



## Department of Energy

### Idaho Operations Office

1955 Fremont Avenue

Idaho Falls, ID 83415

#### NATIONAL HISTORIC PRESERVATION ACT SECTION 106 FINDING OF ADVERSE EFFECT

**Date:** June 3, 2024

**Subject:** Proposed CF-638 Dosimetry Calibration Lab Demolition

In accordance with 36 CFR § 800.6(a)(4), the Department of Energy, Idaho Operations Office (DOE-ID) is making the information below available to the public regarding Section 106 review for the subject undertaking to provide an opportunity for members of the public to express their views on resolving adverse effects of the undertaking. **Comments should be emailed to Betsy Holmes, DOE-ID Cultural Resource Coordinator, at [holmesbs@id.doe.gov](mailto:holmesbs@id.doe.gov) on or before July 3, 2024.**

**Description of the Undertaking and Area of Potential Effect (APE):** The Idaho National Laboratory (INL) is an 890-square mile Department of Energy (DOE) site operated by the Department of Energy, Idaho Operations Office (DOE-ID) with a focus on nuclear energy research. Battelle Energy Alliance (BEA) is the current management and operation contractor. One building at the INL desert site, CF-638, has fallen into disrepair. As a result, and in anticipation of potential future campus development projects, BEA is proposing to demolish this building. Building CF-638, the Dosimetry Calibration Lab, is located in the Central Facilities Area (CFA), was built in 1943, and is a cement building buried in soil to create a bunker.

Demolition activities at CF-638 include removal of the bunker, the concrete pad to the northwest of the bunker, and the power pole to the southwest of the bunker. The area between the northeast elevation of the bunker and Quebec Avenue is currently used for parking and will be used as a laydown and storage area. Approximately 100 feet around CF-638 the concrete pad and the power pole will be required to safely maneuver demolition equipment. All concrete to approximately 3 feet below grade will be removed. The area will then be backfilled with topsoil, contoured to match existing topography, and revegetated with native vegetation. The only utilities that currently serve this building are power and data. The power lines and poles that feed the building will be removed. The data conduit will be left in place and buried.

Archaeological review is limited to the actions that have the potential to affect archaeological historic properties. These include the demolition of the building, the demolition of the building foundation and footings (down to approximately 3-foot depth), the demolition of a concrete pad, the removal of the power pole to the southwest, and the grading/levelling of the landscape following the demolition. The ground disturbance area is defined by the footprints of the building, the concrete pad, and the power pole with a 100-foot buffer surrounding them to accommodate these ground disturbing actions. The total ground disturbance area encompasses 2.75 acres centered on CF-638, the adjacent concrete pad, and the power pole to the southwest.

The CFA APE (Figure 1, attached) was designed to accommodate the potential for both physical and visual effects, as removing building has the potential to alter viewsheds. The observer point was set at 20 feet to capture the full height of the property and the surface set at 5 feet to mimic a human sightline. The CF-638 portion of the project APE is a circle with a radius of 0.6 miles to capture potential visual effects to built environment historic properties in the surrounding area that have a direct view of the historic property.

**Description of Steps to Identify Historic Properties:** Archaeological historic properties were identified from previous cultural resource investigations that overlap with the area identified for ground disturbance at CF-638. No archaeological historic properties were identified in the area reviewed for ground disturbance. No additional surveys were required. Built environment historic properties were identified based on an inventory of CFA properties completed in 2021.

**Description of Affected Historic Properties:** CF-638 is the High Explosives Magazine (Dosimetry Calibration Lab). The magazine was constructed in 1943 using the plans for a “standard magazine high explosives arch type” with its purpose as “light laboratory”. The facility was part of the original Arco Naval Proving Ground (NPG) proof area and stored munitions for the gun emplacements. After the proving ground was no longer in use, the Atomic Energy Commission stored hazardous material in the bunker and relied on its solid concrete construction and berms for additional protection from chemical explosions. In 1969, the bunker became the Dosimetry Calibrations Laboratory and provided radiation shielding. CF-638 meets the 50-year threshold for potentially historic properties and is associated with the historically significant Arco NPG. As a result, the facility was recommended as eligible for listing in the National Register of Historic Places under Criterion A and received Idaho State Historic Preservation Office concurrence in 2023. See Figures 2-4, attached.

**Description of Undertaking’s Effects on Historic Properties:** There are three historic properties within the CF-638 portion of the project APE at CFA: CF-638, CF-651, and CF-704. Additionally, there are two resources of historic age that have not been evaluated for eligibility to the National Register and will be treated as eligible: CF-710 and CF-711. The project will not physically impact CF-651, CF-704, CF-710, or CF-711. Therefore, the only concerns with respect to these historic properties are visual. Due to demolition of buildings and structures built during those periods and non-historic in-fill construction to meet changing mission needs, the integrity of setting and of feeling for these properties has been lost over time. Therefore, the demolition of CF-638 cannot introduce additional deleterious effects to what has already been lost.

**Applicability of Criteria of Adverse Effect:** As demolition is a total and irreversible act, the proposed demolition of CF-638 will result in an Adverse Effect.

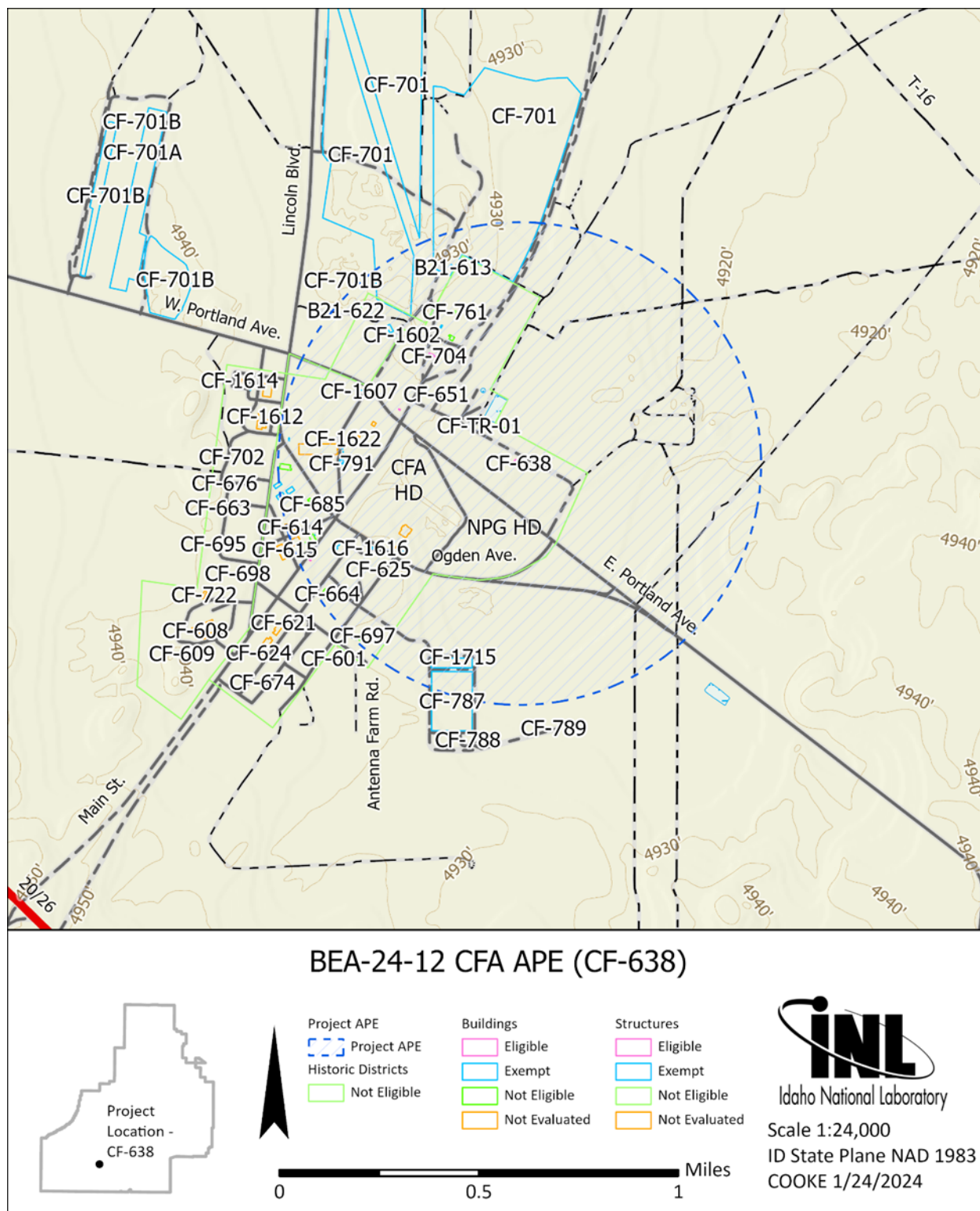


Figure 1. The CFA APE, centered on building CF-638.



Figure 2. CF-638, northeast façade



Figure 3. CF-638, entrance on southeast façade

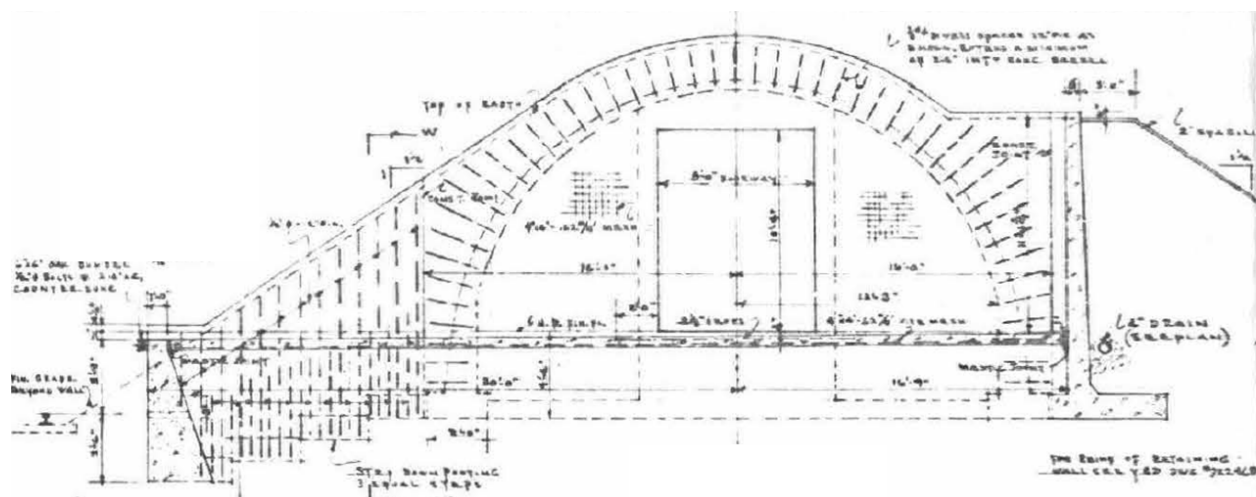


Figure 4. CF-638 cross section, 1943 (U.S. Naval Proving Ground 1943)