

MEMORANDUM

TO: Patty Wahto, Airport Manager

FROM: Ke Mell, Airport Architect

DATE: March 6, 2024

RE: Airport Architect's Report

Updates since last report in italics. Look ahead in **bold italics**.

Parking Lots Improvements: *DOWL has submitted the Preliminary Closeout Report to the Federal Aviation Administration (FAA). Secon's final pay request has been approved. DOWL's final pay request is in hand, with a couple of minor items pending.*

Additional security cameras for the parking lots will be a future project.

During the course of this project, it became increasingly clear that there are design, utility, and paving issues that will need to be addressed in a future reconstruction of Shell Simmons and Yandukin.

Outgoing Baggage Belt Repair/Replacement: Robson has completed installation of the baggage belt, and it is in service. Substantial Completion is scheduled for the week of March 11. JNU extended Robson's contract a month, with Final Completion now on April 2. The contract was extended because the work was not Substantially Complete before the consultant's out of town trip, which was scheduled months in advance.

A future project will work with Transportation Security Administration (TSA) through their planning and design process to upgrade the system as a whole.

JNU Buried Tank (UST) Removal & Replacement (formerly Old Shop UST): *The buried fuel tank at the JNU Airfield Maintenance shop has been replaced and decommissioned. The new 1,000 gallon. fuel tank was installed and connected on February 21. and is supplying the building's boiler.*

The 1962 tank was removed on February 26 and the excavation has been backfilled. The bottom of the buried tank—at the level of the water table, about 5 ½ feet down — was severely corroded and had leaked, although not extensively. After the tank was removed the inside of the tank was power washed, which revealed several holes. The contaminated soil was excavated to the clean limits and a Change Order was drafted for \$22,513.45 to cover disposal of the contaminated soil and its replacement with clean fill. Sampling test results are due from the lab on March 14, after which the project can be closed out.

Gate 5 Passenger Boarding Bridge (PBB) Replacement: TK Airport, manufacturer of the new PBB, informed the contractor, Dawson Construction, that delivery of the new PBB will be delayed from May 21 to June 17, with Substantial Completion now scheduled for June 29. The new PBB will not be in service when Delta's summer flights begin on June 7, which will significantly complicate operations and Secon's work on the Main Ramp Project. To expedite Secon's work, Secon requested that Dawson remove the existing PBB at first opportunity. JNU concurs, as the existing PBB is neither operational nor repairable. Early removal of the existing PBB will allow Secon to move their work away from Gate 5 and the RON (temporary Gate 6) as quickly as possible. After Delta begins flying in on June 7, both Delta and Alaska Airlines will be ground boarding at two gates pending completion of the new PBB. The work will take place in close coordination with TSA, Alaska Airlines, Delta Air Lines, and the Main Ramp Project.

Sand/Chemical Back-up Electric Boiler: The original design of the Sand/Chemical building relied exclusively on the heat pump system shared with the Snow Removal Equipment Building (SREB) to heat the Sand/Chemical building. This was not designed with a redundant system. The Board approved \$175K to design and install a back-up boiler system which was thought to be fairly straight-forward.

Morris Engineering and Modern Mechanical provided a fee proposal under a City & Borough of Juneau (CBJ) consultant term contract (\$50K per project maximum) for the electrical and mechanical design and construction phase services. Staff would provide architectural drawings—sealed and signed if necessary, and any minor construction phase architectural services required—for JNU. Due to time commitments of other projects, staff was unable to provide the architectural work, so ECI (original architect for the Sand/Chemical building) was asked to provide minimal signed architectural work—essentially drafting—at a cost of \$5,000.

During design, it became clear that the Sand/Chemical building did not have adequate electrical capacity to support a back-up boiler; the capacity would need to come from the SREB. But the SREB would still need to have future electrical capacity planned for expansion. Morris Engineering and Modern Mechanical were granted a contract amendment for \$16,000 to analyze the matter. Additional conduits between the SREB and Sand/Chemical would be needed and were added to the project. By fall 2023, JNU had not received final design documents from the consultants, but the design of the trenching and conduits was complete, so staff moved forward on this work to ensure CARES funds would cover this work. The conduits were installed by SECON in October 2023 for \$99,700.

The work that remains to be bid and constructed has three components: 1) Mechanical—installation of the new electric boiler; 2) Electrical—provision of power to the new boiler from the main electrical panel in SREB; and 3) Architectural—minor modifications required by the new boiler. The design documents were sent to CBJ Contracts for advertising. CBJ Contracts accepted the mechanical design documents but will not advertise the project without modifications to the architectural and electrical design documents as submitted.

CBJ Contracts require signed and sealed drawings and a cost estimate for each of the three disciplines: 1) Mechanical—complete - signed and sealed drawings and a cost estimate are complete; 2) Electrical—signed and sealed drawings and a cost estimate are in hand, however, CBJ Contracts is concerned that the drawings may confuse potential bidders and asked that the drawings be revised to minimize potential graphic confusion on the part of bidders; 3) Architectural—drawings are not signed or sealed and no cost estimate received (staff was originally going to do this in-house).

Architecture - ECI submitted a fee proposal of \$4,380 to sign and seal the architectural drawings, and \$1,980 for a professional cost estimate of the architectural work, for a total fee of \$6,360.

Electrical - Morris Engineering submitted a fee proposal of \$17,120 to revise the electrical drawings with stamp/seal.

The additional Architecture and Electrical costs to provide bid documents acceptable to CBJ Contracts are \$23,480.

Initially the Board approved a total project budget of \$175,000, of which \$70,835 has already been contracted for design, and \$99,700 contracted to Secon to trench and lay conduit between the buildings. The current available budget after previously contracted design and trenching is \$4,465. The additional work required by CBJ Contracts will require Board action. The additional work for \$23,480, less \$4,465 remaining from original design contract leaves a balance of \$19,015. This is only design and bid documents, not construction.

Based on the 95% documents, the Engineer's construction cost estimate is approximately \$490,000. The mechanical estimate is \$334,733; the electrical estimate is \$125,971, plus architectural estimated at \$30K; total construction cost now approximately \$980K.

At their January 11, 2024, meeting the Board directed that the project be advertised for bids. When bids are received, the Board will decide whether to proceed with the project. The Board may decide to 1) accept the bid; 2) reduce the scope to a portable boiler at an estimated \$175K; or 3) continue to lease a boiler unit at \$40K/year.

JNU staff investigated the purchase of a new, temporary oil-fired boiler comparable to the one we have been renting for the past several years. Harri Plumbing, from whom JNU is currently renting a portable boiler, said that the lead time would be about four months. Harri's believes that "a budget of \$165,000 would cover the procurement and assembly of a portable heating trailer, fuel tank and hoses similar to what we are using now but with approximately 300 MBH capacity."

In October 2023, Secon and Chatham trenched between the Snow Removal Equipment Building (SREB) and the Sand/Chemical building in order to provide sufficient electrical capacity for the new boiler. The trench was paved, and the conduit terminated at each end of the trench. Spare power and data conduits--for any future purpose--were laid in the completed trench.

JNU is again renting Harri Plumbing's temporary boiler, pending completion of this project.

Alaska Seaplanes Building: (*No change*) Landscaping of JNU property along Shell Simmons and installation of the Service Animal Relief Area fence at the north end of the terminal will be completed in spring 2024.

Alaska Seaplanes submitted an Airfield Tenant Improvement Request (ATIR) for Lease Lot 2, just north of their building. Staff responded with comments but have not yet received a response.