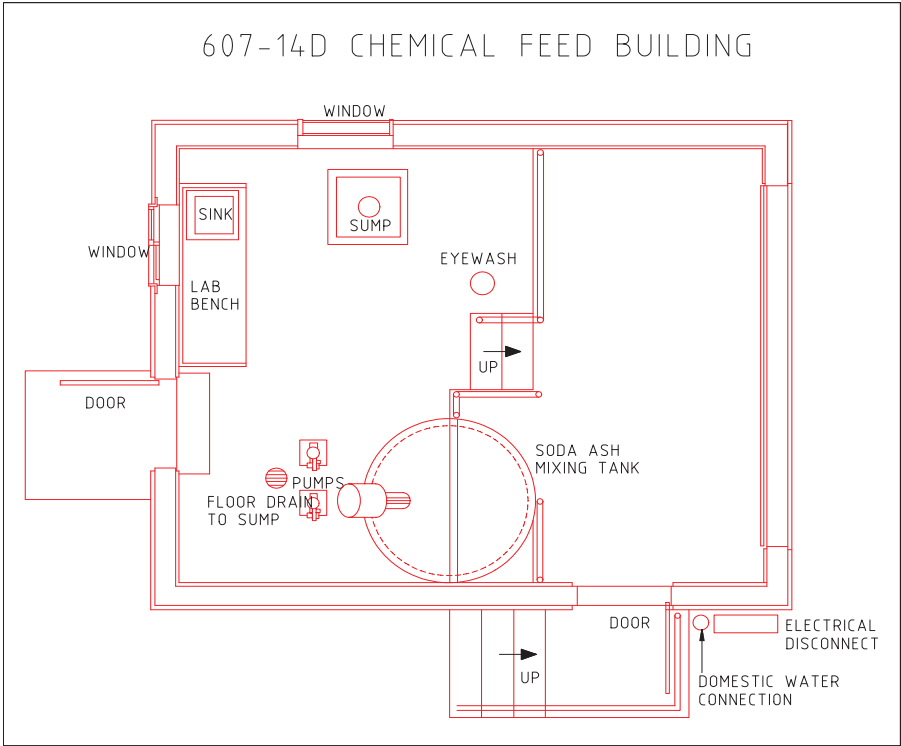


Figure 4. Building 607-14D, Chemical Feed Building Layout



Figure 5. Soda Ash Transfer Pumps/Pedestals (607-14D)



Figure 6. Building 607-14D Collection Sump



Figure 7. Building 607-15D, Sanitary Waste Treatment Plant

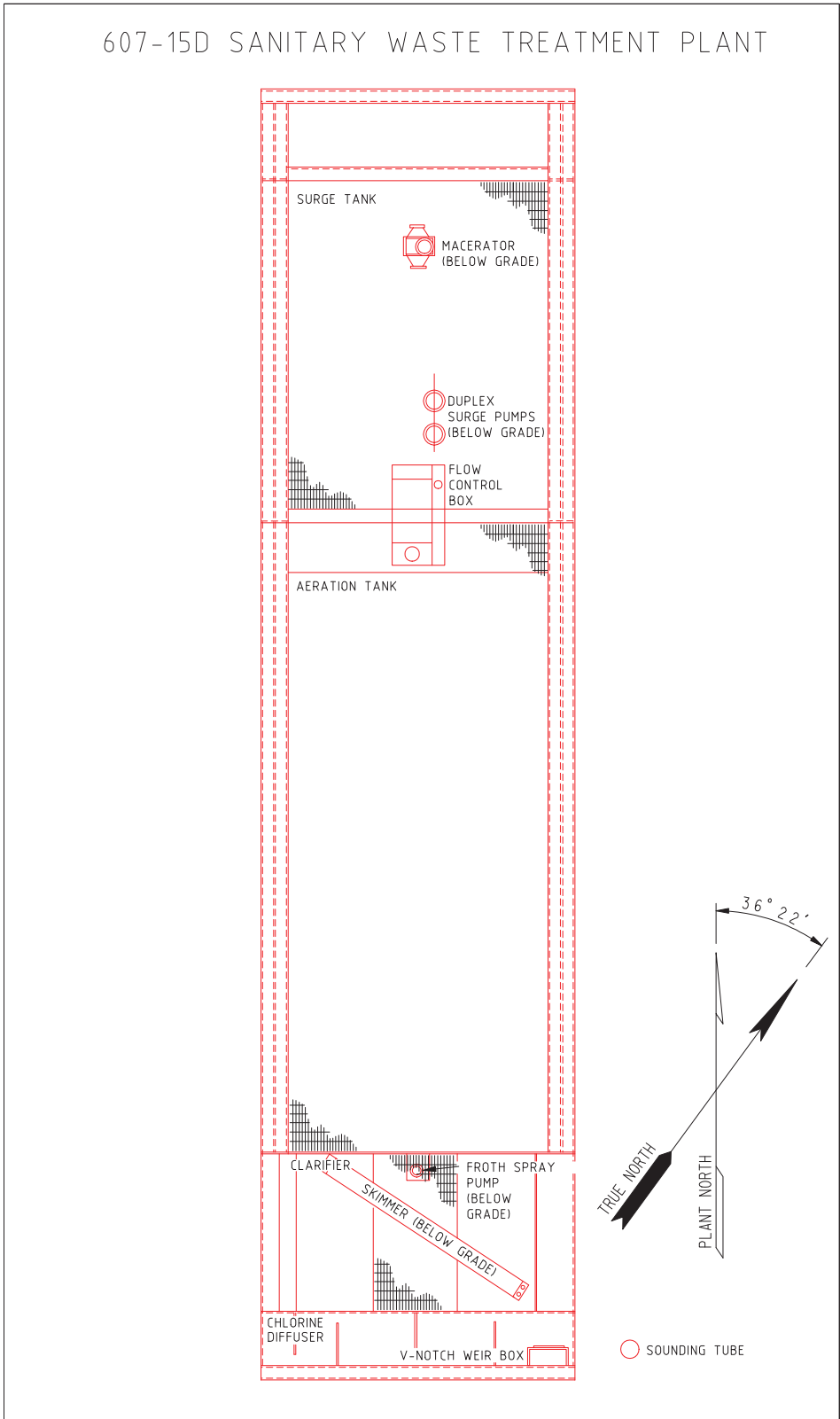


Figure 8. Building 607-15D, Sanitary Waste Treatment Plant



Figure 9. Building 607-15D Blowers



Figure 10. Disinfection Pit



Figure 11. Sanitary Sewage Lift Station 607-12D (currently abandoned)

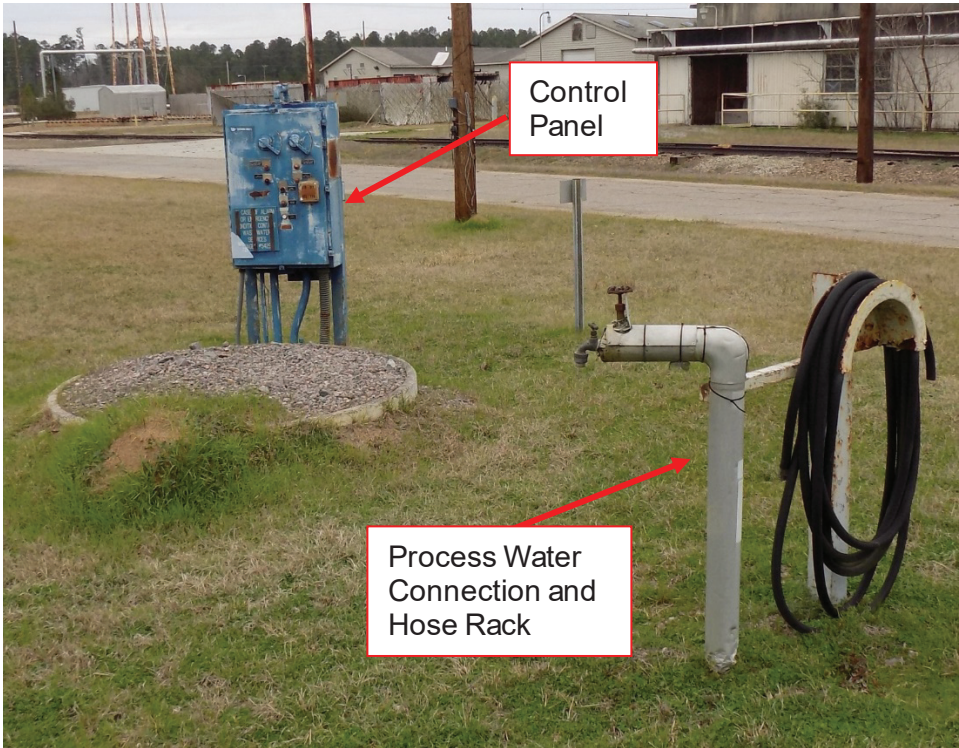


Figure 12. Building 607-2D, Sewage Lift Station #2 and Process Water Hose Connection



Figure 13. 483-6D Surge Basin Remnants

Attachment 5.2 – Engineering Document Requirements

Purpose The Engineering Document Requirements (EDR) form is prepared by the originator, establishes a basis for actions required of a Supplier and provides the schedule for the submittal of engineering documents by the Supplier.

Legend Entry

No.	Information Required
1	Document category number – see below.
2	Applicable specification number and appropriate paragraph.
3	Description corresponding to document category number.
4	Permission to proceed with fabrication or other specific processes is marked yes, if required.
5	List a milestone after award i.e., prior to fabrication, prior to test, prior to shipment, or with shipment that the listed document is to be submitted by Supplier.
6	Number of copies required for submittal.
7	Reproducible, Mylar, Vellum, etc.
8	Enter remarks when appropriate.

Document Category Number and Descriptions

- 1.0 Drawings
 - 1.1 Outline Dimensions, Services, Foundations and Mounting Details – Drawings providing external envelope, including lugs, centerline(s), location and size for electrical cable, conduit, fluid, and other service connections, isometrics and details related to foundations and mountings.
 - 1.2 Assembly Drawings – Detailed drawings indicating sufficient information to facilitate assembly of the component parts of an equipment item.
 - 1.3 Shop Detail Drawings – Drawings which provide sufficient detail to facilitate fabrication, manufacture, or installation. This includes pipe spool drawings, internal piping and wiring details, cross-section details and structural and architectural details.
 - 1.4 Wiring Diagrams – Drawings which show schematic diagram equipment, internal wiring diagrams, and interconnection wiring diagram for electrical items.
 - 1.5 Control Logic Diagrams – Drawings which show paths which input signals must follow to accomplish the required responses.
 - 1.6 Piping and Instrumentation Diagrams – Drawings which show piping system scheme and control elements.
- 2.0 Parts Lists and Costs – Sectional view with identified parts and recommended spare parts for one year's operation and specified with unit cost.
- 3.0 Complete SRS Data Sheets – Information provided by Supplier on data sheets furnished by SRS.
- 4.0 Instructions
 - 4.1 Erection/Installation – Detailed written procedures, instructions, and drawings required to erect or install material or equipment.
 - 4.2 Operations – Detailed written instructions describing how an item or system should be operated.
 - 4.3 Maintenance – Detailed written instructions required to disassemble, reassemble and maintain items or systems in an operating condition.
 - 4.4 Site Storage and Handling – Detailed written instructions, requirements and time period for lubrication, rotation, heating, lifting or other handling requirements to prevent damage or deterioration during storage and handling at jobsite. This includes shipping instruction for return.
- 5.0 Schedules: Engineering and Fabrication/Erection – Bar charts or critical path method diagram which detail the chronological sequence of activities, i.e., Engineering submittals, fabrication and shipment.
- 6.0 Quality Assurance Manual/Procedures – The document(s) which describe(s) the planned and systematic measures that are used to assure that structures, systems, and components will meet the requirements of the procurement documents.
- 7.0 Seismic Data Reports – The analytical or test report which provides information and demonstrates suitability of material, component or system in relation to the conditions imposed by the stated seismic criteria.
- 8.0 Analysis and Design Reports – The analytical data (stress, electrical loading, fluid dynamics, design verification reports, etc.) which demonstrate that an item satisfies specified requirements.
- 9.0 Acoustic Data Reports – The noise, sound and other acoustic vibration data required by the procurement documents.
- 10.0 Samples
 - 10.1 Typical Quality Verification Documents – A representative data package which will be submitted for the items furnished as required in the procurement documents.
 - 10.2 Typical Material Used – a representative example of the material to be used.
- 11.0 Material Descriptions – The technical data describing a material which a Supplier proposes to use. This usually applies to architectural items, e.g., metal siding, decking, doors, paints, coatings.
- 12.0 Welding Procedures and Qualifications – The welding procedure, specification and supporting qualification records required for welding, hard facing, overlaying, brazing and soldering.
- 13.0 Material Control Procedures – The procedures for controlling issuance, handling, storage and traceability of materials such as weld rod.
- 14.0 Repair Procedures – The procedures for controlling materials removal and replacement by welding, brazing, etc., subsequent thermal treatments, and final acceptance inspection.
- 15.0 Cleaning and Coating Procedures – The procedures for removal of dirt, grease or other surface contamination, and preparation and application of protective coatings.
- 16.0 Heat Treatment Procedures – The procedures for controlling temperatures and time at temperature as a function of thickness, furnace atmosphere, cooling rate and methods, etc.
- 19.0 UT – Ultrasonic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by the use of high frequency acoustic energy.
- 20.0 RT – Radiographic Examination Procedures – Procedures for detecting discontinuities and inclusions in materials by x-ray or gamma ray expose of photographic film.
- 21.0 MT – Magnetic Particle Examination Procedures – Procedures for detecting surface or near surface discontinuities in magnetic materials by the distortion of an applied magnetic field.
- 22.0 PT – Liquid Penetrant Examination Procedures – Procedures for detecting discontinuities in materials by the application of a penetrating liquid in conjunction with suitable developing materials.
- 23.0 Eddy Current Examination Procedures – Procedures for detecting discontinuities in materials by distortion of an applied electromagnetic field.
- 24.0 Pressure Test – Hydro, Air, Leak, Bubble or Vacuum Test Procedures – Procedures for performing hydrostatic or pneumatic structural integrity and leakage tests.
- 25.0 Inspection Procedures – Organized process followed for the purpose of determining that specified requirements (dimensions, properties, performance results, etc.) are met.
- 26.0 Performance Test Procedures – Test performed to demonstrate that functional design and operational parameters are met.
 - 26.1 Mechanical Tests – e.g., pump performance, data, valve stroking, load, temperature rise, calibration, environmental, etc.
 - 26.2 Electrical Test – e.g., impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.

Attachment 5.2 – Engineering Document Requirements (EDR)

1.	2.	3.	4.		5.	6.		7.	8.
Document Category Number	Specification Paragraph Reference	Document Description	Permission to Proceed Required		Submittal Schedule	Quantity Required		Kind of Copies	Remarks
			Yes	No		Initial	Final		
4.0	3.1.1.6	Fire Prevention Plan (FPP)	Yes		30 calendar days after Award		1	Repro / PDF	
16.0	3.1.1.6. D.12.a.	Hot Work Permit Procedure	Yes		Prior to any Hot Work operations		1	Repro / PDF	
4.0	3.1.1.7	Worker Protection Plan (WPP)	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.8	Task Specific Plans (TSP)	Yes		10 calendar days prior to start of each task		1	Repro / PDF	
5.0	3.1.1.10	Decommissioning Plan & Activities Schedule	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.13	Approved Demolition Permit(s)	Yes		4 working days prior to start of any demolition activities		2	Repro / PDF	
4.0	3.5.1.2.	Copies of worker qualifications and any required licenses	Yes		With proposal		1	Repro / PDF	
4.0	3.1.1.17	Three Rivers Sanitary Landfill scale ticket for each waste shipment	Yes		After each shipment		1	Repro / PDF	
6.0	3.1.1.22.C	Engineering Survey	Yes		30 calendar days after Award		1	Repro / PDF	

Attachment 5.3 – Asbestos Management Program Aid

Asbestos Management Program	Manual:	3Q
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APPENDIX 8.6

Aid for Determining Demolition License Requirements at the Savannah River Site

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**Aid
for
Determining
Demolition License
Requirements
at the
Savannah River Site**



**Regulatory Integration
and Environmental Services**

March 28, 2012
Revision 2

REVISED 12/27/12 10:10:00AM

Contact your area/
project Environmental
Compliance Authority
for assistance and
more information.



This document is provided as a service
to Savannah River Site organizations
and contractors by the
Regulatory Integration and
Environmental Services Department



**Additional Information
Required for Compliance**

This aid is a supplement to Procedures 3Q 4.14 and 3Q 5.1, and to South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1 as they relate to the demolition of structures. It should not be used as a replacement for compliance with the procedures and regulation. Items to be considered in determining the need for a demolition license:

- A demolition is defined as the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations, the burning of a facility, or the moving of a structure.
- Renovation is the altering of a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos from a facility component.
- A demolition license is required even if no asbestos is present in the building.
- An inspection by a certified asbestos inspector is required before applying for a license.
- SCDHEC requires a 10-day mandatory waiting period after the application is received and before a license can be issued and work begins.
- Start and finish dates are enforced by SCDHEC but can be modified with 24-hour notice to the RI&ES licensing agent.
- SCDHEC licenses and license modifications must be obtained through the RI&ES licensing agents via the following e-mail address:

“ASBESTOS PERMITTING”

or by calling 7-6553.

Attachment 5.3 – Asbestos Management Program Aid

Asbestos Management Program

Manual: 3Q
 Procedure: 4.14
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APPENDIX 8.6

Aid for Determining Demolition License Requirements at the Savannah River Site

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Aid for Determining Demolition License Requirements

Examples of Activities Requiring a Certified Asbestos Inspection/Demolition License

- Buildings/structures being partially/completely demolished
- ALL office trailers demolished/partially dismantled/relocated
- Hand-Houses being demolished
- Portable campers being demolished
- Steaks being demolished/partially demolished

Specifically:

- > Buildings/structures that are affixed to foundation or ground
- > Hand-Houses being demolished
- > Structure that contains load-supporting members, beams, or posts
- > Structure being moved/demolished that has the appearance of "permanency"

A demolition license application, including an inspection report by a certified inspector, is required before any work begins.

A demolition license is required even if no asbestos is present.



ALL trailers relocated/demolished



Building affixed to the ground



Structure with foundation



Load-bearing wall removal



Building with foundation



Porch with structural posts

Examples of Renovations/Relocations Requiring a Certified Asbestos Inspection

- Hand-Houses with tie-downs and/or utilities being moved
- Mobile offices being moved that have permanent utilities
- Renovations that include alteration of facility
- Portable buildings being moved

Specifically:

- > Utility connections the only permanent part of structure
- > Structure temporary in nature
- > Structure temporary, foundation permanent

Renovations require an inspection report from a certified asbestos inspector—stating that asbestos is not present or that the asbestos will not be disturbed during the relocation—before work begins, with the certified report to be kept on file for three years.



Screw-type tie-downs



Permanent electrical tie-in



Electrical connection and restraints



Foundation break of a "sprung structure" requires inspection



Permanent electrical tie-in



Wheels and low tongue make unit appear portable

Examples of Activities Not Requiring Inspection/License

- Containers (Skutznans, Mobile Units) that move—not affixed to the ground
- Hand-House with no utilities—only tie-downs without inground foundation
- Motor homes with no permanent utility connections
- Trailers on stabilizer jacks (temporary)
- "Pony tents" – shelters for craft when performing tasks
- Temporary construction features/equipment
- Portable campers (retract foundations) that are moved but not disassembled

Consentance by the area/project ECA is required prior to beginning work.



Portable tents without utilities



No tie-downs, not disassembled



No tie-downs/no utilities



No tie-downs/no utilities



No tie-downs/no utilities; routinely moved around the site