Attachment #4



Division of Finance & Management

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TO: South Dakota Aeronautics Commission
FROM: Jack Dokken, Office of Aeronautics
DATE: July 18, 2024
SUBJECT: Airport Improvement Program (AIP) /Bi-Partisan Infrastructure Law (BIL)

Airport sponsors are requesting funding from the State Aeronautics Fund for the following AIP/BIL projects below.

Clark County 3-46-0009-017-2024

Grant Applications

BIL: Fuel system upgrades – bid schedule B and engineering services.Federal Share\$448,000.00State Share\$Local Share\$49,778.00Total\$497,778.00

Faith 3-46-0076-017-2024

AIP: Conduct aeronautical survey for approach development.

Federal Share	\$ 139 <i>,</i> 300.00
State Share	\$ 7,739.00
Local Share	\$ 7,739.00
Total	\$ 154,778.00

Gettysburg 3-46-0017-016-2024

BIL: Acquire snow removal equipment.

\$288,000.00
\$ 16,000.00
\$ 16,000.00
\$320,000.00

Huron 3-46-0022-044-2024

AIP: Construction of partial parallel taxiway – bid schedule A.

Federal Share	\$850,500.00
State Share	\$ 47,250.00
Local Share	\$ 47,250.00
Total	\$945,000.00

Huron 3-46-0022-045-2024

BIL: Construction of partial parallel taxiway – alt bids A and B, engineering and testing.

Federal Share	\$697,500.00
State Share	\$ 38,750.00
Local Share	\$ 38,750.00
Total	\$775,000.00

Mitchell 3-46-0037-032-2024

BIL: Design revenue-producing hangar.	
Federal Share	\$ 90,000.00
State Share	\$ O
Local Share	\$ 10,000.00
Total	\$100,000.00

Mobridge 3-46-0038-022-2024

AIP: Airport layout plan update, narrative, AGIS exhibit A and Land use plan.

Federal Share	\$324,193.00
State Share	\$ 18,011.00
Local Share	\$ 24,033.00
Total	\$366,237.00

Design and Construction of AvGas Fuel System

The Clark County Airport, 8D7, is a general aviation airport in Clark County, SD. The airport's primary runway is Runway 13/31 which is 3,697 ft long and 60 ft wide. A crosswind turf runway, Runway 3/21 at 1,258 ft long and 100 ft wide is also available for aircraft using the airport.

The current airport manager is an agricultural spray operator who has his own fuel system. When he is available, he will sell fuel to local and itinerant users. As he is a small business owner and unable to be at the airport at all times when the fuel service is needed, there are occasions when he is unable to accommodate everyone. The manager does not wish to continue to service the local and itinerant users from his personal fuel system as it is an inconvenience to himself when he is home spending time with his family and to others when he is not able to accommodate them when during. The manager has let the County know that he plans to discontinue fuel service to the public by January of 2025.

The County plans to construct a self-service credit card aeronautical fueling system that includes a double-walled storage tank, pavement needed for tanks and dispensers, and associated site improvements for 100LL fuel. At this time, there is not a need for JetA fuel to be sold at the airport therefore that type of fuel tanks and dispenser is not included in this project.

Per FAA Order 5100.38D, Airport Improvement Plan Handbook, a fuel farm is an eligible project if justified. For clarification on the eligibility and justification of the fuel farm:

- The fuel farm will be owned and operated by the County of Clark.
- •The County Airport will have no fuel service by 2025, therefore is in need a self-service system ASAP.
- •The County understands that the fuel farm is considered a revenue-producing aeronautical support facility project and maintenance/repair of the system is not eligible.
- •The airport is a Nonprimary airport and only plans to use AIP entitlements/BIL allocations for this project.
- •All airfield needs are met:
 - Runway condition is excellent with plans for a seal coat application in 2025 (4 years after construction)
 - Taxiways/Taxilanes are in good condition and maintenance was recently applied to them. No signs of FOD or rapid deterioration on them.
 - The GA Apron PCI values are in the 40's however, a large concern of the apron is the concrete tie-downs. Due to the very high water table on the airfield, each year the tie-downs are forced upward after winter. The County has since been able to force the tie-downs back into the earth each spring to remove concerns over the life the pavement. Recently, crack sealing and a seal coat were applied to the apron and it looks to be in much better shape.
 - No foreseeable improvements of the airside facilities are anticipated that go beyond the Airport's annual AIP entitlements, for example entitlements will be used for pavement maintenance in 2025.

Faith Municipal Airport Faith, SD

2024 Project Description/Justification:

The project is to Conduct Aeronautical Survey for Instrument Approach Development

The City of Faith has been trying to obtain an instrument approach for several years without success. This year, they are determined to obtain IAP on both ends of the runway. The IAP can protect pilots from terrain and obstacles, avoid visual illusions that can cause them to fly too high or too low, and help them land or take off in inclement weather.

Transitioning from VFR to IFR, is a safety-critical projects. A City of Faith Council member attended the airport CIP meeting in Deadwood, SD, on April 9, 2024, expressing the high priority of the project and the need for additional funding. One of the council members even had a child life flighted out of the airport, so it is extremely important for the community to have a reliable lighting system and instrument approach. The next closest airport with instrument procedures is Eagle Butte, and that airport is 41 miles away, followed by Lemmon Municipal Airport, which is 71 miles away. The area is extremely remote, so it is very important to have good access to instrument procedures at Faith Municipal Airport.

Snow Removal Equipment

The Gettysburg Municipal Airport (0D8) currently operates a piece of Snow Removal Equipment that consists The Sponsor currently uses a Case IH MX120 for snow removal operations at the airport. This tractor was acquired using AIP funds in 2002. The Airport is proposing to purchase a loader with a blade, sweeper, and blower as attachments. The existing equipment will be used as a trade-in with the bid package. However, the Sponsor does have interest in keeping this equipment and reimbursing the grant for the value of this Trade-In Equipment so that it could be used in other areas of the city that are less critical for snow removal operations than the airport.

In order to justify the use of federal money for the purchase of SRE Equipment, the FAA developed a SRE Calculator spreadsheet that uses different variables to quantify the equipment needed to meet the requirements they set in their advisory circulars. The following justifications of the variables used in completing the spreadsheet. Figure 1 provides the results of the spreadsheet that was prepared using the following variables:

- The average annual snowfall of 37 inches was determined from the historical average monthly data from 1985 to 2022 from the High Plains Regional Climate Center.
- The Gettysburg Municipal Airport is a General Aviation facility.
- The Number of Operations was obtained from the most recent Airport Master Record. The total operations for 12 months ending 8/8/2023 was 6,200.
- The sizes of the Priority 1 snow removal areas are:
 - Runway 13/31 is 4,400 ft x 75 ft.
 - Connector Taxiway/Partial Parallel Taxiway is ± 1,300' x 35' ft.
 - The GA Apron is approximately 67,000 ft².

Figure 1 is the completed "Airport Snow Removal Equipment" for the Gettysburg Municipal Airport. The Airport is proposing to purchase a loader with blade, sweeper, and blower attachments. The airport has adequate storage to store the currently owned and proposed snow removal equipment indoors. A loader is required as a carrier vehicle for the attachments.

BEFORE the acquisition and replacement of the Snow Removal Equipment, the following equipment was purchased with AIP funds:

- 1 Snow Blowers
- 1 Plows
- 0 Sweeper
- 0 Hopper Spreaders
- 1 Front End Loader

According to the Snow Removal Equipment Calculations spreadsheet, the maximum number of eligible items is as follows:

- 1 Snow Blowers
- 2 Plows
- 1 Sweepers
- 1 Hopper Spreaders
- 0 Front End Loader

AFTER the acquisition and replacement of the Snow Removal Equipment, the airport will have:

- 1-Snow Blowers
- 1 Plows
- 1-Sweeper
- $0-Hopper\ Spreaders$
- 1 Front End Loader.

This project shall include the Phase I construction of a new partial parallel taxiway for Runway 17 at the Huron Regional Airport. Once completed, the new taxiway will complete the parallel taxiway for the 17 End of the runway. This phase of the project includes approximately 600' of partial parallel taxiway and approximately 350' of hangar taxilane.

Huron Regional Airport is the base for the two largest Ag Spray Operators in the state. Each of these companies has planes spraying throughout the region but they ultimately end up back in Huron for maintenance, repairs and storage. In addition to the two current operators, two additional aerial application businesses want to construct hangars and utilize the airfield. With the addition of these two new spray businesses, the Huron airport will have four spray operators based on the airfield, making it the largest Agricultural spaying airport in the State. With that large of agricultural presence, the amount of traffic from the different ag spray businesses will be detrimental to the other general aviation (GA) users of the airport. The addition of this partial parallel taxiway will allow for the users to be able to enter and exit Runway 17/35 more quickly and efficiently increasing safety on the airfield.

Design of Revenue Producing Hangar

The Mitchell Regional Airport is currently in need of a new hangar to meet the current demands for aircraft storage and to increase airport revenue. There are numerous existing hangars at the airport, but the hangars are full and there is no storage space available. The airport manager has stated that there is interest from multiple pilots on basing their aircraft at the airport. However, with the lack of storage space available, the prospective pilots have not made the move. Constructing a new Hangar will allow users to rent the space from the city for storing their aircraft. The hangar would be owned by the City of Mitchell and would be rented out to pilots to allow them to store their aircraft inside while using the airport. By collecting rent from the proposed hangar, the city would be able to have another source of income from the airport. Having more space available for aircraft will also bring more traffic to the airport. In order for aircraft to use the proposed hangar, access to the existing hangar taxilanes will be constructed with the project. The included preliminary project sketch provides the location of the proposed hangar as well as a possible haul route and staging area for the project. The proposed hangar will be a pre-fabricated steel building with three separate units or "areas" for pilots to store aircraft. Each of the units will be large enough to store a single plain and will be rented out on a single basis.

The bidding process is being anticipated to be completed in the spring of 2024. Construction of the new hangar is expected to be completed during the late summer/fall of 2024 or due to extended lead times, the 2025 construction season. Once the building is completed, pilots will be able to rent the hangar space from the city, providing an additional source of income for the airport.

Mobridge Municipal Airport, Mobridge, South Dakota

Project Narrative / Justification – Airport Layout Plan (ALP) Update, Narrative, AGIS, Exhibit A and Land Use Plan

BIL Grant

- 1. ALP Update
 - a. The ALP for Mobridge (MBG) was last completed in 2005 and is nearly 20 years old. It was based on FAA AC 150/5300-13 Airport Design (through Change 9). Since that time the Airport Design Advisory Circular was changed an additional 9 times and then two other complete re-writes have been issued so the current standard is now FAA AC 150/5300-13B issued in March 2022. In summary, the drawings need to be brought to current standards so that the airport can provide a portrayal of how the areas of the airport will be most effectively used for development into the future and maximize the use of space.
- 2. Narrative Report
 - a. The narrative report is the justification for why the elements of the airport portrayed on the ALP are arranged and sized they way they are. This includes where hangars will go, how the apron will be laid out, what the runway capabilities will be. The narrative will thoroughly evaluate the forecast of activity at MBG over a 20-year period so that in the development of the ALP, that all anticipated activity can be accommodated without impeding other development.
- 3. AGIS
 - a. The FAA is now using the Airport Data and Information Portal (ADIP) to consolidate information for airports including Airport GIS (AGIS) data regarding the airfield and surrounding obstructions. An AGIS project has never been completed at MBG, therefore this is required by the FAA with an ALP update. In addition to providing information into the ADIP, the FAA will be able to use the newly acquired obstruction data to remove the current restriction on nighttime approaches to Runway 12 and therefore all approaches at MBG will again be fully functional.
- 4. Exhibit A
 - a. In 2013, the FAA issued a number of Standard Operating Procedures (SOPs). One of these was SOP 3.00 regarding Exhibit 'A' Airport Property Inventory Maps. This standard requires a more thorough presentation of the property interest that the Airport Sponsor has in the airport including acquisition records and any encumbrances that may limit the Airport Sponsor's ability to maintain the airport. The work includes title search for deeds, easements and encumbrances and development of a booklet which will include all records.
- 5. Land Use Plan
 - a. A land use plan for an airport is completed to assure that property uses surrounding the airport will remain compatible with the long-term plans of the airport and there will not be a conflict created by an off airport development. The land use plan primarily relates to height restrictions but also includes compatible use (e.g. protecting residential uses in approach areas or near areas that would experience loud noises).
- 6. DBE Program Update
 - a. The current airport Disadvantaged Business Enterprise (DBE) program was valid for 2021 through 2023. A new DBE program with new goals will need to be developed to cover anticipated airport projects in 2024 through 2026.