

Procurement Specification/Statement of Work Cover Sheet

Proc. Ref. E7, 2.14

1. Title Statement of Work for the Abatement of Asbestos Containing Material in D Area Buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D.				Total Pages: 29	
2. Specification/SOW Number G-SOW-D-00009		3. Revision 0		4. Page 1 of 29	
5. Functional Classification GS		6. Requester Department EC&ACP		7. Requester Division M&O	
8. Responsible Engineer/Cognizant Technical Function					
Name Warren May				Date 06 APR 2020	
Title Engineer		Department EC&ACP			
9. Verifier/Checker					
Name J. K. Blankenship				Date 4/7/20	
Title Fellow Engineer		Department EC&ACP			
10. Additional Reviewer					
Name KB for Melissa Hanshew				Date 4/7/20	
Title Operations Support Manager		Department EC&ACP			
11. Cognizant Quality Function					
N/A					
Name				Date	
Title		Department			
12. Responsible Manager					
Name Manuel Terronez				Date 04/07/2020	
Title DAE/CTF Engineering Manager		Department EC&ACP			
13. Other Approver			13a. Other Reviewer		
Name Andrew MacMillan		Date 4-7-2020	Name J. K. Barrineau		Date 4/7/20
Title Control Account Manager		Department ACP	Title Asbestos Project Design Engineer		Department EC&ACP

4/06/2020

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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 safe, intact abatement and disposal of regulated (Friable) and non-regulated (Non-Friable) asbestos containing materials (ACMs) and presumed asbestos containing materials (PACMs) from buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D located in D-Area of the Savannah River Site (SRS) as defined in the procurement documentation including this Statement of Work (SOW).

1.2 General Description of Services

- 1.2.1 This abatement work is being performed to prepare these buildings for decommissioning. This SOW addresses the abatement of all ACMs and presumed asbestos containing materials (PACMs) such as cementitious panels, pipe lagging, mastic, caulking, roof sealant, insulation for electrical wiring, and gaskets in the listed facilities. Additionally, any material interfering with ACM/PACM removal or on which asbestos is applied (cellulose ceiling tiles, gypsum board, etc.) will be abated or removed to prevent exposure to the elements.

1.3 Facility Description

1.3.1 Building 480-3D, Maintenance Field Office and Building

- 1.3.1.1 Building 480-3D is a steel framed structure on a concrete foundation. It was constructed in the 1950's as a Maintenance Field Shop and is approximately 576 SF. The exterior walls and roof are corrugated cementitious panels. The interior finishes include painted gypsum board walls, cementitious wall panels, prefabricated metal walls, resilient floor tile, and a suspended acoustical tile ceiling system. See Diagram 1 and Photo 2 in Section 5.0, Attachments.
- 1.3.1.2 Building 480-3D has approximately 2,300 SF of ACM cementitious panels and associated sealant/backer rod and contains approximately 260 SF of ACM floor tile and associated mastic tiled over the concrete slab. All ACM was non-friable and in good condition (Ref 2.4.2.2). All ACM are expected to be removed intact to the extent possible. Heat machines shall be used to lift floor tiles intact.
- 1.3.1.3 After abatement is completed, this structure will be a skeletal structure of exposed steel studs and rafters. For this reason, cellulose ceiling tiles and gypsum board will be removed as part of the abatement process. The end state will be a slab free of any residual mastic material and completeness will be determined by SRNS asbestos inspection team.

1.3.2 Building 482-2D, Motor Control Center

- 1.3.2.1 Building 482-2D is a prefabricated structure constructed in the 1950's. It is a single-story building with a steel frame, corrugated cementitious siding, and a corrugated cementitious roof. The building is supported by a low-rise (approximately 2') concrete wall and concrete slab with a footprint of approximately 580 SF. See Diagram 2 and Photo 3 in Section 5.0, Attachments.
- 1.3.2.2 Building 482-2D contains approximately 1,500 SF of ACM cementitious panels and associated sealant/backer rod to be removed. The building also contains electrical wires and arc shoot plates which contain suspected ACM. The wires and plates were inaccessible for samples. Electrical wiring will not be removed during this abatement process but will be removed later during the decommissioning process. At the time of inspection, all ACM was non-friable and in good condition to be removed (Ref 2.4.2.3).
- 1.3.2.3 The end-state for this structure will be a skeletal structure of exposed steel studs and rafters.

1.3.3 Building 484-4D, Power Maintenance Building

- 1.3.3.1 Building 484-4D is a circa 1980' s, approximately 11,000 SF structure. The building is abandoned but was previously used as a maintenance support facility. It is a steel framed structure with raised seam metal siding and roofing on a concrete slab. Interior finishes include resilient floor tile, terra cotta tile, painted gypsum board walls, decorative wood paneling, and suspended acoustical ceiling tile systems. See Diagram 3 and Photo 4 in Section 5.0, Attachments.
- 1.3.3.2 Building 484-4D has approximately 1,700 SF of ACM mastic underneath non-ACM floor tiles. Approximately 100 SF of White ACM sealant is present in the seams and joints of the metal roofing. An additional 2 SF of ACM caulking was identified on small piping penetrations. All ACM are expected to be removed intact to the extent possible. Heat machines shall be used to lift floor tiles intact. At the time of sampling, all ACM was non-friable and in good condition (Ref 2.4.2.4).
- 1.3.3.3 After abatement is completed, portions of the roof may be removed which would expose interior ceiling tiles and gypsum board. The Subcontractor should cover any openings with material suitable for mitigating any water intrusion (i.e. a tarp). The end state will be a slab free of any residual mastic material and completeness will be determined by SRNS asbestos inspection team.

1.3.4 Building 485-D, Cooling Tower

- 1.3.4.1 Building 485-D was constructed in 1952 and is a standard updraft industrial cooling tower. The building is constructed of wood, steel, concrete and corrugated fiberglass panels, and has a footprint of approximately 3,800 SF. The facility sits on a reinforced concrete basin. See Diagram 4 and Photo 5 in Section 5.0, Attachments.
- 1.3.4.2 Building 485-D has 8 linear feet of ACM canvas pipe wrap on the cooling water piping on the south side of the tower at ground level. During the inspection, samples were not taken of any gaskets but are suspected ACM. Gaskets will not be removed during this abatement process but will be removed later during the decommissioning process. At the time of sampling, all ACM was non-friable and in good condition (Ref 2.4.2.5).
- 1.3.4.3 The final end-state for this structure will leave it intact. ACM portions of canvas pipe wrapping will be removed. This activity will require excavation approximately 1 ft around the pipe and removal of visible pipe wrap down to approximately 1 ft below grade, and then re-grade.

1.3.5 Building 704-7D, Administration Building

- 1.3.5.1 Building 704-7D was constructed in the 1990's with a footprint of approximately 4,200 SF. The building has a wood frame construction with vinyl siding and an asphalt shingle roof. The foundation of the building is concrete pillars and the crawl space is enclosed with plywood sheeting. Several wooden decks with stairs provide access. The interior is divided into offices and common areas. There is an attached wing comprised of multiple offices and restroom facilities, each having its own access. Interior finishes include wood veneer paneling and an acoustical ceiling tile system. The flooring consists of resilient floor tile, resilient sheet flooring, and carpet, all installed over a plywood sub-floor. See Diagram 5 and Photo 6 in Section 5.0, Attachments.
- 1.3.5.2 Building 704-7D has approximately 50 SF of ACM roofing sealant located in roof valleys and around roof penetrations. At the time of sampling, all ACM was non-friable and in good condition (Ref 2.4.2.6).

- 1.3.5.3 Abatement of ACM portions of windows and the roof will expose interior spaces to the elements. The Subcontractor should cover any openings with material suitable for mitigating any water intrusion (i.e. a tarp or plywood panel).

2.0 REFERENCES

2.1 Definitions

2.1.1 Acronyms

ACM	Asbestos Containing Material
ACP	Area Completion Projects
AHERA	Asbestos Hazard Emergency Response Act
C&D	Construction and Demolition
CFR	Code of Federal Regulations
D&D	Deactivation and Decommissioning
DOE	Department of Energy
ECA	Environmental Compliance Authority
EPA	Environmental Protection Agency
EC&ACP	Environmental Compliance and Area Completion Projects
GCO	Generator Certification Official for SRS waste
LF	Linear Feet
OSHA	Occupation Safety and Health Administration
PACM	Presumed Asbestos Containing Materials
RCRA	Resource Conservation and Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SOW	Statement of Work
SF	Square Feet
SRNS	Savannah River Nuclear Solutions
SRS	Savannah River Site
STR	Subcontract Technical Representative
S&M	Surveillance & Maintenance
SW	Solid Waste
USDOE	United States Department of Energy

2.1.2 Terms

- 2.1.2.1 Hold Point: A designated verification beyond which work does not proceed until verification is performed and documented by a Subcontract Technical Representative (STR).
- 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 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 Facility: Any building, structure, or other improvement to real property including their 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.

2.2 Codes / Standards

2.2.1 General

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

2.2.2 Required 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
- A. 29 CFR 1910.1001, Subpart Z, Asbestos
- 2.3.1.3 29 CFR 1926 – Safety and Health Regulations for Construction
- A. 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 40 CFR 763, Subpart G, Asbestos
- 2.3.1.6 S.C. Reg. R61-86.1, Standards of Performance for Asbestos Projects
- 2.3.1.7 S.C. Reg. 61-107.19, Solid Waste Landfill Regulation

NOTE: This SOW is based on codes and standards with a date of issue that is current on the date proposals are received, unless noted otherwise. The use of any other edition, addenda, revision or issue requires SRNS concurrence before use.

Drawings listed in Section 2.4.1 are intended to assist the Subcontractor in planning his work and provide a better understanding of the building and its associated equipment/appurtenances

2.4 SRNS Documents

2.4.1 Drawings

- 2.4.1.1 W138795, Chemical BLDG 480-3D For Cooling Tower.
- 2.4.1.2 D117590, Switchgear Building No 485D Architectural & Steel
- 2.4.1.3 W136318, Cooling Tower Plan and Elevations Arrg't of Circ. Water Pumps.
- 2.4.1.4 W136401, Cooling Tower- Building 485-D Circulating Water Pit and Pump Well Plan and Sections.

2.4.1.5 W137770, Cooling Tower – Building No. 485-D Electrical Arrangement- Switchgear BLDG and Conduit Plan.

2.4.2 Documents

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

2.4.2.2 Q-APG-D-00010, Baseline Asbestos Inspection Report of Building 480-3D.

2.4.2.3 Q-APG-D-00006, Baseline Asbestos Inspection Report of Building 482-2D.

2.4.2.4 Q-APG-D-00005, Baseline Asbestos Inspection Report of Building 484-4D.

2.4.2.5 Q-APG-D-00026, Baseline Asbestos Inspection Report of Building 485-D.

2.4.2.6 Q-APG-D-00016, Baseline Asbestos Inspection Report of Building 704-7D.

3.0 WORK REQUIREMENTS

3.1 Task Requirements

3.1.1 Employ all measures as required to protect personnel and the environment during the performance of this deactivation and 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, 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. 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 (GET)
2. Remote Worker Training
3. Emergency Response Briefing
4. Site Badging
5. Site Clearance Permit
6. ACP Waste Generator/Waste Verifier Training and Area Specific Training

B. Asbestos project design/management services to represent SRNS for the duration of abatement activities

C. Independent third-party contractor to conduct barricade and clearance air monitoring services as required during deactivation and decommissioning of Buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D.

D. Accumulation Areas and receptacles, as necessary, for all universal waste (light bulbs, ballasts, etc.).

E. Special Waste Manifests/Worksheets for the disposition of asbestos as well as special waste materials to the Three Rivers Landfill.

F. Work completed prior to Subcontractor mobilization shall include:

1. Asbestos inspections of all affected structures, facilities, pipes, etc. prior to award of contract.
2. Isolate, relocate, and/or eliminate all power/communications systems.
3. Buildings mechanically and electrically isolated rendering the buildings “Cold and Dark”.

- 3.1.1.5 Prepare and submit a Fire Protection Plan (FPP) that defines and establishes the process and program for protecting life and property from fire during deactivation and decommissioning operations.
- 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 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 facility
 - 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
 - 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.
- 3.1.1.6 Prepare a Worker Protection Plan (WPP) and submit for abatement activities in all buildings and all associated appurtenances as described herein.
- 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 abatement effort.
 - B. No work shall be allowed to start until WPPs have been reviewed and accepted by SRNS.
 - C. 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 well-being of those involved in those activities.
 - D. Work shall be performed in accordance with approved and accepted WPPs.
 - E. Describe the implementation requirements of 10 CFR 851, 29 CFR 1910 and 29 CFR 1926 for this abatement scope.
 - F. Proposed location(s) for parking individual workers' vehicles.
 - G. Proposed location(s) for lay-down and material sorting/segregating areas.
 - H. Proposed areas for loading SRNS supplied skip pans, containers, trucks, etc.
- 3.1.1.7 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 shall be allowed to start until TSPs covering the specific task(s) 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. Work shall be performed in accordance with SRNS approved and accepted TSPs
- 3.1.1.8 Verify the existing physical conditions, utilities, dimensions and details affecting the work in each facility/area/site of this project.
- 3.1.1.9 Prepare an Abatement Plan and Activities Schedule which identify in detail the step-by-step activities associated with the asbestos abatement of Buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D 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. ACM or PACM, including identified friable and non-friable ACM on piping and equipment which shall be removed via component method to the extent possible. Glove bag a section to cut and remove component with asbestos material intact.
Steps:
 - a. Wrap
 - b. Glove bag
 - c. Cut
 - d. Dispose
 - 2. Hazardous materials (such as lead pipe joints which shall be segregated from recyclable materials), and any other hazardous materials discovered during abatement activities not previously removed will be turned over to the SRNS GCO.
 - 3. Universal waste discovered during abatement activities will be turned over to the SRNS GCO.
 - 4. Recyclable materials
 - D. No work or abatement activities shall start until the Abatement Plan and Activities Schedule has been reviewed and accepted by SRNS.
 - E. Any deviation or variances of the asbestos abatement requirements as set forth must be submitted on an SDDR for review and approval by the SRNS Asbestos Project Designer. Acceptance or denial of these are the final decision.
- 3.1.1.10 Inform the SRNS 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. For any spill of Regulated Asbestos Containing material, a response action will be directed by the SRNS Asbestos Project Designer.
 - C. Subcontractor is responsible for performing remedial actions.
- 3.1.1.11 Obtain asbestos permit(s) as required by South Carolina Department of Health and Environmental Control (SCDHEC) Codes and Regulations, SC Reg. R61-86.1, Section V, for Buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D.
- A. In accordance with 40 CFR Part 61.145 permit(s) shall be requested at least ten (10) working days before asbestos stripping or removal work or any other activity (deactivation/decommissioning) begins.
 - B. Submit two (2) copies of the SCDHEC approved asbestos permit(s) to SRNS.

- 3.1.1.12 Regulated (friable or those which can be rendered friable) asbestos containing materials (ACMs) and presumed asbestos containing materials (PACMs) listed in Asbestos Inspection Documents referenced in section 2.4.2 shall be removed, packaged, and disposed of at The Three Rivers Solid Waste Authority in accordance with all applicable Savannah River Site (SRS), Federal, State of South Carolina (SC) and local (county) codes, guide lines, standards, orders or regulations, and SRNS Waste Stream Manifests/Worksheets.
- A. It is the obligation of the Subcontractor to verify the information presented in the Asbestos Inspection Documents.
 - B. Perform abatement, packaging, manifesting, transportation, and disposal of asbestos waste.
 - 1. Work shall be conducted and completed within the time frame specified on each SCDHEC asbestos permit and shall be conducted only by qualified personnel.
 - 2. No asbestos work shall be conducted prior to receiving the necessary SCDHEC permit(s).
 - 3. Waste receptacles, waste packaging, waste labeling and storage conditions for asbestos waste shall meet the requirements of SC Reg. 61-86.1 and 29 CFR Part 1926,1101 including Subpart Z.
 - a. Structurally sound waste receptacles shall be provided by the Subcontractor for asbestos waste generated during these activities.
 - b. Separate, structurally sound waste receptacles shall be provided by the Subcontractor for any ancillary C&D waste generated during abatement activities.
 - 4. All asbestos abatement shall be done by a licensed Abatement contractor.
 - 5. During asbestos abatement, ensure the work area is restricted to qualified personnel.
 - 6. Work plans for abatement activities shall include provisions to keep all asbestos materials adequately wet, non-friable and basically intact.
 - 7. An inspection of the buildings and surrounding area will be conducted at completion of abatement activities to assure no asbestos contamination is present.
 - C. Erect barricades, containment and signage as necessary around the perimeter of the work area.
 - 1. The barricaded area shall be plainly visible and include an entrance providing safe access into and out of the barricaded area.
 - D. All non-radiological, friable and non-friable asbestos waste shall be placed in double-plastic lined containers (burrito wrap) as it is removed for bulk disposal recommended at the Three Rivers Solid Waste Authority at 9900 Atomic Rd. (SC Highway 125), Jackson, SC 29831. Each container shall be lined with 2 each 10 mil plastic liners.
 - E. SRNS GCO, with support provided as necessary by the subcontractor, shall submit copies of forms and records required by the State of South Carolina (SC) documenting and verifying proper removal, disposal and receipt by the Three Rivers Landfill after each shipment of ACM and PACMs.
 - F. The Subcontractor Asbestos Hazard Emergency Response Act (AHERA) supervisor is responsible for overseeing removal of all regulated and nonregulated ACMs and/or PACMs as specified in the asbestos inspection report.
 - G. Non-friable asbestos waste shall be handled in a manner that will not render it friable.
 - H. Submit copies of the Three Rivers Sanitary Landfill scale ticket for each waste shipment.

- 3.1.1.13 Minimize interference with other personnel, roads, etc. during all asbestos abatement activities at Buildings 480-3D, 482-2D, 484-4D, 485-D, and 707-4D.
- 3.1.1.14 Work area is not a guaranteed/exclusive work zone accessible only to the Subcontractor. 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.).
- 3.1.1.15 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 None identified.

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 Personnel Qualification / Certification

- 3.5.1 Subcontractor shall be fully licensed by SCDHEC to perform asbestos work.
 - 3.5.1.1 Subcontractor may employ the services of a qualified Sub-Tier Subcontractor to perform the asbestos work if approved by SRNS
 - 3.5.1.2 Copies of required licenses and worker qualifications shall be submitted to Savannah River Nuclear Solutions, LLC (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.
 - 3.5.1.5 These engineers/supervisors are expected to possess a minimum of a bachelor's degree in Engineering, or similar technical field of study, 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 a current and valid license (asbestos abatement), and any other required licenses 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 radiological, asbestos and lead hazards.
 - 3.5.3.2 Submit 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 the 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 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 A "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:
 - Date of transmittal,
 - Sequence page number and total number of pages on each page,
 - Subcontractor Name,
 - SRNS Purchase Order 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 inches by 11 inches, 11 inches by 17 inches, or 22 inches by 34 inches.
 - 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 Portable Document Format (PDF) attached to an email (unless directed otherwise by the STR) sent to vendordocuments@srs.gov for:

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

3.7 Marking and Identification

None specified.

3.8 Deviations

3.8.1 Supplier Deviation Disposition Request (SDDR) Preparation

3.8.1.1 Prepare a SDDR for each Sub Contractor proposed deviation from the technical or quality requirements of this procurement.

- A. Applies to proposed deviations after award of contract.
- B. Use to request material substitution "SRNS accepted equal".

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 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 Transmit SDDR to SRNS STR for disposition.

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) prepared in accordance with your Quality Assurance Program.

3.8.3.4 Submit SDDR with NCR to SRNS STR for disposition.

3.8.4 Prior to turn-over

3.8.4.1 Complete the SDDR(s), if any, completely filled out including Subcontractor QA representative signature / date 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 Inspections / Examinations

None

4.1.2 Testing

None

4.2 SRNS Surveillance and Audits (HOLD POINTS)

4.2.1 SRNS STR Verification

4.2.1.1 Verification of removal and disposal of all regulated (friable and/or potentially friable) ACMs/PACMs.

4.3 Final Acceptance Method

4.3.1 Acceptance of Service

4.3.1.1 Successful completion of a walkdown activity of the system by the STR and Subcontractor after abatement activities are completed.

4.3.1.2 Confirmation that all EDR and QVDR have been submitted, reviewed and SRNS accepted.

4.3.1.3 SDDRs have been dispositioned by SRS engineering and completed in accordance with SDDR Instructions.

4.3.1.4 Confirmation of satisfactory performance in accordance with procurement contract as documented by the STR and the SRNS procurement representative.

5.0 ATTACHMENTS

5.1 Diagrams

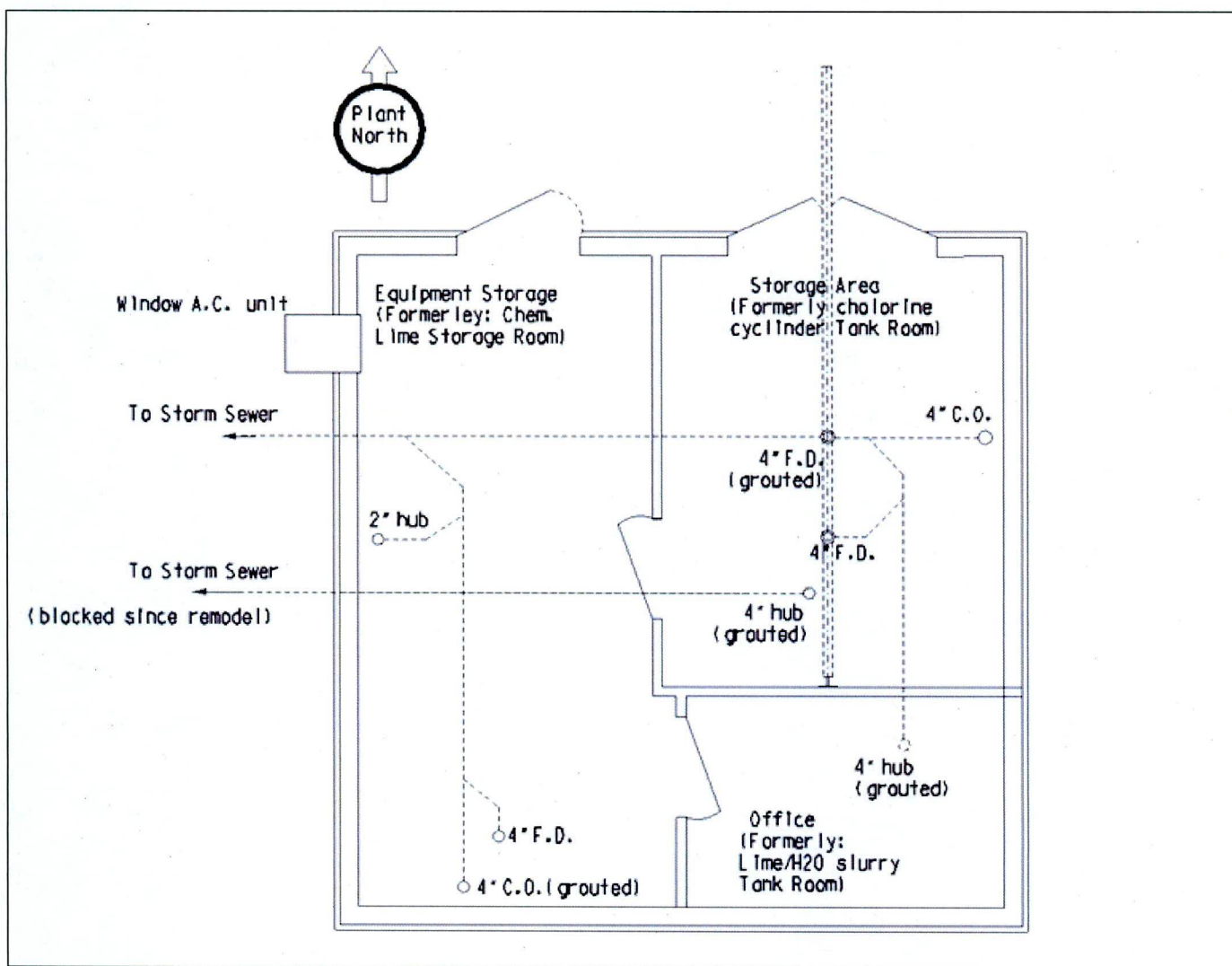


Diagram 1: 480-3D

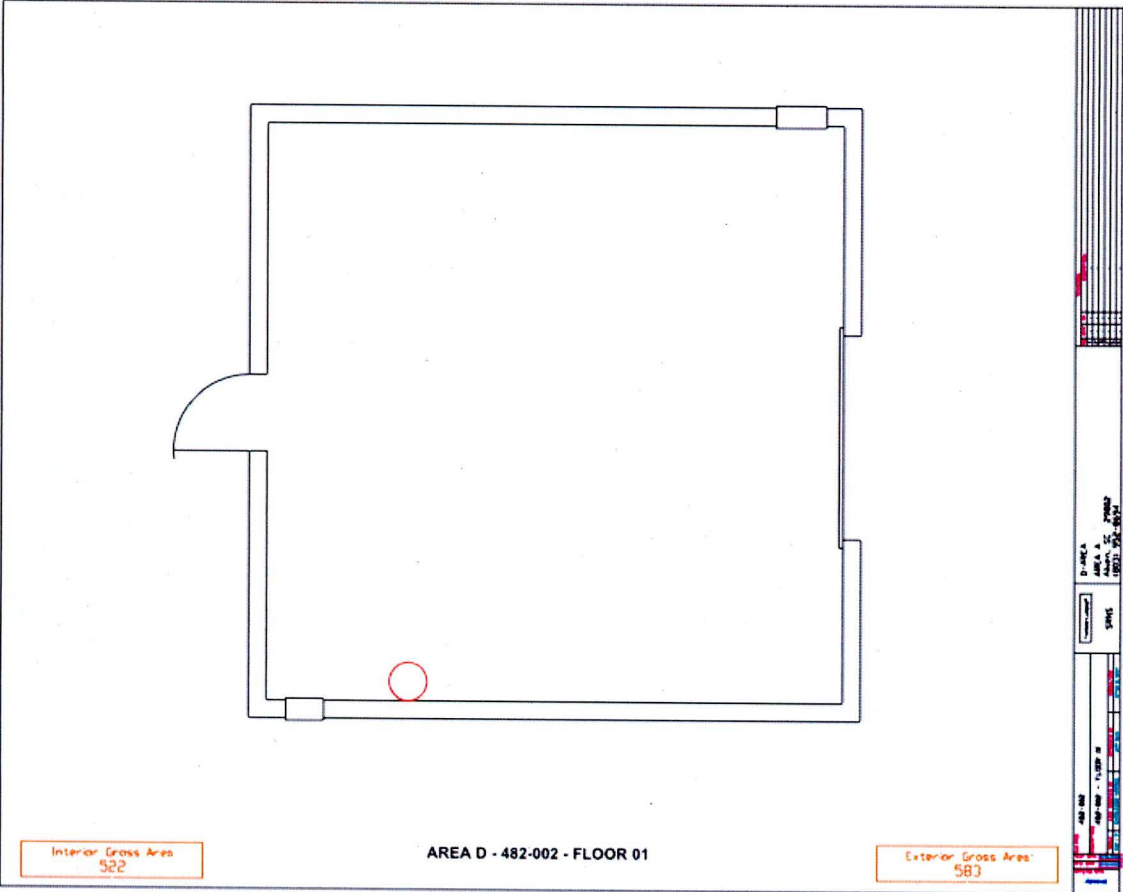


Diagram 2: 482-2D

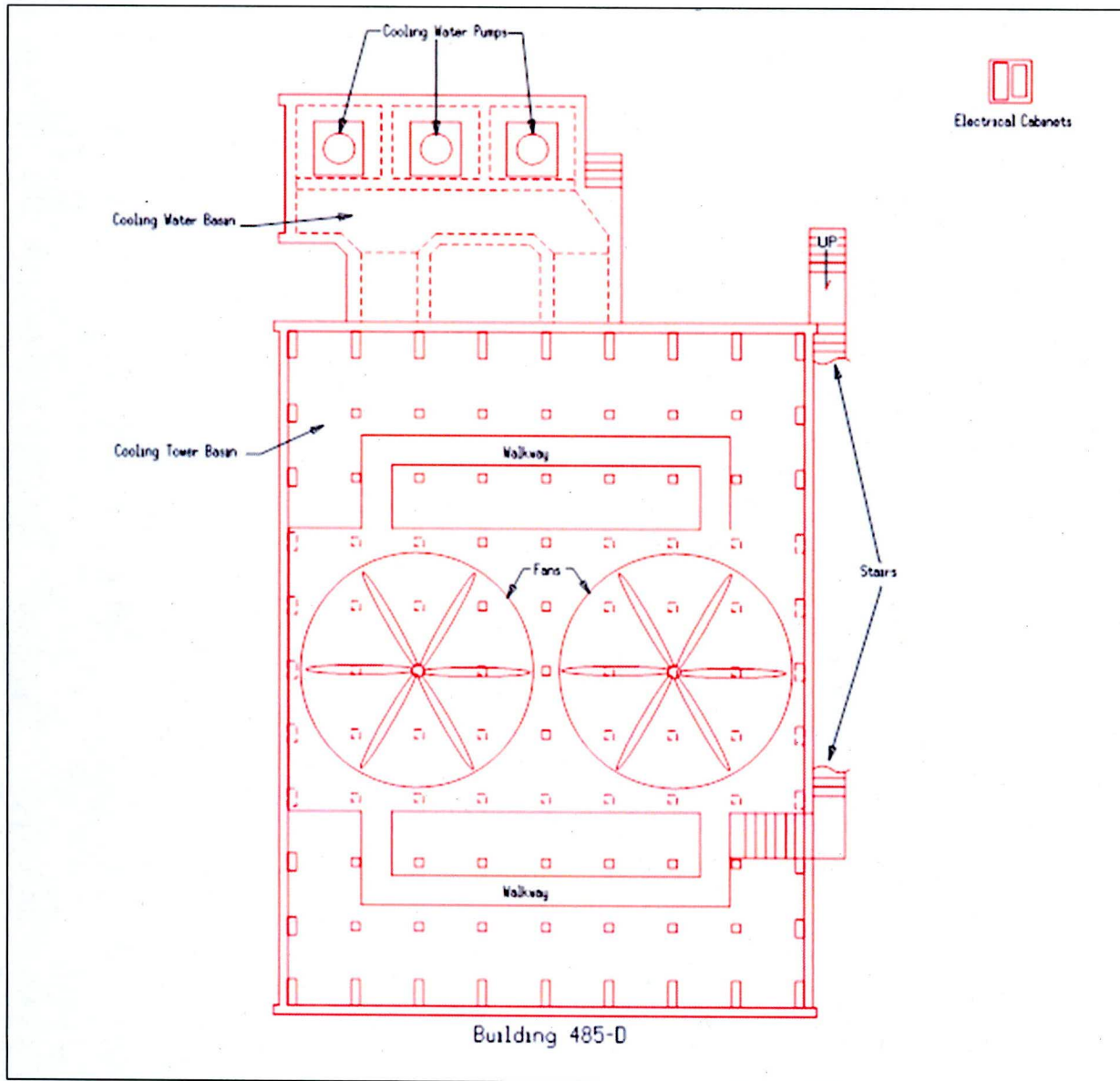
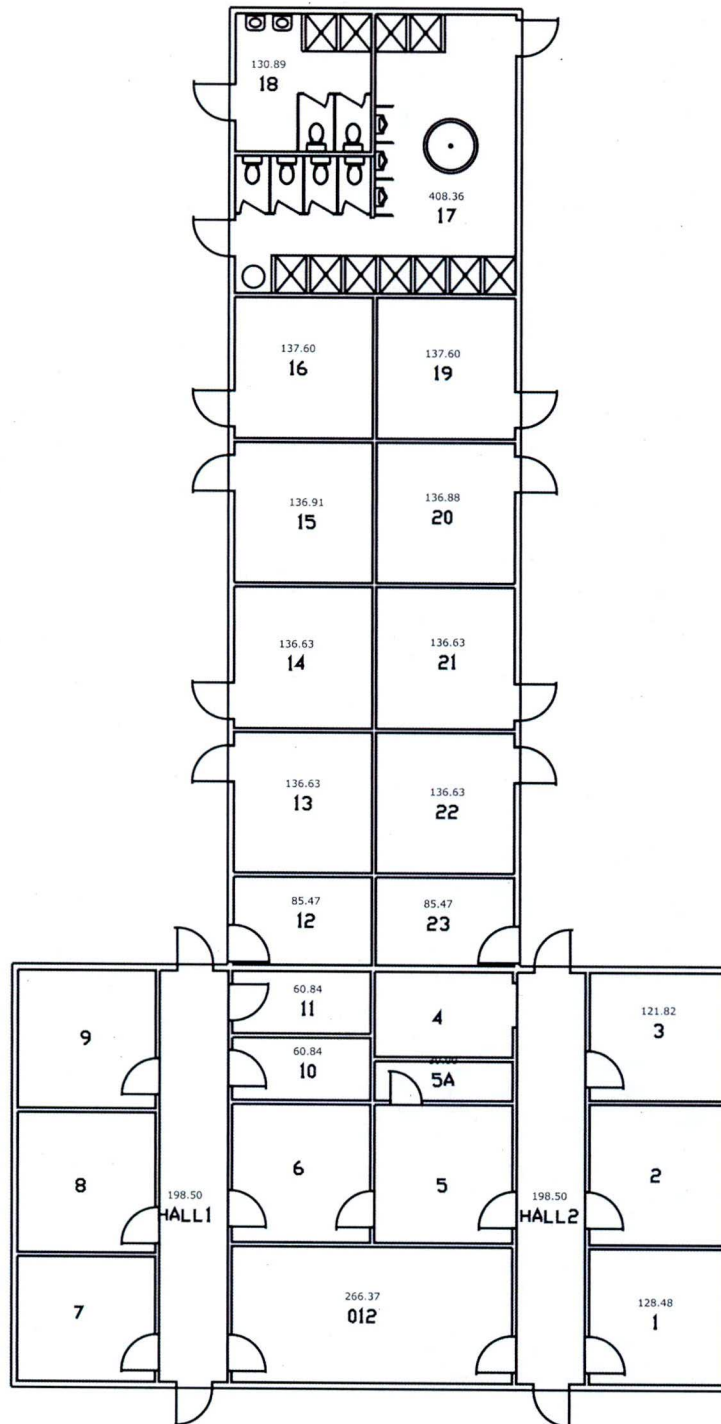


Diagram 4: 485-D



AREA D - 704-007 - FLOOR 01

Diagram 5: 704-7D

5.2 Photos

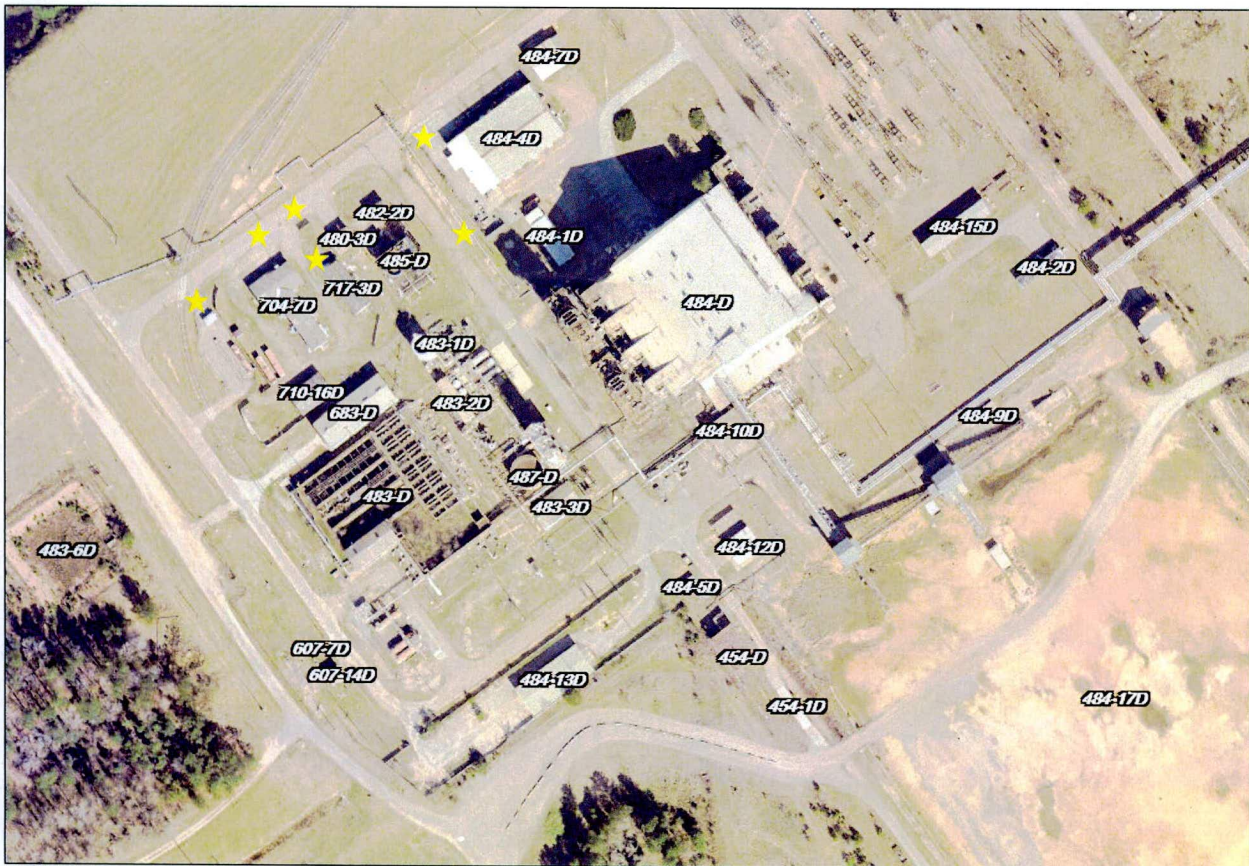


Photo 1 - D Area Aerial View.



Photo 2 - Building 480-3D.



Photo 3 - Building 482-2D.

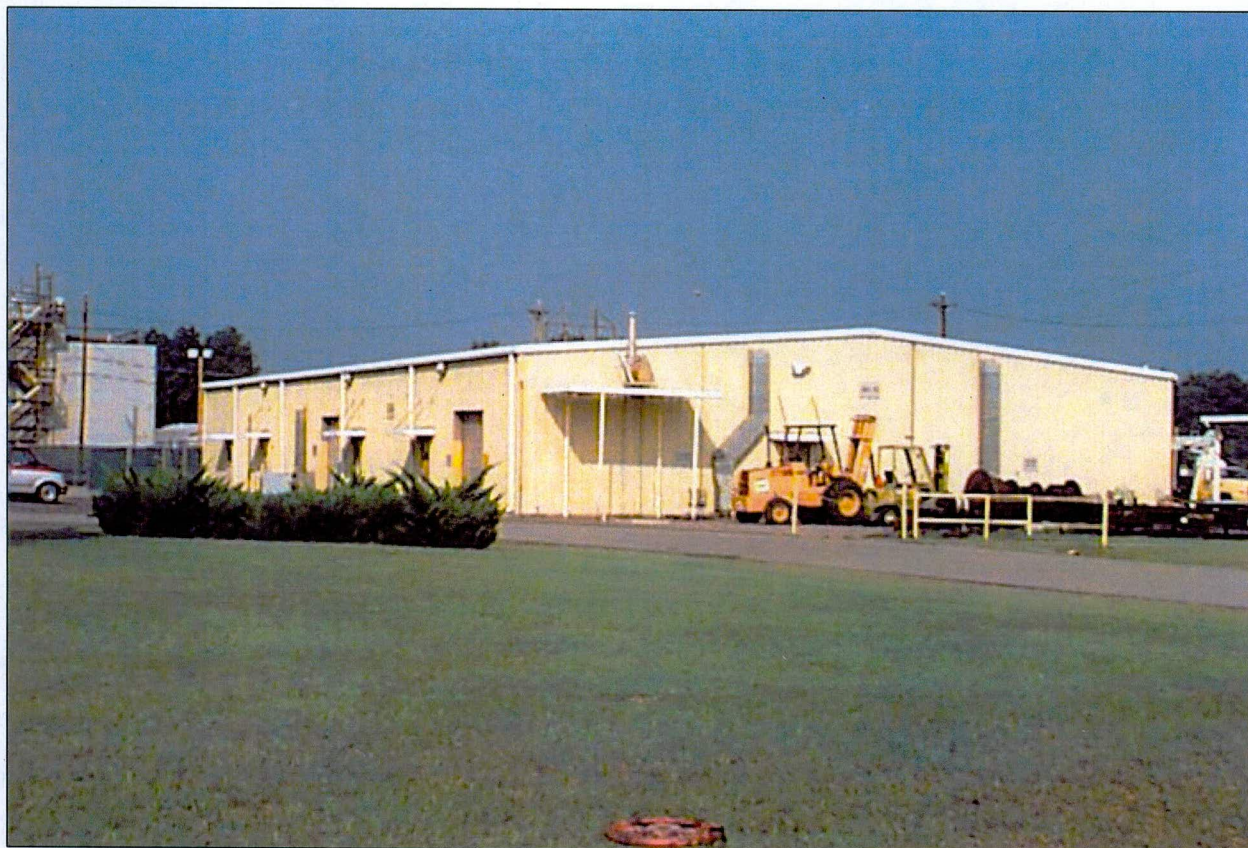


Photo 4 - Building 484-4D



Photo 5 - Building 485-D.



Photo 6 - Building 704-7D.



Photo 7 - 704-7D Side view.

5.3 Documents

5.3.1 Document Requirements

Document Requirements (EDR)

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.

5.3.2 Engineering Document Requirements (EDR)

Engineering Document Requirements (EDR)

1. Document Category Number	2. Specification Paragraph Reference	3. Document Description	4. Permission to Proceed Required		5. Submittal Schedule	6. Quantity Required		7. Kind of copies	8. Remarks
			Yes	No		Initial	Final		
4.0	3.1.1.5	Fire Prevention Plan (FPP)	Yes		30 calendar days after Award		1	Repro / PDF	
16.0	3.1.1.5. D.12.a.	Hot Work Permit Procedure	Yes		Prior to any Hot Work operations		1	Repro / PDF	
4.0	3.1.1.6	Worker Protection Plan (WPP)	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.7	Task Specific Plans (TSP)	Yes		10 calendar days prior to start of each task		1	Repro / PDF	
5.0	3.1.1.9	Asbestos Abatement Plan & Activities Schedule	Yes		30 calendar days after Award		1	Repro / PDF	
4.0	3.1.1.11.B	Approved Asbestos Permit(s)	Yes		4 working days prior to start of any asbestos abatement activities		2	Repro / PDF	
4.0	3.1.1.12.F.	Forms and records documenting receipt of ACM / PACM by the Three Rivers Landfill	Yes		After each shipment		1	Repro / PDF	
4.0	3.1.1.12.I	Three Rivers Sanitary Landfill scale ticket for each waste shipment	Yes		After each shipment		1	Repro / PDF	
6.0	3.1.1.16.A	Engineering Survey	Yes		30 calendar days after Award		1	Repro / PDF	