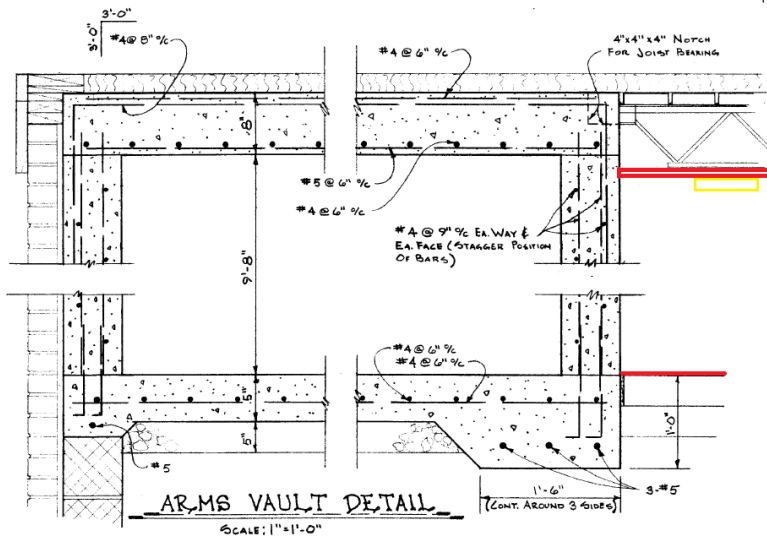
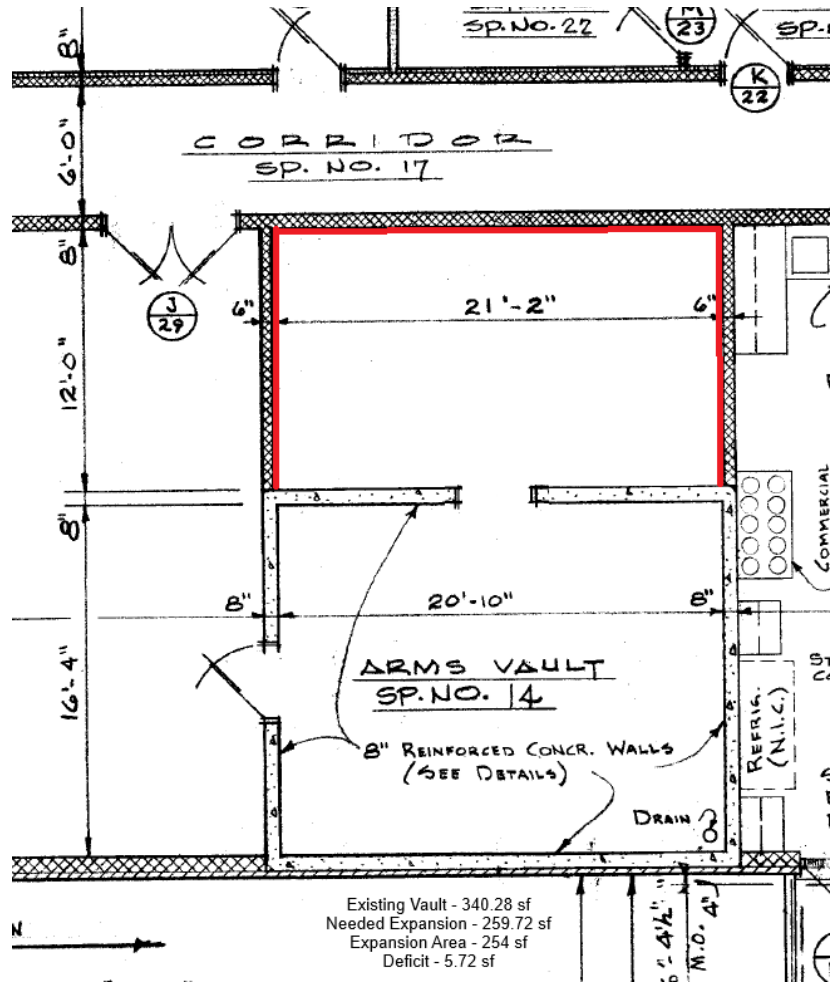


# DICKSON RC VAULT EXPANSION 07.30.2025



### **Scope of Work:**

- 1. Remove door and frame to Corridor 17.**
- 2. Infill wall opening with 8" reinforced CMU. Reinforcing is two #4 bars every third block course, doveled 4" into existing wall.**
- 3. Remove hand sink and floor drain. Cap plumbing penetrations in wall and below floor.**
- 4. Cut opening in existing 8" concrete wall for new 3'-4" wide x 6'-8" tall hollow metal cased opening.**
- 5. For the existing 6" and 8" CMU walls (total of three walls) and to create a secured ceiling element, over the entire room-side surface of the walls and to the bottom of the existing steel bar joists install 3/16" expanded metal with a maximum grid opening of 1" x 3" and weighing a minimum of 4.27 pounds per square foot. The new expanded metal shall applied and fastened to the existing CMU walls and steel bar joists so that destruction of the existing and reinforcing materials is required to remove them.**
- 6. For the existing floor, over the entire surface install Marsten, Irving or pierced steel planking. The new steel planking shall applied and fastened to the existing CMU walls so that destruction of the existing and reinforcing materials is required to remove them.**
- 7. Install new dehumidifier piped to existing drain. New dehumidifier is to be sized to serve both the existing vault and the expansion area (approximately 5,915 cubic feet).**
- 8. New LED lighting fixtures in existing vault and to bottom of expanded metal in expansion area.**
- 9. Electrical subcontractor to provide conduit as required for use by Electronic Security Systems. See Item 10 below.**
- 10. Owner's Electronic Security Systems vendor to install new sensors and alarms as necessary to secure the existing and expansion areas of the vault.**
- 11. Paint all surfaces receiving work to match existing colors.**

**Reference: AR 190-11, Appendix G, Paragraph G-2.**

G-2. Criteria for existing facilities storing Category II through Category IV arms The following exceptions to the new facility criteria are permitted for storing Category II through Category IV arms in an existing facility located on or off a military installation: a. Doors and door frames. Door frames, for doors other than Class 5 doors specified in paragraph G-1, above, will be as follows: (1) Door bucks, frames, and keepers will be rigidly anchored and provided with anti-spread space filler reinforced to prevent disengagement of the lock bolt by prying or jacking of the door frame. The frames and locks for both interior and exterior doors will be so designed and installed as to prevent sufficient removal of the frame facing or the built-in locking mechanism to allow disengagement of the lock bolt from outside a secured room when the door is closed and locked. (2) Construction requirements for door frames and thresholds will be as exacting as those for the doors themselves. For example, where metal doors are used, the frame and thresholds will be of metal. Various types of hinges are commercially available. When choosing the proper type of hinge for secure area doors, hinges will be of the fixed pin security hinge type or equivalent; exposed hinge pins will be peened, spot welded, or otherwise secured to prevent removal; and hinge mounting screws may not be exposed to the outside of the arms room except for Class 5 steel vault door hinges. b. Windows and other openings. Windows and other openings will be kept to a minimum. When required, windows and other openings will be secured as required in paragraph G-1, above. c. Walls. Walls will be as required in paragraph G-1, above, except that in addition to those construction types, 12- inch unreinforced, solid brick interlocked between the inner and outer courses will be allowed. In addition, where walls do not meet that standard or the standards in paragraph G-1, above, they may be reinforced per paragraph G-2f , below. d. Ceilings and roofs. Ceilings and roofs of existing facilities will be reinforced concrete where possible per paragraph G-1, above. Where ceilings and roofs do not meet the standards in paragraph G-1, above, they may be reinforced per paragraph G-2f , below. e. Floors. Floors, if on grade, will meet the standards in paragraph G-1, above. Where the floor slab acts as the ceiling of an under-lying room or area, the ceiling standards in paragraph G-2d , above, apply. Where such floors do not meet the standards in paragraph G-1, above, they may be reinforced per paragraph G-2f , below. f. Existing wall, ceiling, roof, or floor reinforcement. Walls, ceilings, roofs, and floors that do not meet the structural criteria above will be reinforced by one of the following methods. When any of these reinforcing materials are used, they will be applied and fastened to the existing structure so that destruction of the existing and reinforcing materials is required to remove them. (1) Steel bars. Three-eighth inch steel bars, 4 inches apart with bars in one direction welded to the bars in the opposite direction so that the openings do not exceed 32 square inches. Ends of the steel bars will be embedded securely in the structure of the building or welded to a steel frame securely fastened to the building. (2) Steel landing mat. Marsten, Irving, or pierced steel planking. (3) Expanded metal. Three-sixteenth inch with a maximum

grid opening of 1 inch by 3 inches and weighing a minimum of 4.27 pounds per square foot. (4) Steel plate. One-fourth inch steel plate. (5) Steel mesh. Number 8-gauge high carbon manganese steel, or for existing facilities, number 6-gauge cold drawn steel wire with a grid of not more than 2 inches center to center. The number 6-gauge material is not authorized for future upgrading. (6) Sheet metal. For existing facilities, 16-gauge steel sheets or plates securely fastened together. This material is not authorized for future upgrading.