



**TO:** Mayor Tom Ross  
Members of the City Council

**FROM:** Jennifer Eckman, Airport Director

**DATE:** February 5, 2024

**SUBJECT: CONTRACT FOR ELECTRICAL VAULT REHABILITATION - FINAL DESIGN (CITY PROJECT NUMBER # 2024500001)**

**I. RECOMMENDED ACTION**

- A. Recommend approval of the Electrical Vault Rehabilitation final design to be conducted by Short Elliott Hendrickson Inc. (SEH); and
- B. Recommend approval of the budget amendment; and
- C. Authorize Mayor to sign the agreement.

**II. DEPARTMENT CONTACT PERSONS**

A. Jennifer Eckman, Airport Director	857-4724
B. Maria Romanick, Airport Operations Manager	857-4724

**III. DESCRIPTION**

**A. Background**

The airfield electrical vault building was originally constructed in 1993. The building houses the infrastructure required for the airfield lighting, including the runway and taxiway edge lighting, signage, and airport navigational aids. Most of the equipment in the building is original to the 1993 construction. It is 30 years old and has exceeded its useful life and needs replacement. Per Table J-4 in the AIP Handbook, the minimum useful life for airfield electrical/lighting equipment is 10 years. Airport staff have experienced and documented consistent maintenance challenges with the equipment and replacement parts are becoming increasingly challenging to obtain, if not obsolete. The current infrastructure in its current condition poses a risk that airfield lighting will become inoperable without notice with the potential delayed maintenance period, potentially causing safety issue and flight delays.

**B. Proposed Project**

The project will replace several pieces of equipment inside the existing electrical vault, including control panel, relay-based interface panel, ATCT lighting panel, ATG radio control, and most of the constant current regulators. The vault rehabilitation will ensure airfield safety by providing a well operating and maintainable lighting system.

**C. Consultant Selection**

SEH is the engineer of record for MOT airport development as was approved at the City Council meeting on May 17, 2021.

**IV. IMPACT:**

**A. Strategic Impact:**

Safe use of the airport lighting systems are of utmost importance to providing safe and efficient aviation transportation for the Minot Community.

**B. Service/Delivery Impact:**

By designing a solution to address the unreliable and aging airport lighting systems and components, this project will allow for continued safe operations for aviation at the Minot International Airport.

**C. Fiscal Impact:**

The anticipated cost of this project is outlined below, and it is included in the 2024 CIP for the Minot International Airport:

**Project Costs:**

Project Preliminary Design and Labor	\$ 46,590.60
<b>Direct Expenses</b>	<b>\$ 43,309.40</b>
<b>TOTAL</b>	<b>\$ 89,900.00</b>

**Project Funding**

The funding will come from the FAA Airport Improvement Program (AIP). The airport receives approximately \$1.6M of AIP entitlement funding annually, in addition to the carry-over from previous years. Project funding beyond the available AIP funding will be funded with FAA discretionary funding. The preliminary design effort will scope the project accordingly to match City, NDAC, and FAA budgets. It is projected that the City of Minot share will be 5 percent of total project costs.

**V. CITY COUNCIL ASPIRATIONS**

The City Council aspirations that are achieved by adopting the proposed recommendation and completing this project include providing a safe and welcoming environment at the Airport.

**VI. ALTERNATIVES**

An alternate the City Council could recommend that this project be postponed or denied, resulting in a delay for repairs and the potential for failure of the airport's lighting systems. Failure of airport lighting could result in runway and taxiway closures, causing delays for air traffic control's ability to land and taxi aircraft efficiently.

**VII. TIME CONSTRAINTS**

The following project schedule is intended to accommodate City and FAA funding and grant schedule requirements:

1. February 5, 2024 – City Council approves final design contract
2. February 15, 2024 – Submit Engineer's Design Report and Construction Safety and Phasing Plan to FAA
3. March 2024 – Complete final design
4. April 2024 – Bidding and award.
5. Fall 2024 – Construction

**VIII. LIST OF ATTACHMENTS**

- A. SEH Proposal - Supplemental Letter Agreement – Electrical Vault Rehabilitation – Design
- B. Budget Amendment – 11.2024 BA Airport Electrical Vault