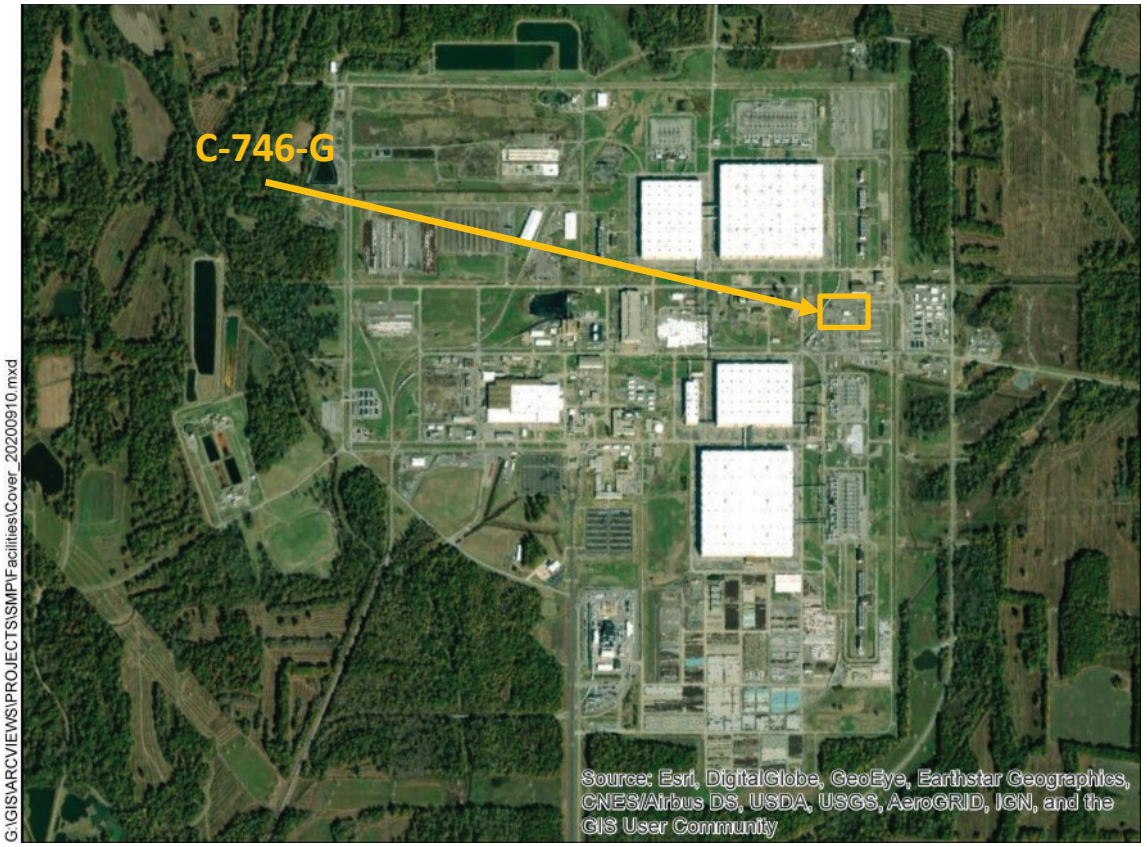
C-746-G Building – Electrical Equipment Storage



Facility Overview Briefing

March 4, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on February 22, 2021.

Purpose

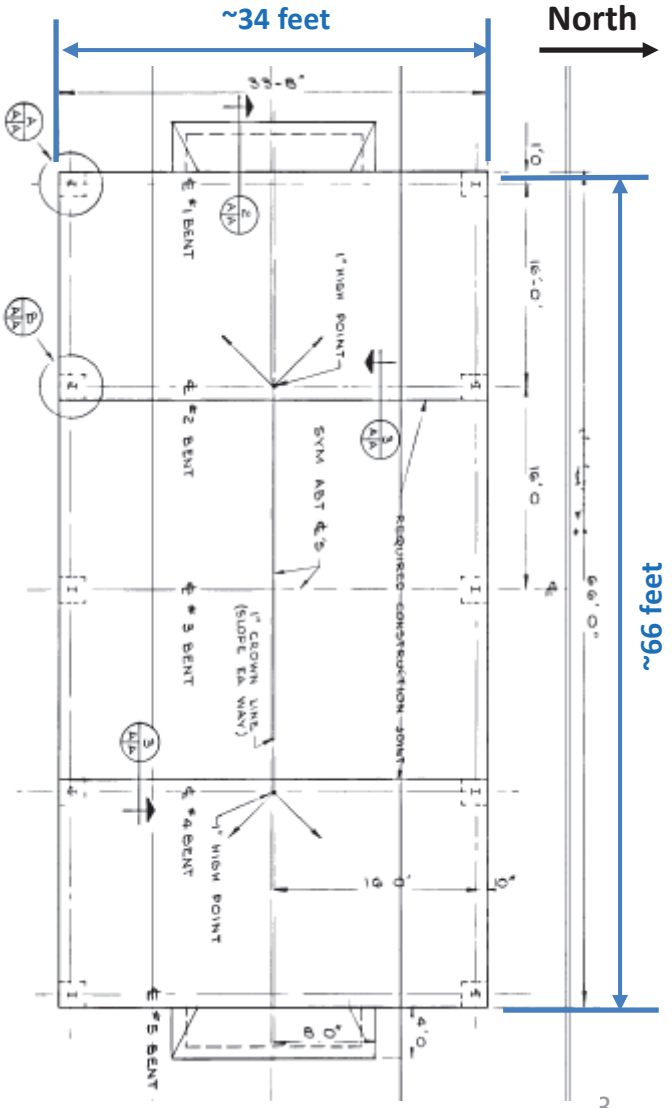
- The C-746-G Building – Electrical Equipment Storage is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.

- This presentation is intended to serve as consultation, providing the basis for demolition and disposal of the aboveground structure outside of the FFA/CERCLA process.
- The slab/soils will remain and be subject to further CERCLA evaluation as part of a future site evaluation conducted under Appendix 4 of the SMP.

C-746-G Facility Photo: 8/2020

Construction History

- C-746-G is located within the Paducah Site security fence, southeast of the C-337 Process Building.
- Construction was completed in 1974.
- The facility is a prefabricated steel building constructed with a concrete pad.
- Based on the dimensions from the engineering drawings, the facility occupies a footprint of approximately 2,244 ft^2.
  - Measuring ~66 ft x ~34 ft.



Engineering Drawing:E-A-12519-A

Operational History

- C-746-G has been used since construction for maintenance of electrical equipment and storage of related parts.
- Building operations used materials typically utilized in electrical maintenance, such as solder, flux, cement, cleaning solutions, silver solutions for electroplating, lubricants, and insulating oils.
- A 1993 audit report indicates the following.
  - TCE was historically used in the past to clean parts during maintenance but was no longer stored in the building.
  - The facility contained three Generator Staging Areas (GSAs) and two Satellite Accumulation Areas (SAAs).
- USEC leased the facility in the early 1990s and continued to use it until USEC ceased operations in 2014.
- The facility was transitioned from USEC to DOE in 2014 and is still operational for its intended purpose.

C-746-G Facility Photos: 10/2020

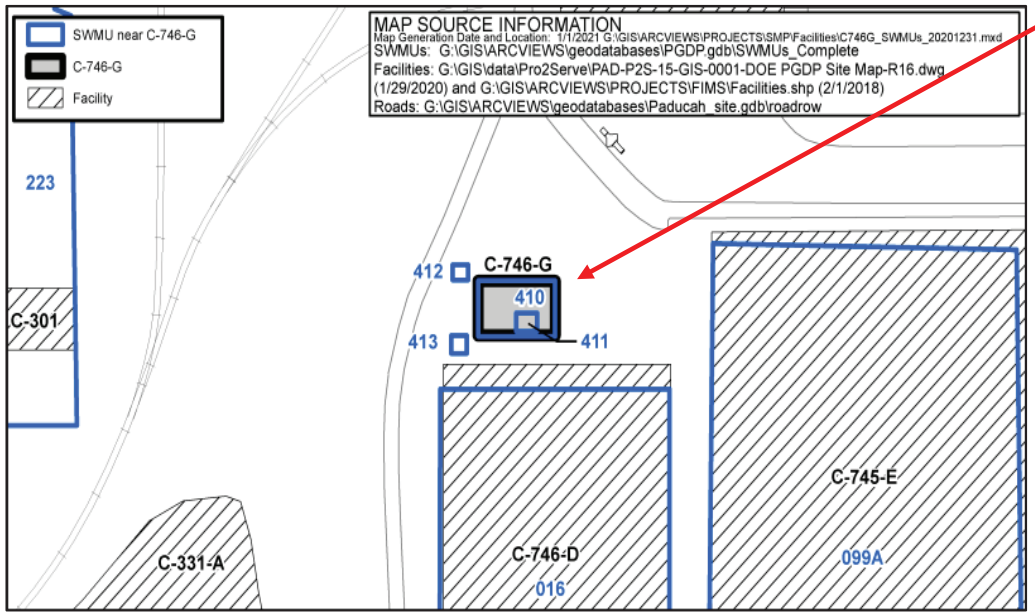
Current Status

- C-746-G is still operational and continuing to support its intended function for electrical maintenance.

- Walkdown inspection conducted in October 2020 and employee interviews confirmed the following conditions.
  - Storage of parts, equipment, and tools used for electrical maintenance.
  - Two blue 55 gallon product drums (West Penetone Cleaner, X-CEL).
  - Flammable storage cabinet with small quantities of chemical products managed in accordance with applicable requirements.
  - Evidence of oil staining on the floor.

C-746-G Facility Photos: 10/2020

Environmental Impacts
(Solid Waste Management Units)



- C-746-G was designated as SWMU 410 due to the presence of a GSA.
  - The GSA stored an impeder, which contained PCB oil that was removed from a transformer in one of the switchyards.
  - Storage of the impeder occurred over a period of 3-4 months in 1991.
  - Kentucky inspected the GSA in 2004, concluding no environmental concerns and granted an NFA.
- SWMU 411 was located inside of the building and SWMUs 412 and 413 were located outside. All were designated GSAs and granted NFA.

SWMU No.	Facility Name	Current Status	NFA Approval By
016	C-746-D Classified Scrap Yard	Soils and Slabs OU	
099A	C-745 Kellogg Bldg. Site–Cylinder Yard	Soils and Slabs OU	
223	OS-12 slab and underlying soils	Soils and Slabs OU	
410	G-746-G-01	NFA	KDWM 6/29/2004
411	G-746-G-1-01	NFA	KDWM 3/8/2007
412	G-746-G-2-01	NFA	KDWM 11/1/2004
413	G-746-G-3-01	NFA	KDWM 11/1/2004

Environmental Impacts

- No information to indicate demolition of the aboveground structure would pose a release or threatened release of a hazardous substance that would require an evaluation for a potential response action to protect future public health or welfare or the environment.
  - Building materials used for construction could contain lead-based paints and asbestos materials, both of which can be effectively verified during a predemolition inspection and properly managed using standard demolition and waste management practices.
  - C-746-G was designated as SWMU 410 due to a GSA that stored an impeder for a period of 3-4 months in 1991 which contained PCB oil removed from a switchyard transformer; SWMU 410 was granted an NFA approved by Kentucky in 2004.
  - SWMUs 411, 412, and 413 were operated in accordance with applicable regulations; no reported releases and all these GSAs were granted an NFA approved by Kentucky.

- Process knowledge and employee interviews indicate historical operations at C-746-G involved the use of certain chemicals that could have the potential to pose a release threat to the concrete floor and underlying soils.
  - Typical maintenance activities would suggest that equipment may be contaminated with PCBs, solvents, and possibly radionuclides.
  - TCE was historically used in the past to clean parts during maintenance but is no longer stored in the building.
  - Evidence of oil staining on the floor including information from a 1993 audit report documenting a historical spill of non-PCB insulating oil that was cleaned up.

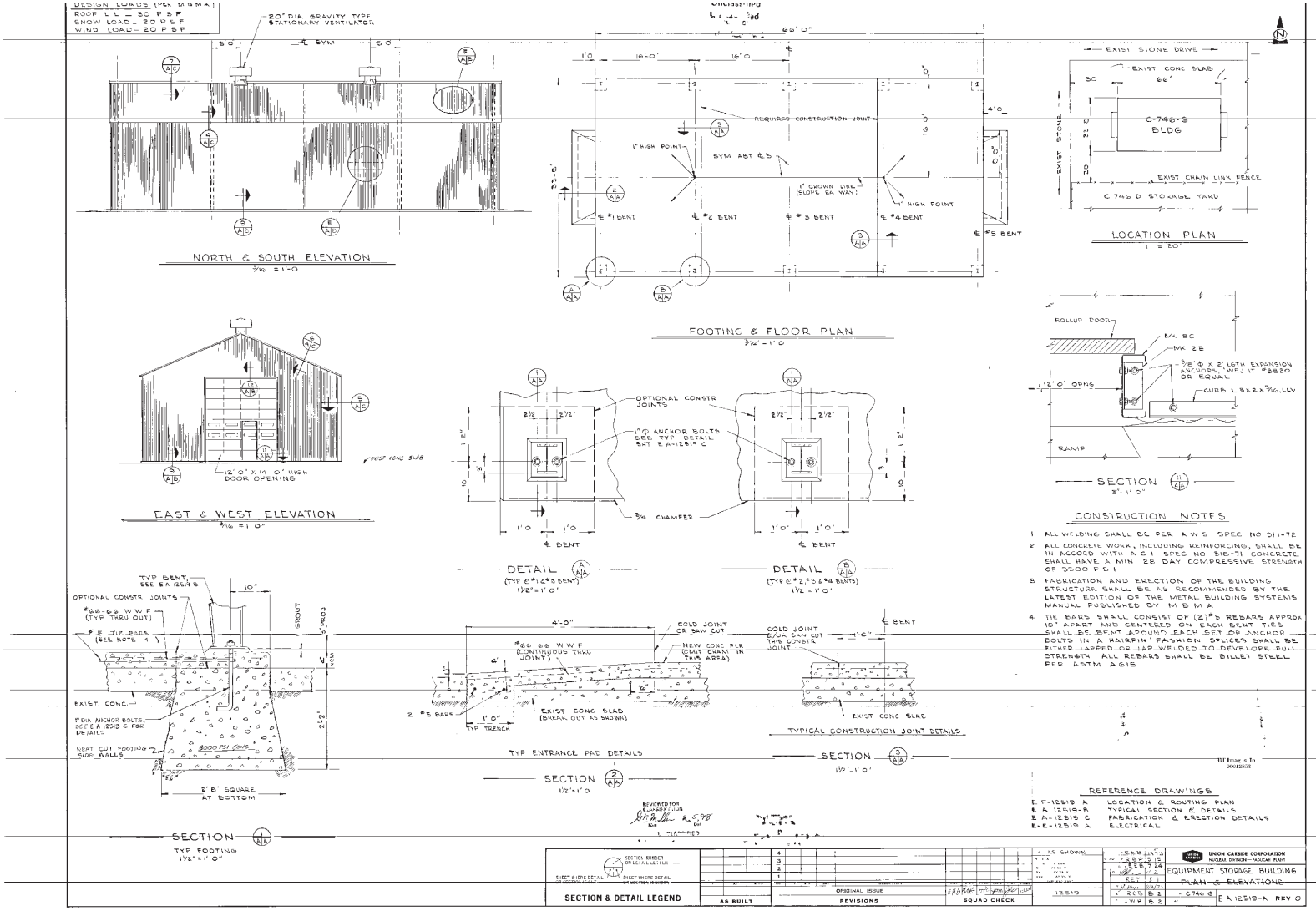
Conclusion and Recommendations

- Walkdown inspection 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.
  - Deactivation will include removal of any accessible loose items being stored, to the extent practicable, prior to demolition.
- Pending ceasing of operations, deactivation, and availability of funding, proceeding with demolition and disposal of the C-746-G facility (aboveground structure) outside of the FFA/CERCLA process, contingent upon the fact that no additional changes have occurred that would affect the CERCLA determination of the facility prior to demolition, is recommended.
- All applicable laws, regulations, and DOE procedures/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.
- Based on the nature of chemicals historically used during past operations (e.g., TCE, PCBs) and staining on the concrete floor, it is recommended that the underlying slab and soils undergo further CERCLA evaluation as part of a future site evaluation conducted under Appendix 4 of the SMP.
- The above approach will be documented in the appropriate annual SMP revision.

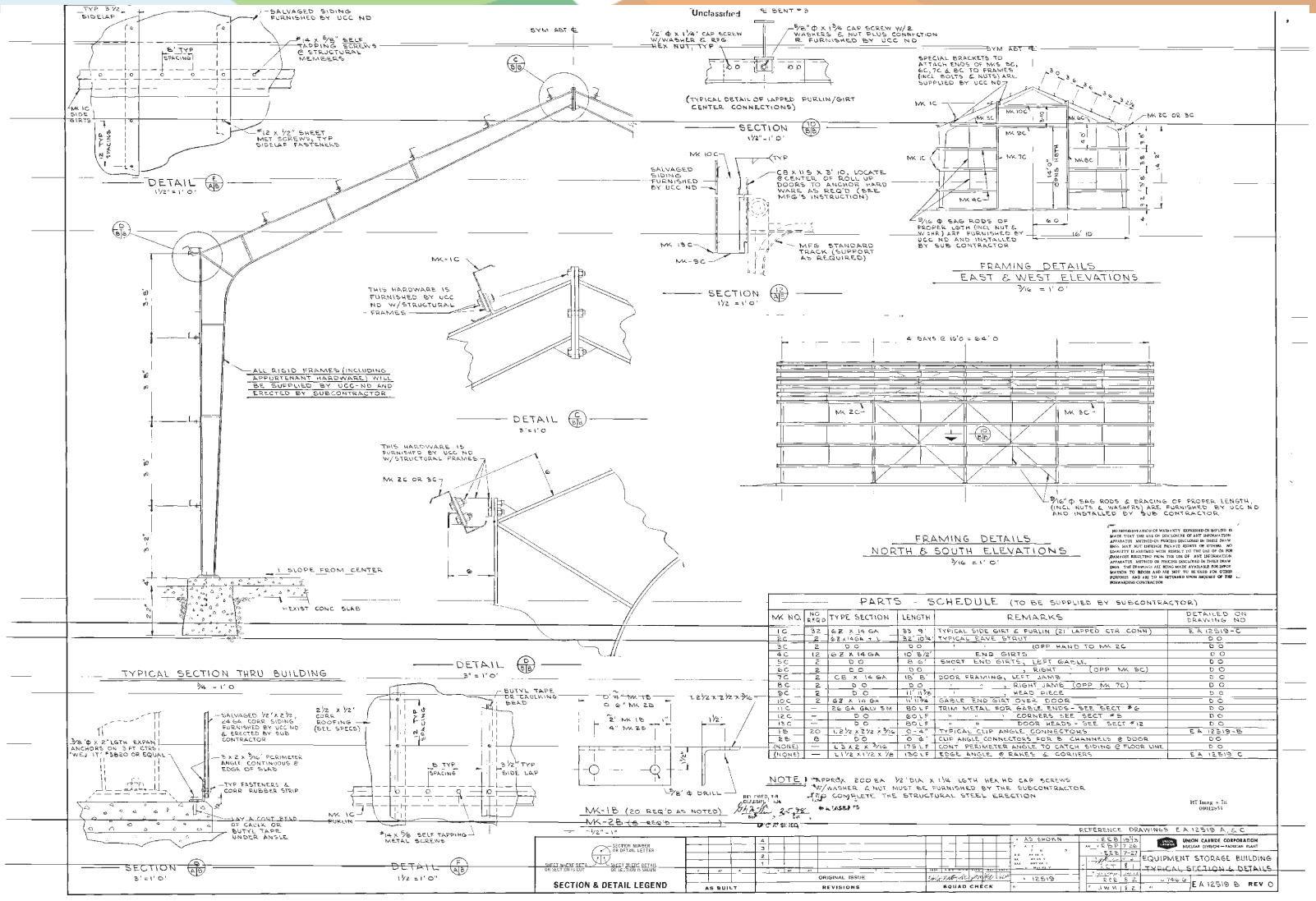
C-746-G Building – Electrical Equipment Storage

BACKUP INFORMATION

C-746-G Engineering Drawings

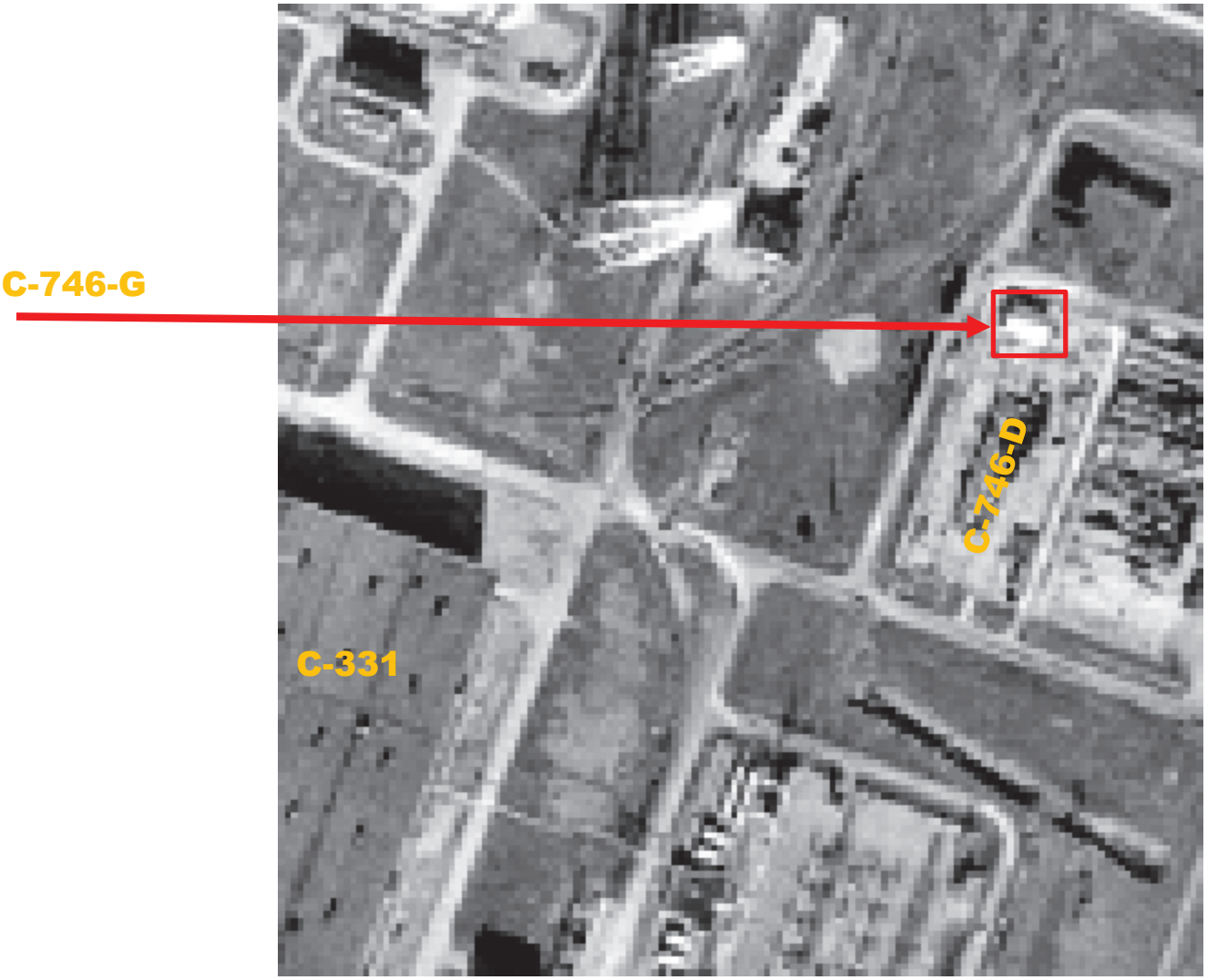


C-746-G Engineering Drawings



E-A-12519-B, Rev 0

C-746-G Aerial Photograph



Modified from Aerial Photo: December 10, 1974 (2-152 GS-VDJE)