



Department of Energy

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August 13, 2021

Mr. Brian Begley
Federal Facility Agreement Manager
Division of Waste Management
Kentucky Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-10013172-21

Mr. Victor Weeks
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Dear Mr. Begley and Mr. Weeks:

TRANSMITTAL OF THE SITE EVALUATION REPORT FOR THE C-750 GARAGE, C-750 GARAGE SLAB AND UNDERLYING SOILS, AND ASSOCIATED OUTSIDE AREAS (AREA OF CONCERN 573) AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, DOE/LX/07-2466&D1

In accordance with Appendix 4 of the approved Site Management Plan (SMP) of the Paducah Federal Facility Agreement (FFA), the U.S. Department of Energy (DOE) is submitting the *D1 Site Evaluation Report for the C-750 Garage, C-750 Garage Slab and Underlying Soils, and Associated Outside Areas (Area of Concern 573) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2466&D1 (SE)*, to the U.S. Environmental Protection Agency (EPA) and the Kentucky Department for Environmental Protection (KDEP) for review and comment. A joint policy issued under the DOE and EPA memorandum, dated May 22, 1995, *Policy on Decommissioning Department of Energy Facilities Under CERCLA*, establishes a framework for conducting the decommissioning of DOE facilities and provides guidance on the use of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response authority to decommission DOE facilities. This policy states that DOE is required to conduct a removal site evaluation, in accordance with the National Contingency Plan and interagency agreements (i.e., FFA) to assess site conditions and determine whether a release, or substantial threat of release, exists at the facility. DOE, EPA, and KDEP have agreed to conduct decontamination and decommissioning activities for those facilities that pose an environmental release threat at the Paducah Site under the existing FFA. Section IX, Site Evaluation(s), of the FFA requires DOE to conduct integrated site evaluations that consist of the removal site evaluation, remedial site evaluation, and solid waste management unit (SWMU) assessment report. These integrated site evaluations are to be documented in an SE report.

The C-750 facility is listed in Appendix 4 of the fiscal year (FY) 2021 SMP under the Detailed Facility Decontamination and Decommissioning Operable Unit (OU) Facilities List as pending an SE. Information was identified that warranted the designation of the C-750 slab and underlying soils and two outside areas associated with C-750 operations as an area of concern (AOC). Submittal of the enclosed SE report serves as the notification required by Kentucky Hazardous Waste Management Facility Permit KY8-890-008-982 (Permit) Condition IV.B.1 and serves as a SWMU assessment report for the newly identified AOC in accordance with Condition IV.B.2 of the Permit. This AOC is designated as AOC 573. DOE requests that AOC 573 be added to Appendix A of the Permit during the next Permit update. Additionally, the enclosed SE report recommends a Resource Conservation and Recovery Act Facility Investigation for AOC 573. The AOC will be assigned to the Soils and Slabs OU in Appendix 4 of the FY 2022 SMP.

The enclosed SE recommends that a CERCLA action for the facility is not necessary for demolition of the C-750 facility aboveground structure. Upon approval, Appendix 4 of the SMP will be updated to indicate that the CERCLA non-time-critical removal action is not required for this facility. The date of the SE report also will be added.

In accordance with Section XX of the FFA, EPA and KDEP have a 30-day review period to provide comments and/or approval of the document. If additional information is needed, please contact me at (270) 441-6862.

Sincerely,

**Tracey L.
Duncan**

Tracey Duncan

Federal Facility Agreement Manager
Portsmouth/Paducah Project Office

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Tracey L. Duncan
Date: 2021.08.13
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Enclosures:

1. Certification Page
2. *Site Evaluation Report for the C-750 Garage, C-750 Garage Slab and Underlying Soils, and Associated Outside Areas (Area of Concern 573) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2466&D1*

Administrative Record File—ARF-ARR

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CERTIFICATION

Document Identification: *Site Evaluation Report for the C-750 Garage, C-750 Garage Slab and Underlying Soils, and Associated Outside Areas (Area of Concern 573) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-2466&D1*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Four Rivers Nuclear Partnership, LLC



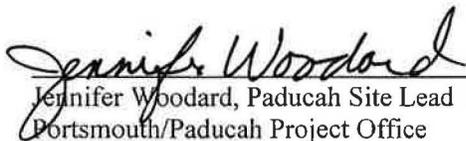
Myrna E. Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC



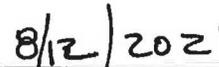
Date Signed

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U.S. Department of Energy



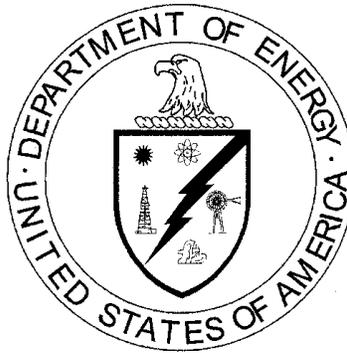
Jennifer Woodard, Paducah Site Lead
Portsmouth/Paducah Project Office
U.S. Department of Energy



Date Signed

**DOE/LX/07-2466&D1
Primary Document**

**Site Evaluation Report for the
C-750 Garage, C-750 Garage Slab and Underlying Soils, and
Associated Outside Areas (Area of Concern 573)
at the Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**



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**Site Evaluation Report for the
C-750 Garage, C-750 Garage Slab and Underlying Soils,
and Associated Outside Areas (Area of Concern 573)
at the Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**

Date Issued—August 2021

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FOUR RIVERS NUCLEAR PARTNERSHIP, LLC,
managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract DE-EM0004895

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ACRONYMS

ACM	asbestos-containing material
AOC	area of concern
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
D&D	decontamination and decommissioning
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement
KDWM	Kentucky Division of Waste Management
NFA	no further action
NTCRA	non-time-critical removal action
OU	operable unit
PGDP	Paducah Gaseous Diffusion Plant
RCRA	Resource Conservation and Recovery Act
SE	site evaluation
SMP	Site Management Plan
SWMU	solid waste management unit
TSCA	Toxic Substance Control Act
UST	underground storage tank

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1. FACILITY NUMBER/NAME

C-750 Garage

2. SOLID WASTE MANAGEMENT UNIT/AREA OF CONCERN NUMBER/DESCRIPTION

AOC 573—C-750 Garage Slab and Underlying Soils and Associated Outside Areas

3. DATE

August 4, 2021

4. REGULATORY STATUS

A joint policy issued under a U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA) Memorandum dated May 22, 1995, *Policy on Decommissioning Department of Energy Facilities Under CERCLA* (DOE 1995), establishes a framework for conducting decommissioning of DOE facilities and provides guidance on the use of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) response authority to decommission DOE facilities. The Policy states that DOE is required to conduct a removal site evaluation (SE) in accordance with the *National Contingency Plan* and interagency agreements [i.e., Federal Facility Agreement (FFA)] to assess site conditions and determine whether a release or substantial threat of release exists at the facility. At any facility for which DOE conducts a removal site evaluation, DOE will consult with EPA and will provide, as requested, EPA with such information necessary for EPA to review such evaluation. DOE, EPA, and the Commonwealth of Kentucky have agreed to conduct decontamination and decommissioning (D&D) activities at the Paducah Gaseous Diffusion Plant (PGDP) under the existing FFA. Section IX [Site Evaluation(s)] of the FFA requires DOE to conduct integrated SEs that consist of the removal SE, remedial SE, and solid waste management unit (SWMU) assessment report. The integrated SEs are to be documented in a site evaluation report consistent with the format in Appendix D of the FFA (EPA 1998).

Industrial facilities that DOE has determined to pose a potential threat of release of hazardous substances to the environment are listed as part of the facility D&D Operable Unit (OU) in Appendix 4 of the Site Management Plan (SMP) (DOE 2020). The SE report shall state whether demolition of the facility should be conducted using a CERCLA Non-Time-Critical Removal Action (NTCRA) and will serve to designate any facility, or portions thereof, that are related to any identified release as a SWMU and/or area of concern (AOC).

Based on historical information associated with past operations at C-750, including potential leaks and spills within the building and surrounding area, the C-750 slab and underlying soils and two outside areas associated with C-750 operations may contain possible contaminants associated with lube oil, ethylene glycol, waste oil, hydraulic oil, fuel (gasoline or diesel), and solvents/degreasers. These contaminants may include trichloroethene (TCE) and polychlorinated biphenyls (PCBs). The presence of these contaminants warrant these areas to be designated as an AOC (AOC 573). Additionally, based on historical information, a Resource Conservation and Recovery Act (RCRA) Facility Investigation is necessary for the AOC; however, a CERCLA NTCRA is not recommended as necessary for the aboveground C-750 facility.

5. LOCATION

C-750 is located in the central portion of the Paducah Site industrialized area, east of the C-720 Maintenance and Storage Building. (See Figure 1, Aerial Photograph Showing the C-750 Garage Location, and Figure 2, Map Showing the C-750 Location.)

6. APPROXIMATE DIMENSION OR CAPACITY

C-750 is a one-story building made of cast-in-place concrete walls and structural steel/corrugated siding built in 1952. The total square footage of C-750 is approximately 11,866 ft² (see Figure 3, Engineering Drawing E5-2-A_0001_U-017124).

Additional engineering drawings are provided in an appendix to this report.

7. FUNCTION

C-750 has been used as a garage since 1952.

8. BRIEF HISTORY

C-750 was constructed in 1952 and houses a garage maintenance shop, office, and restroom. The building is used to service automotive and heavy mobile equipment and to store auto parts. C-750 was leased to the United States Enrichment Corporation in the early 1990s and continued to be used as a garage until the PGDP was deleased and returned to DOE in 2014. C-750 continues to operate as a garage by the infrastructure support services contractor.

9. OPERATIONAL STATUS

Operating

10. DATES OPERATED

1952 to present

11. SITE/PROCESS DESCRIPTION

The garage provides service and maintenance of all Paducah Site automotive and heavy mobile equipment. The garage includes a vehicle parking area and an outside storage area. A fuel service island was located on the south side of the garage, with two gasoline pumps and one diesel pump. The gasoline and diesel pumps were supplied by two underground storage tanks (USTs) associated with the garage (i.e., C-750-A, C-750-B). The C-750 garage utilized two USTs for the accumulation of waste oils and motor oils (i.e., C-750-D, the C-750 1,000-gal waste oil tank), which were then sold to reclaimers. All four USTs were closed under the UST program.

The garage consists of one main building and three bays. The bays are used as a tire and waste storage area; a wash room; and a grease/lubrication room with a 4 ft 9-inch deep trench. The grease/lubrication room contained a 6 ft 3-inch waste oil storage pit. A small degreaser, historically used to clean small parts, was located in the garage and stored in the wash room or west bay. The degreaser was removed from service in approximately 2018. Figure 3 shows a “glass bath” in the grease/lubrication room. The glass bath, as described in the engineering drawing, is no longer located at C-750. While employee interviews confirmed that a glass bath has not been in the facility since at least 1995, interviewees were not able to provide any detailed information concerning the purpose or use of the glass bath.

Sub-grade hydraulic lifts were located in the main room—along the southwest wall and in the westernmost bay.

Historically, C-750 was designated as a fixed contamination area and a radiologically contaminated area. C-750 has been resurveyed and is no longer posted as a fixed contamination area or radiologically contaminated area.

The outside storage area was located on the west side of C-750 (approximately 50 ft from the building) (Fluor 2014). This area contained a former battery storage area (DOE 1996); new and used tires; miscellaneous equipment; and unused (i.e., old) product oil and glycol drums. Several of the drums were rusted and in very bad shape. Contents of the storage area were removed in approximately 2018. It should be noted that the storage area directly overlies the C-750-D UST that was formerly designated as SWMU 24 and granted a no further action (NFA) determination by the Kentucky Division of Waste Management (KDWM) (UST Branch) on November 23, 1999.

Currently, oil, antifreeze (i.e., ethylene glycol), hydraulic fluid, transmission oil, and lead-acid batteries are stored and routinely used to support daily operations at the facility. Nitrogen was historically used to charge hydraulic accumulators; however, nitrogen is no longer used in the facility. An oxygen-acetylene torch is used for heating or cutting parts. Small amounts of automotive brake cleaner are disposed of with waste oil. Stains are visible on the garage shop floor, on the parking area surface, and on the outside storage area.

Figures 4 through 7 show the exterior of C-750. Automotive spare parts are stored in C-750 as shown in Figures 8 through 10. Work and storage areas are shown in Figures 11 through 21.

Drains in the building tie in and drain to a grease and oil interceptor on the east side of the building. The interceptor discharges to the sanitary sewer system. The building roof conductors drain to the storm-water system.

12. WASTE DESCRIPTION

The primary waste streams that would be generated during D&D of C-750 are nonhazardous solid and Toxic Substance Control Act (TSCA) construction/demolition debris. This demolition debris will be comprised primarily of metal structural components, piping, equipment, and insulation. Wastes such as PCB-containing liquids and electrical components, nonradioactive RCRA and/or mixed waste sludges or liquids, are not anticipated to be generated with exceptions noted below.

Limited infrastructure items remain in the facility (e.g., light fixtures, exit lights, instrumentation panels, alarms) that could potentially contain *de minimis* quantities of regulated items (e.g., mercury, lead), which will be removed to the extent practicable during deactivation. The TSCA Compliance Agreement identified the C-750 building as one of 24 buildings at the Paducah Site that contain ventilation duct gaskets impregnated with concentrations of PCBs which exceed 500 ppm (EPA 2017). These gaskets will be removed to the extent practicable during deactivation or demolition and managed, disposed, and reported in accordance with the TSCA Compliance Agreement and applicable regulatory requirements. Building materials used for construction could contain lead-based paints and asbestos-containing material (ACM). Generation of any residual amounts of regulated items will be properly containerized, characterized, and dispositioned in accordance with applicable regulatory requirements.

Based on historical information associated with past operations, including potential leaks and spills within the C-750 building and surrounding area, the C-750 slab and underlying soils and two outside areas associated with C-750 operations may contain possible contaminants associated with lube oil, ethylene glycol, waste oil, hydraulic oil, fuel (i.e., gasoline, diesel), and solvents/degreasers. These contaminants may include TCE and PCBs.

13. WASTE QUANTITY

Based on the waste forecast information available in the *Remedial Investigation/Feasibility Study Report for CERCLA Waste Disposal Alternatives Evaluation at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* (DOE 2018), the projected waste volume associated with the demolition of C-750 is approximately 3,544 yd³ of nonhazardous solid waste and 42 yd³ of TSCA waste for a total of 3,586 yd³. The projected waste volume of TSCA waste does not include the ventilation duct gaskets which will be managed and disposed of in accordance with the TSCA Compliance Agreement.

A projected waste volume associated with the C-750 slab and underlying soils is uncertain. The extent of contamination and volume will be defined during a future remedial investigation/feasibility study based on sample collection.

14. SUMMARY OF ENVIRONMENTAL SAMPLING DATA

SWMU and sampling locations within a 50-foot boundary of C-750 are shown in Figure 22.

Soil samples were collected from locations RC-3613 through RC-3616 (shown on the west side of C-750 on Figure 22) from the C-750 Fuel Tank Soil Cover. Samples were collected on January 31, 1990 (MMES 1990). The sample results describe the material as soil from east of C-750, gas tanks, which is consistent with sample locations RC-3617 through RC-3623.

Groundwater samples were collected from location MW208 during a 1993 groundwater monitoring project and a 1998 special UST/chromium sampling event.

Soil samples were collected from locations 24-02; 24-04; 24-05; and 24-06 on July 19, 1996. Soil samples were collected from locations 024-001; 024-002; 024-003; and 024-004 on September 24, 1998. These samples are associated with SWMU 24 (C-750-D UST) and were used to support KDWM's NFA determination granted on November 23, 1999.

Soil samples were collected from locations RC-4341 through RC-4344; RC-2171 through RC-2174; and RC-2491241 through RC-2491244 on October 6, 1993. These samples are associated with SWMU 25 [1,000-gal waste oil tank (UST)] and were used to support KDWM's NFA determination granted on June 20, 1994.

Soil samples were collected from locations 142-001 and 142-002 in October and November 1998. Soil samples were collected from locations 750-001 and 750-003 through 750-007 in September 1997. A soil sample was collected from location 750-002 in March 1998. These samples are associated with SWMU 142 [C-750-A—10,000-gal gasoline tank (i.e., UST)] and were used to support KDWM's NFA determination granted on March 25, 1999.

Soil samples were collected from locations 143-001 and 143-003 through 143-005 in October and November 1998. These samples are associated with SWMU 143 [C-750-B—10,000-gal diesel tank (i.e., UST)] and were used to support KDWM's NFA determination granted on March 25, 1999.

Due to their age, and consistent with the use of historical data in Paducah Site projects, no data from sample locations discussed in this section were utilized for determining representativeness of current conditions.

15. DESCRIPTION OF RELEASE AND MEDIA AFFECTED

<u>Groundwater:</u>	Yes
<u>Surface Water:</u>	Yes
<u>Soil:</u>	Yes
<u>Ecology Affected</u> (i.e., threatened/endangered species):	None Known
<u>Air</u>	None Known

On June 28, 1985, an automatic cutoff of a gasoline-filling nozzle failed to operate, which resulted in a 25-gal spill. Heavy rains carried the spill to a nearby storm drain and then to a plant-effluent ditch. An underflow oil control structure on the ditch prevented the release of the gasoline to Big Bayou Creek. Evaporation occurred before recovery operations could be initiated (MMES1986).

In 1989, petroleum hydrocarbons were discovered in a plant monitoring well northeast of the C-750 garage. Two underground fuel tanks at the garage were tested (i.e., C-750-A, C-750-B) and found to be leaking. A total of four USTs subsequently were located within a 50-ft boundary of C-750; all have been closed. It is not known whether there have been releases from the building to groundwater or soil.

Solvents were and currently are being used at the garage. At a minimum, the types of solvents/degreasers used would have been those that were commercially available at the time. Since the garage has been in operation since 1952, it is possible that those solvents/degreasers contained TCE.

During walkdowns in April/May 2021, areas inside the garage were visually observed to have had a spill or release, and stains were identified on the floors (see Figure 23) and the waste oil storage pit; however, it is not known whether these spills have reached the environment.

16. DOCUMENTATION OF NO RELEASE

The C-750 garage has not been identified as a SWMU or AOC; however, based on the longevity of garage operations, historic releases of lube oil, ethylene glycol, solvents, waste oil, hydraulic oil, and fuel (i.e., gasoline, diesel) to the environment are possible. PCBs may be present in products and materials produced before 1979 (including oil used in motors and hydraulic systems). Since the garage has been in operation since 1952, it is possible that historically-used hydraulic oils could have been suspect for PCBs.

Based on historical information associated with past operations at the garage, including potential leaks and spills within the building, the leak at the former fuel service island that was located on the south side of the garage, and the condition of containers stored on a storage area on the west side of C-750, it is recommended that the soils and slab beneath C-750, the soils and slab associated with the former fuel service island located on the south side of C-750, and the soils and slab associated with the storage area on the west side of C-750 be designated as an AOC [AOC 573—C-750 Garage Slab and Underlying Soils and Associated Outside Areas (see Figure 24)]. It should be noted that the storage area on the west side of C-750 directly overlies the C-750-D UST that was formerly designated as SWMU 24 and granted an NFA determination by KDWM (UST Branch) on November 23, 1999. The portion of the boundary for AOC 573 that overlies the C-750-D UST is not intended to include the UST tank nor affect or serve to reopen the previous NFA determination granted for SWMU 24.

17. IMPACT ON OR BY OTHER SWMU/AOC

Four SWMUs that have been granted an NFA determination by KDWM (UST Branch) are located within a 50-ft boundary of C-750 and are shown on Figure 25.

SWMU 24 was the C-750-D 8,000-gal UST. The tank was used from 1953 to 1982 to accumulate waste oils that were then sold to reclaimers. Potential releases associated with this tank were previously addressed. KDWM (UST Branch) granted an NFA determination on November 23, 1999.

SWMU 25 was the C-750 1,000-gal waste oil tank. The tank was used since 1952 for the storage of waste motor oil from vehicle maintenance activities prior to the oil's resale to reclaimers. The date that the tank was removed from service is unknown; its removal is assumed to have occurred in the mid- to late 1980s—similar to when other tanks located at C-750 were removed. Potential releases associated with this tank were previously addressed. KDWM (UST Branch) granted an NFA determination on June 20, 1994.

SWMU 142 was the C-750-A 10,000-gal gasoline tank. The tank was used from the 1950's to 1989; it was found to be leaking in 1989 and removed in early 1991. Contamination from this UST was previously addressed. KDWM (UST Branch) granted an NFA determination on March 25, 1999.

SWMU 143 was the C-750-B 10,000-gal diesel tank. The tank was used from the 1950's to 1989; it was found to be leaking in 1989 and removed in 1991. Contamination from this UST was previously addressed. KDWM (UST Branch) granted an NFA determination on March 25, 1999.

18. PRELIMINARY REMEDIATION GOAL COMPARISON

Sample locations were identified within a 50-ft boundary of C-750. Historical data was collected from sample locations MW208 (1993 and 1998) and RC-3613 through RC-3623 (1990). Historical data from the other sample locations were granted an NFA determination by KDWM. Due to their age, and consistent with the use of historical data for Paducah Site projects, no data from sample locations discussed in this section were utilized for determining representativeness of current conditions or compared to preliminary remediation goals.

19. RCRA FACILITY INVESTIGATION NECESSARY

A RCRA Facility Investigation is recommended for the C-750 slab and underlying soils, the outside storage area on the west side of the building, and the former fuel service island that was located on the south side of the garage due to possible historical leaks or spills of lube oil, ethylene glycol, solvents/degreasers, waste oil, hydraulic oil, or fuel (i.e., gasoline, diesel).

The RCRA Facility Investigation will define the nature and extent of contamination associated with AOC 573.

20. CERCLA NTCRA NECESSARY

A CERCLA NTCRA is not recommended as necessary for demolition of the C-750 facility following completion of deactivation. Limited infrastructure items possibly containing small quantities of regulated items, including PCB gaskets, in the building will be removed, to the extent practicable, during deactivation. Building materials used for construction could contain lead-based paints and ACM, both of which can be effectively verified during a pre-demolition inspection, then contained and properly managed using standard demolition and waste management practices. Deactivation will include removal of any accessible loose items being stored, to the extent practicable, prior to demolition. Floor drains will be delineated and isolated prior to demolition.

April/May 2021 walkdown inspections of the facility, employee interviews, and other reviewed historical information did not identify any unusual conditions that would pose a potential threat of environmental release during future demolition of the aboveground structure; therefore, the demolition and disposal of the

facility is recommended to be conducted outside of the FFA and/or CERCLA process. While measures to be implemented during D&D are not a part of this SE, the demolition of the C-750 facility would identify any necessary best management practices to prevent and/or minimize contaminated storm-water runoff and to prevent any debris from pooling and collecting in the below-grade trench and associated pit and any additional subgrade areas.

All applicable laws, regulations, and DOE procedures and/or protocols will be followed to ensure the demolition and disposal of the aboveground structure occurs in a safe, compliant manner, including conducting any additional radiological characterization through confirmation radiological surveys, as necessary, to support demolition and waste disposition.

21. OU ASSIGNMENT

C-750 currently is assigned to the Facility D&D OU, Other Buildings (non-SWMUs) (SMP Appendix 4) (DOE 2020). It is recommended that the newly-designated AOC (i.e., AOC 573) be assigned to the Soils and Slabs OU.

22. REFERENCES

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DOE 2020. *Site Management Plan, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Annual Revision—FY 2021*, DOE/LX/07-2450&D1, U.S. Department of Energy, Paducah, KY, November.

EPA (U.S. Environmental Protection Agency) 1998. *Federal Facility Agreement for the Paducah Gaseous Diffusion Plant*, DOE/OR/07-1707, U.S. Environmental Protection Agency, Atlanta, GA, February.

EPA 2017. *Toxic Substance Control Act Federal Facility Compliance Agreement*, effective date February 20, 1992, modification May 30, 2017.

Fluor (Federal Services, Inc.) 2014. *Paducah Deactivation Project Comprehensive Environmental Compliance Due Diligence Review*, CP5-ES-0101, Paducah, KY, October.

MMES (Martin Marietta Energy Systems) 1986. *Environmental Monitoring Report United States Department of Energy Paducah Gaseous Diffusion Plant Site Calendar Year 1985*, KY-755, Paducah, KY, May.

MMES 1990. *Internal Correspondence Soil Analysis Results from C-750 Fuel Tank Soil Cover*, Paducah, KY, May.



Figure 1. Aerial Photograph Showing the C-750 Garage Location

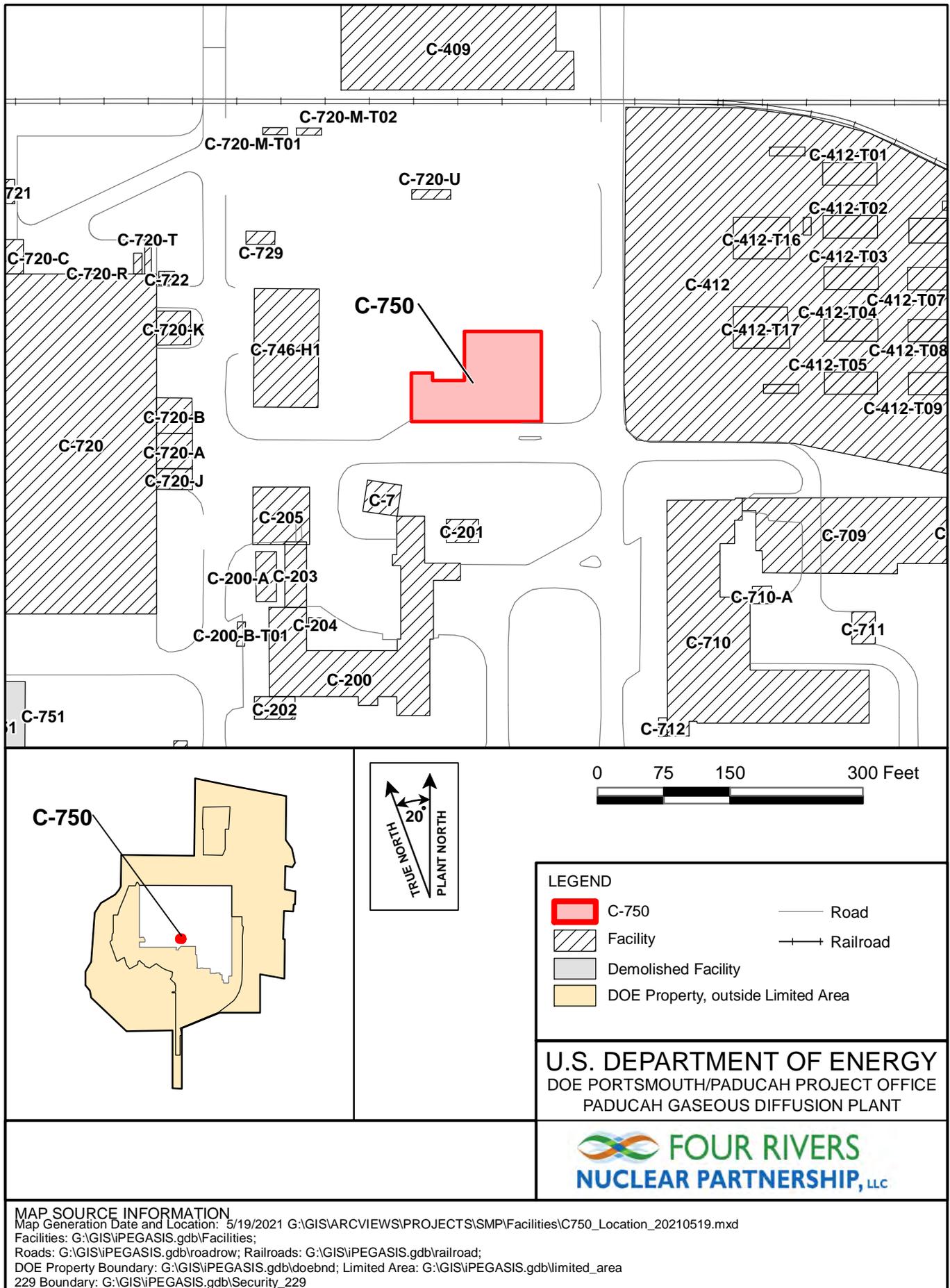


Figure 2. Map Showing C-750 Garage Location

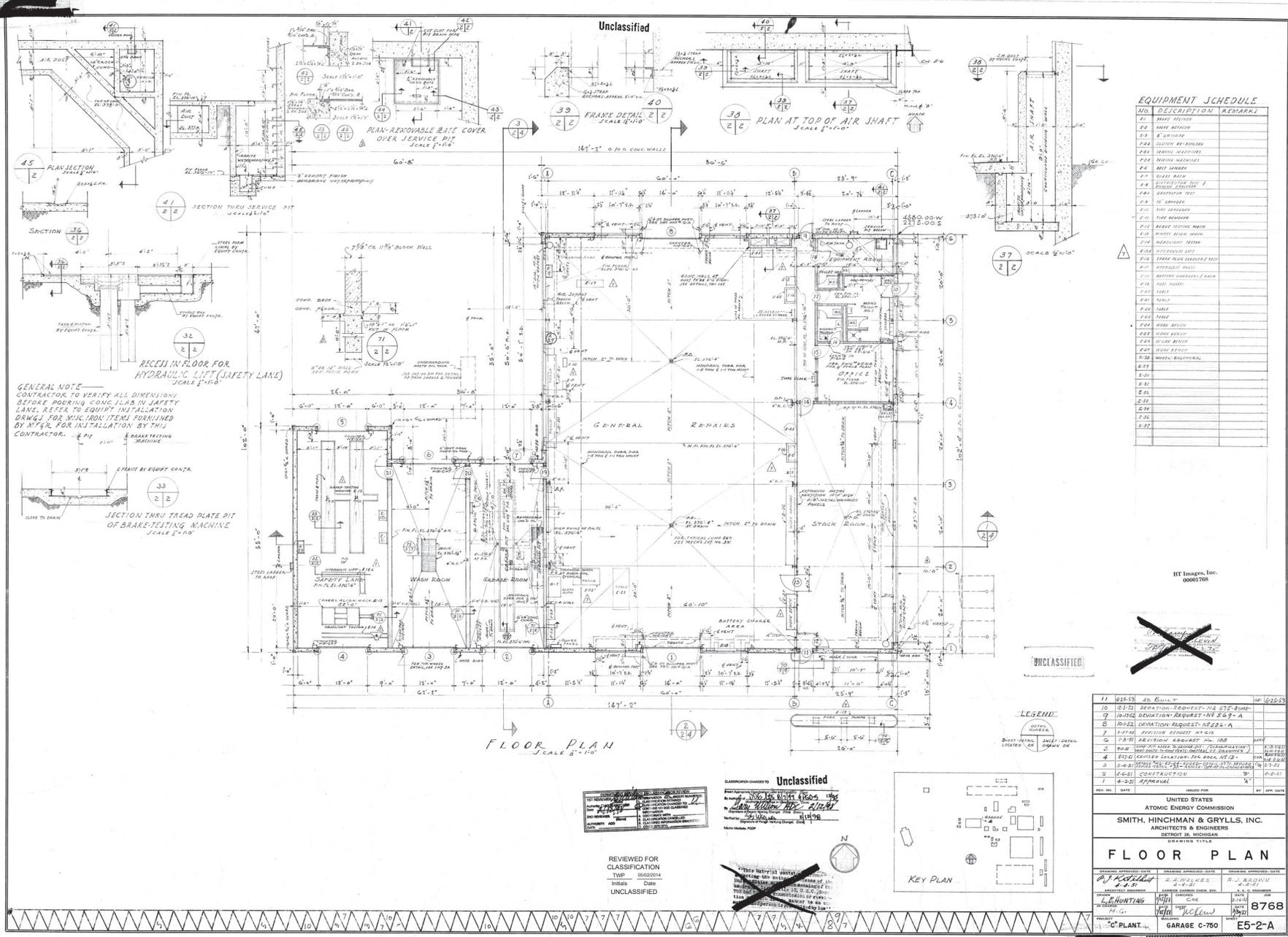


Figure 3. Engineering Drawing E5-2-A_0001_U-017124



Figure 4. North Side of C-750



Figure 5. East Side of C-750



Figure 6. South Side of C-750



Figure 7. West Side of C-750



Figure 8. Spare Parts Storage Room, North End



Figure 9. Spare Parts Storage Room, East Aisle



Figure 10. Spare Parts Storage Room, West Aisle



Figure 11. Ethylene Glycol Storage Tank



Figure 12. Garage Work Stations, East Side



Figure 13. Garage, Center Aisle



Figure 14. Garage Work Stations, West Side



Figure 15. Ventilation System, North Wall



Figure 16. Hot Work Area, Northwest Corner



Figure 17. Lubrication Bay Trench



Figure 18. Wash Bay



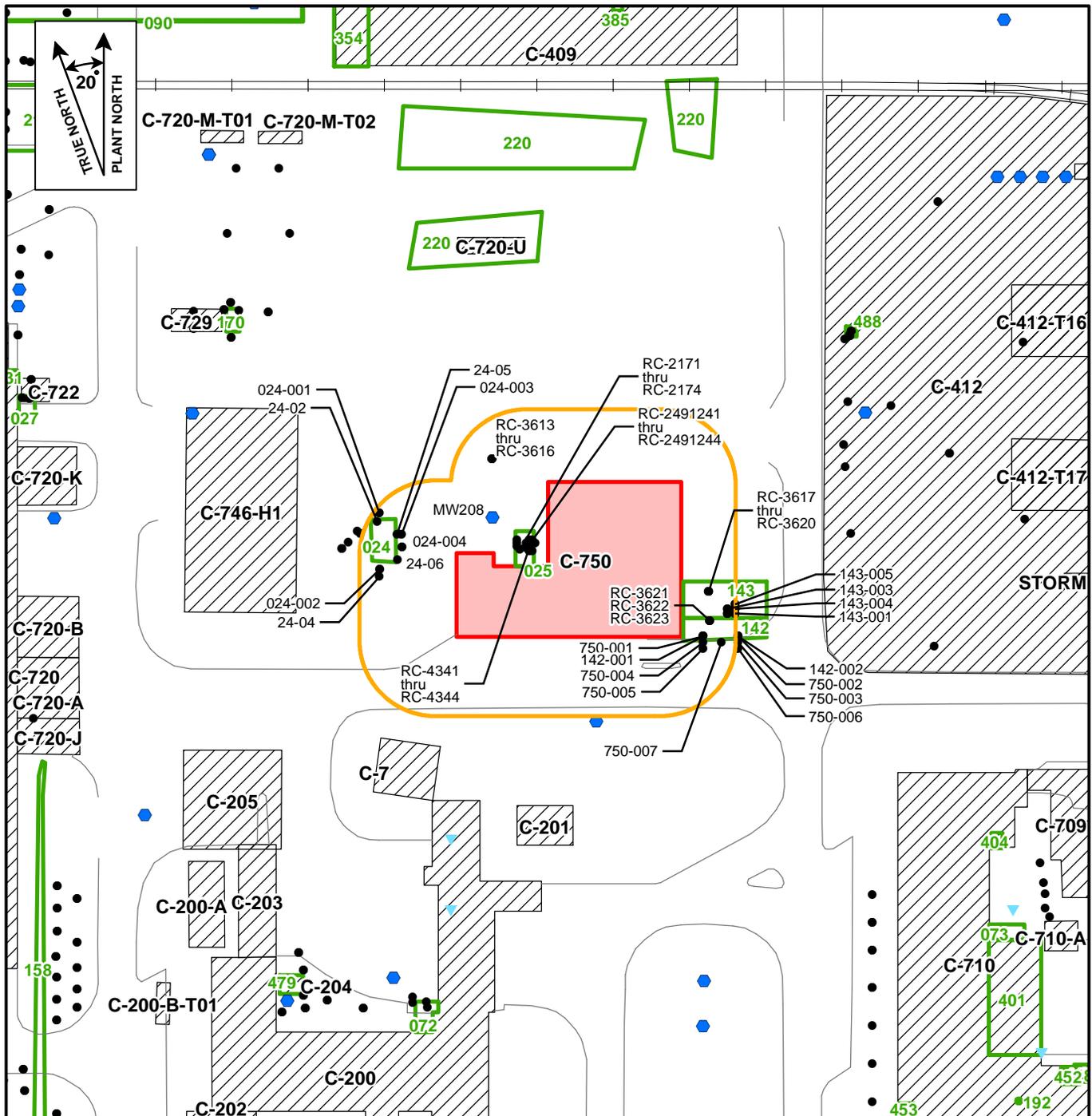
Figure 19. Spare Tire Bay



Figure 20. Oil Storage Area (GSA G-750-01)



Figure 21. Waste Storage Area (GSA G-750-01)



LEGEND

C-750	Road	SAMPLES	Sediment	Groundwater
50-ft Boundary	Railroad	Soil	Surface Water	
Facility		Solid Waste		
SWMU/AOC				

NOTE: Storm sewers (SWMUs 102A and 102B), sanitary sewers (SWMU 179), and groundwater plumes (SWMUs 201, 202, and 210) are not shown. Sample WC-197 has not been shown on map. The sample is denoted as groundwater in OREIS; however, further research shows that the sample was from a UST and not representative of current environmental conditions.

0 50 100 200 Feet

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT

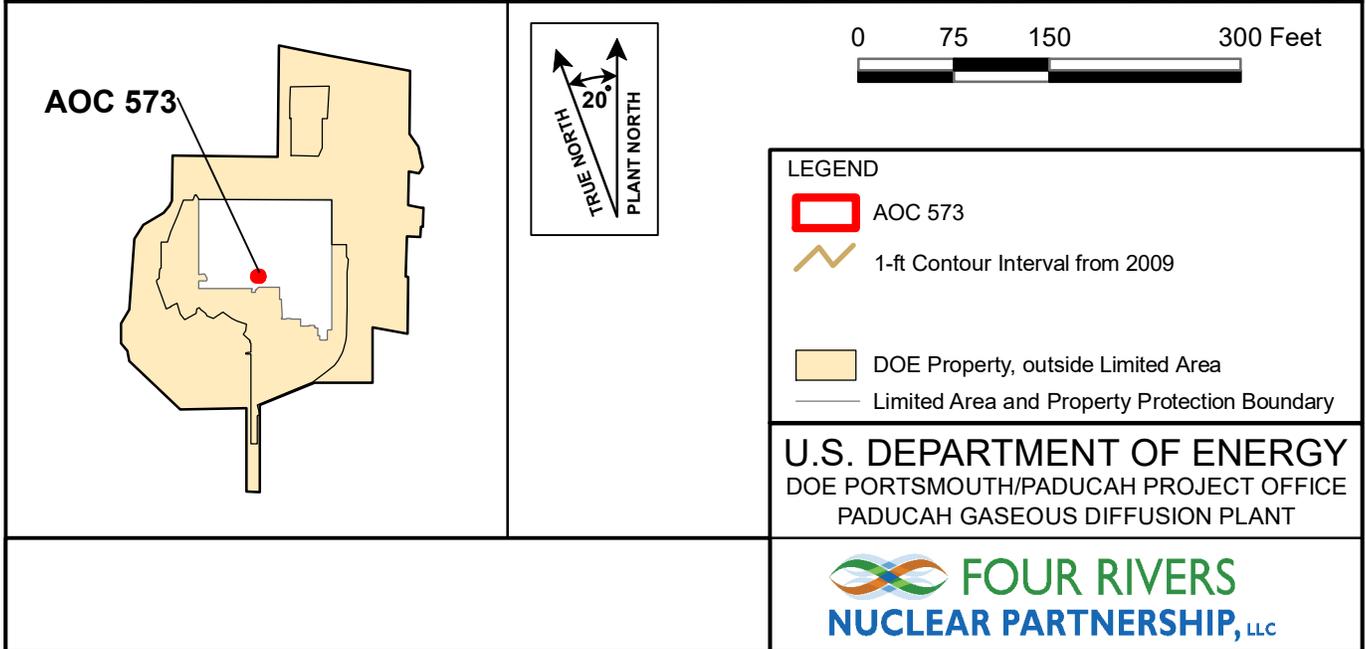
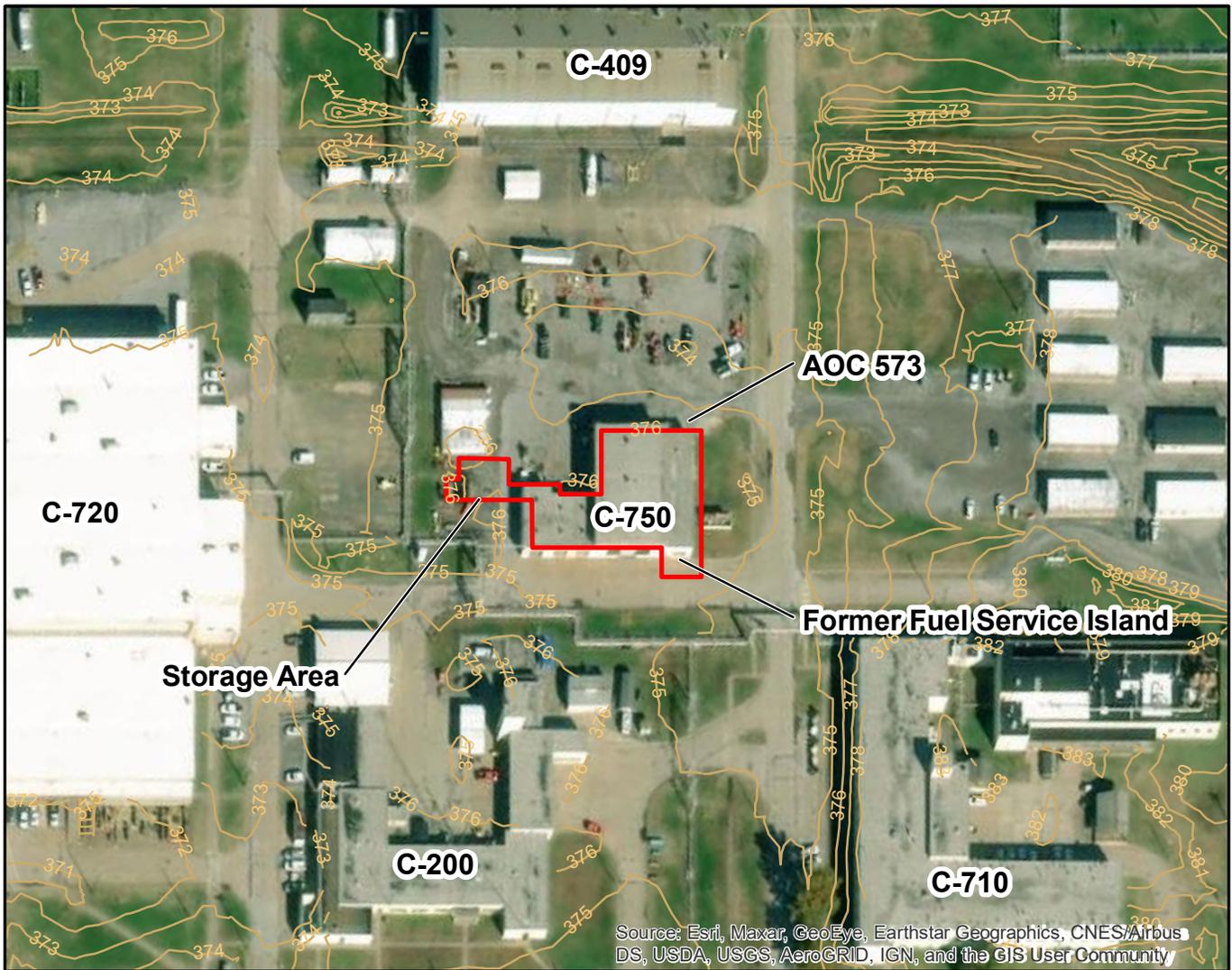
FOUR RIVERS
NUCLEAR PARTNERSHIP, LLC

MAP SOURCE INFORMATION
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Figure 22. SWMUs and Sampling Locations near C-750

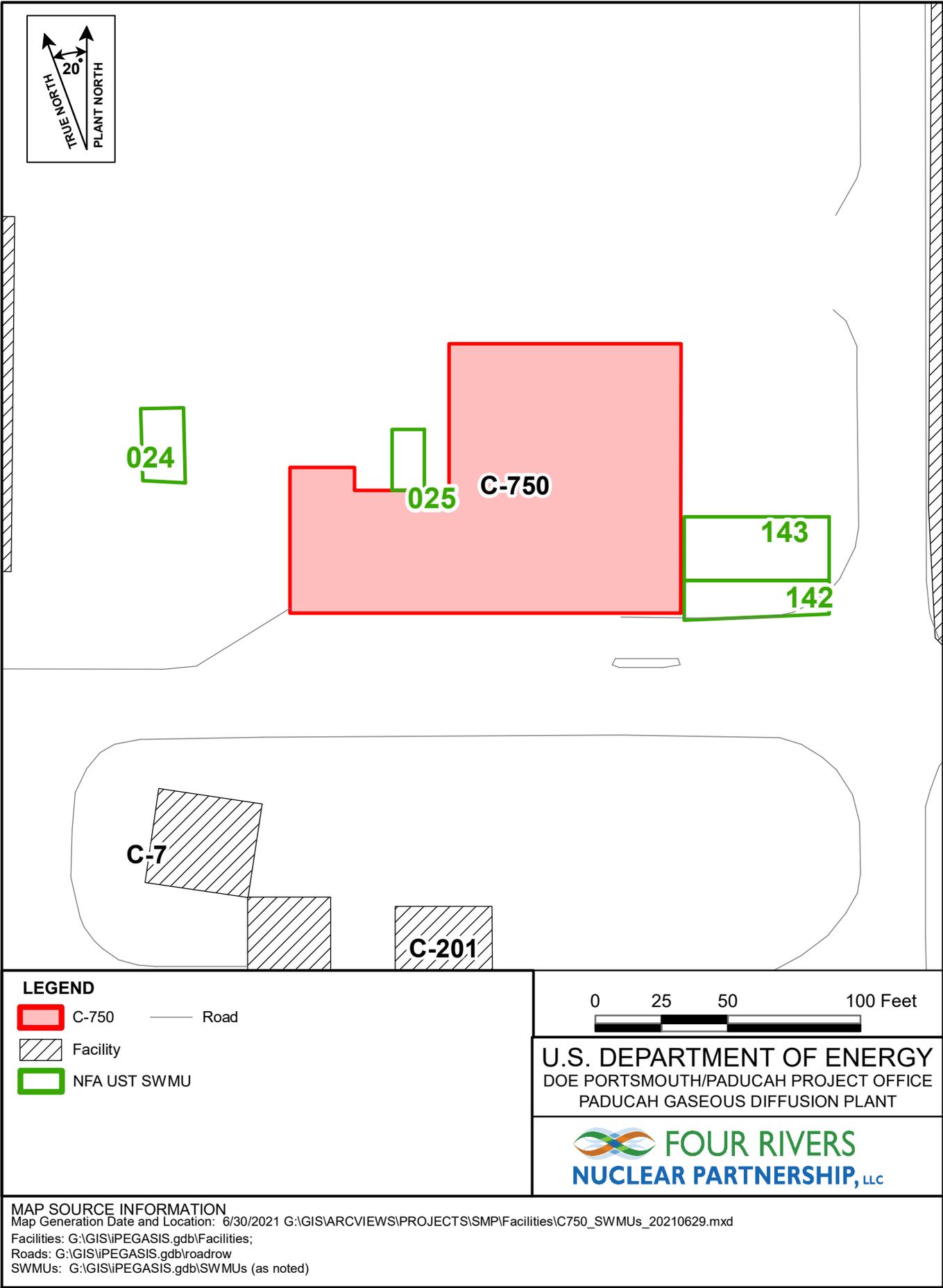


Figure 23. Floor Stain



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 229 Boundary: G:\GIS\IPEGASIS.gdb\Security_229
 AOC 573 Outline: As interpreted C-750 facility location and aerial photo of nearby storage area

Figure 24. C-750 Slab and Underlying Soils and Associated Outside Areas (AOC 573)



LEGEND

- C-750
- Road
- Facility
- NFA UST SWMU

0 25 50 100 Feet



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 PADUCAH GASEOUS DIFFUSION PLANT



MAP SOURCE INFORMATION

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Figure 25. NFA UST SWMUs

APPENDIX
ENGINEERING DRAWINGS

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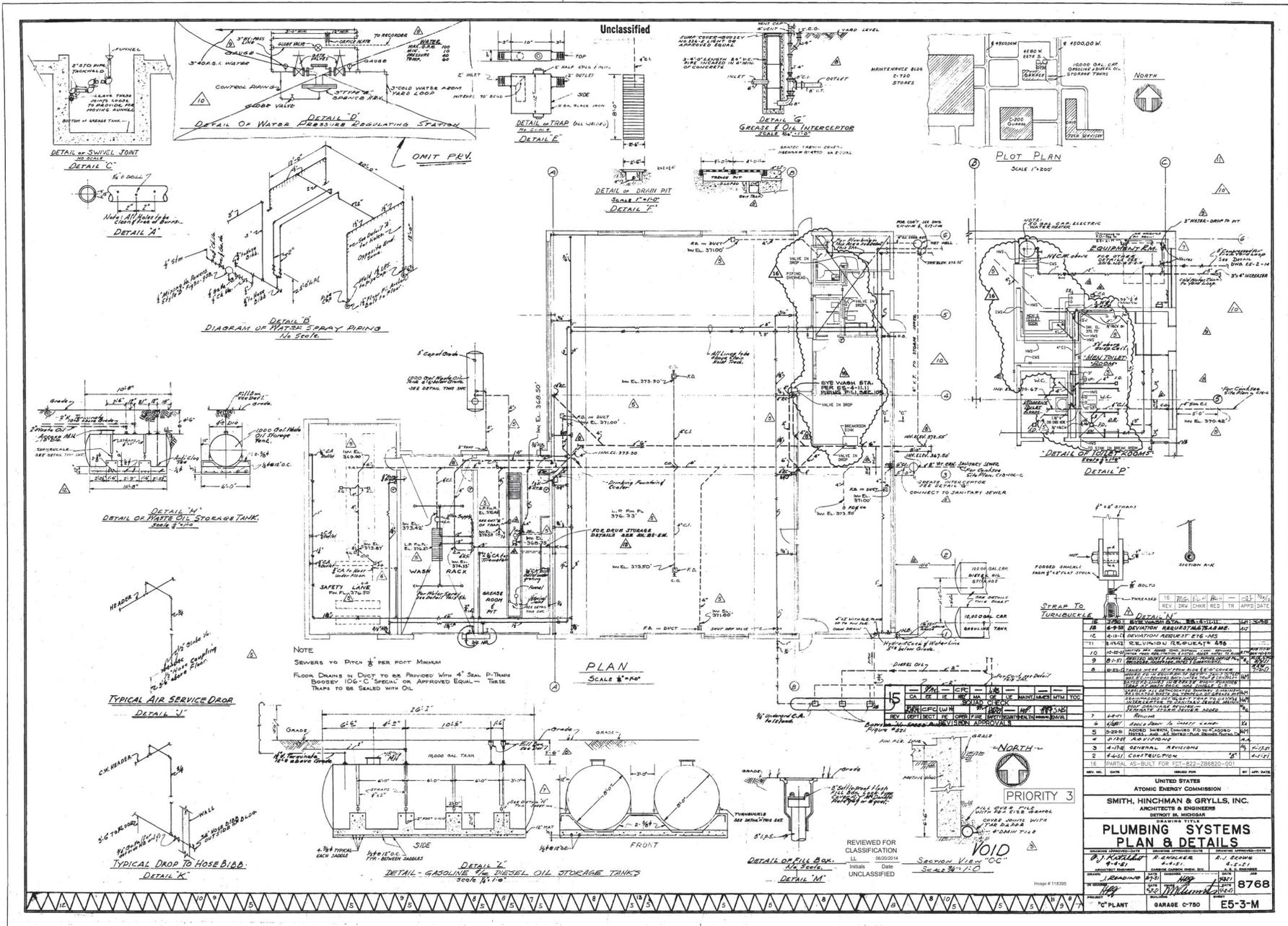


Figure A.1. Engineering Drawing E5-3-M_0001_0016_U-105988

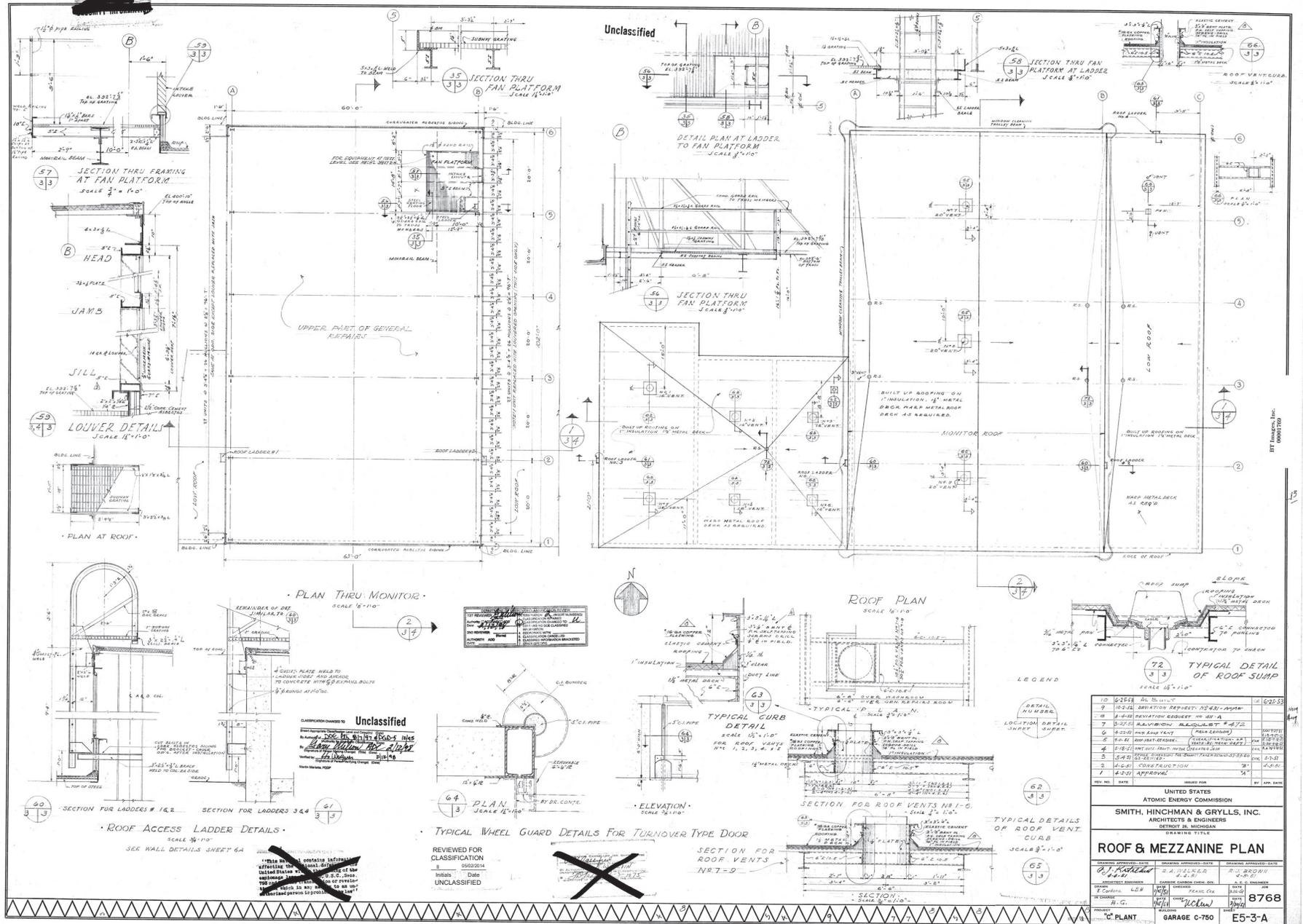


Figure A.2. Engineering Drawing E5-3-A_0001_0010_U-017135

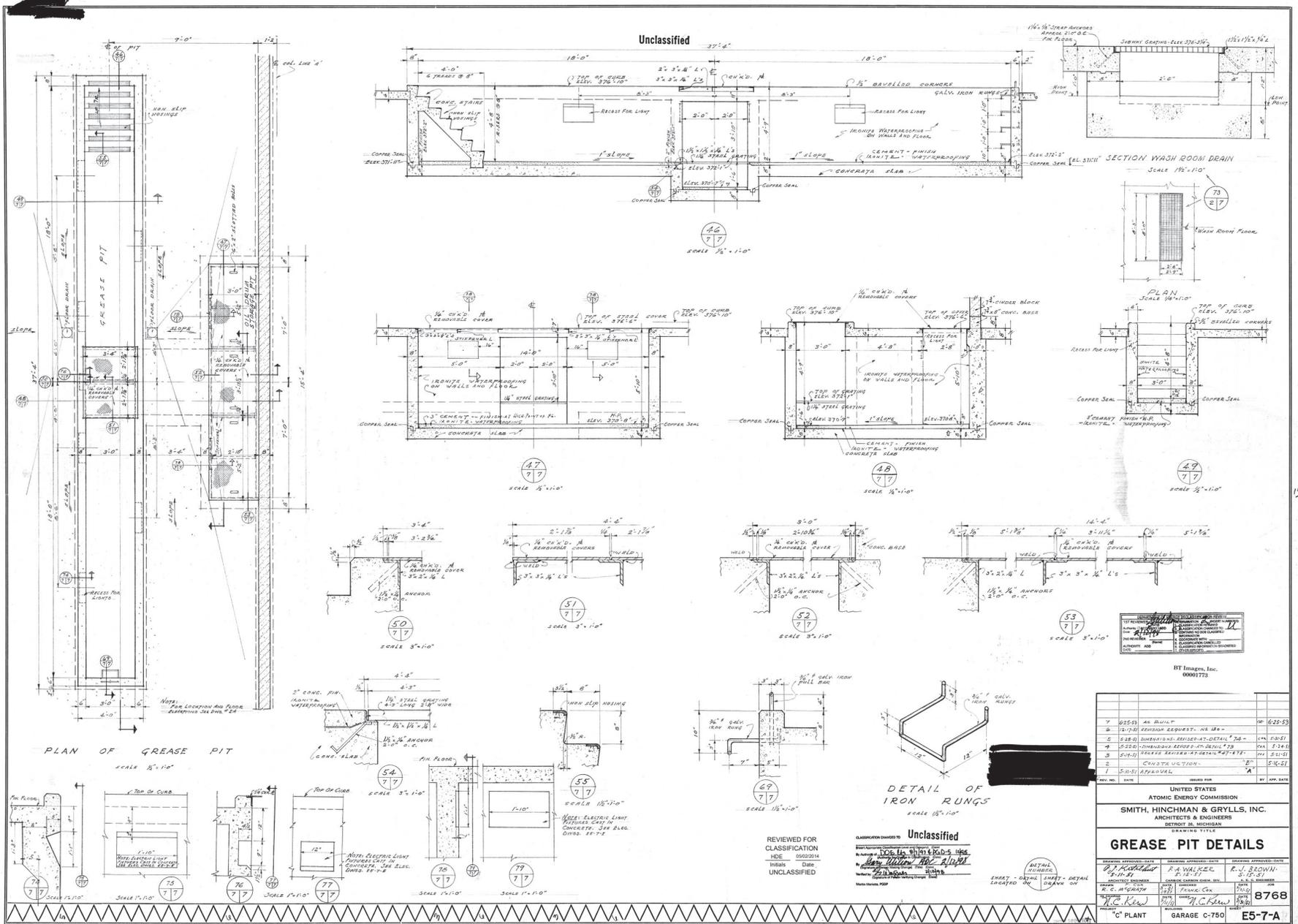


Figure A.3 Engineering Drawing ES-7-A_0001_0007_U-01780

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