



MEMORANDUM

TO: Patty Wahto, Airport Manager

FROM: Ke Mell, Airport Architect

DATE: February 5, 2025

RE: Airport Architect's Report

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

Gate 5 Passenger Boarding Bridge (PBB) Replacement: *With help from Dawson Construction and Schmolck, the mechanical subcontractor, the heating unit is now functioning as intended. Apparently, some electrical connections had become dislodged since Substantial Completion in summer of 2024, and the issue was not noticed until winter arrived. In late November, during the cold weather, the roof mounted bridge heating unit was found to be inoperable. During that time the PBB remained in service but was unheated.*

Jensen Yorba Wall (JYW) has provided as-built drawings for the project, *as have their consultants*. JYW continues to work on the final project close out report for the Federal Aviation Administration (FAA). On this account, their final pay request will likely be in February.

Mendenhall Riverbank Stabilization: *State of Alaska Department of Military and Veteran's Affairs (DMVA) continues their review of JNU's pre-bid requirements and eight-month time extension request.*

The jökulhlaup occurred on August 5, 2023. Permanent work to repair damage must follow normal City and Borough of Juneau contracting and bidding procedures and permitting by relevant agencies. Eighteen months from August 5, 2023, is February 5, 2025. JNU staff applied for the eight-month extension on November 26, 2024; DMVA staff have assured JNU that the extension will be granted.

On behalf of JNU, proHNS is in the process of applying for permits for stabilization and repair of damage from the 2023 jökulhlaup:

1. On September 4, 2024, proHNS submitted an application to the Alaska Department of Fish and Game for a permit for work that could affect fish habitat. On October 9, JNU received the permit.
2. On September 3, 2024, proHNS submitted an application to the U.S. Army Corp of Engineers for a permit to work in the "Waters of the United States". On October 21, JNU received the permit.
3. On August 12, 2024, proHNS submitted an application to DNR for a permit for work below 'ordinary high water', in this case the high tide line. *On January 29, JNU executed an*

amendment to our existing ADL 107597 aviation easement which granted permission for the work.

4. On October 23, proHNS submitted an application to the City & Borough of Juneau (CBJ) for a grading permit. The permit will be issued after all other permits are received.

JNU staff are working with CBJ Contracts to advertise bids for the repair work, with bid-ready documents and a cost estimate prepared by proHNS in late February 2024. JNU will seek reimbursement from the Federal Emergency Management Agency and the DMVA for the work.

At the August 21 low tide JNU staff and proHNS visited the site of the 2023 damage. There was no damage from the 2024 jökulhlaup additional to the 2023 damage.

DOWL Manual Exhibit Updates: *DOWL is completing final revisions for JNU final review before submission to the FAA for their review.*

ALP Update: *Staff reviewed Michael Baker International's draft updates and responded with comments. JNU must submit the updates to the FAA by March 3, 2025 (90 days from the FAA's December 3, 2024, letter requesting the updates).*

Master Plan Update (MPU): *Technical Advisory Committee (TAC) meetings have been rescheduled as follows:*

TAC meeting #2 and TAC meeting #3 are now combined. The next JNU MPU TAC meeting is now scheduled for March 12, 1:00 p.m. to 3:00 p.m. This meeting will be virtual on Teams. The meeting will cover Airfield Inventory and Existing Conditions, the Aviation Forecast for JNU, and Airport Capacity and Facility Requirements. Michael Baker International (MBI) will deliver working papers related to these topics for review and comment prior to the meeting.

The April meeting is scheduled for April 10, 1:00 p.m. to 3:00 p.m. This meeting will be held in person at the Juneau International Airport, Alaska Room and virtually on MS Teams. This chapter covers the refined airport alternatives, the Environmental Action Plan, and a list of suggested capital improvements. MBI will deliver working papers related to these topics for review and comment prior to the meeting.

The final meeting is scheduled for June 19, 1:00 p.m. to 3:00 p.m. The meeting will be virtual on MS Teams and will cover the complete draft MPU.

MBI visited JNU on December 4 and December 5. They met w/JNU staff and members of the TAC, toured the facilities and laid the groundwork for their work over the next year.

The current Airport Master Plan will be updated with regard to data and forecasts of aviation demands, expansion for future planning consideration, Airport Layout Plan, and related Exhibit "A". This update will include an obstruction survey, but does not look to change the sustainability goals, environmental inventory, nor financial plan. Aerial photography for the obstruction survey will take place in early summer 2025, and the final update is expected in December 2025.

ADL 107380: Conveyance: *Since last checking with the State of Alaska Department of Natural Resources (ADNR) in late November, the Title Report Request has moved from number 36 to number 30 in the queue but has not yet been assigned to an adjudicator. When ADNR staff receive the Title Report, they can request the tideland patent for JNU. JNU staff will check back with ADNR in a couple of months. JNU's case seems to be moving about five spaces up in the queue per month; on that basis it would reach the top of the queue in about six months. After that, actual processing time is as yet unknown.*

During the Runway Safety Area (RSA) project, the Airport, through the Environmental Impact Statement (EIS) public process and mitigation, acquired wetlands parcels from the State for the extension of the RSA on both the RWY 8 and RWY 26 ends, and to accommodate portions of the approach lighting systems. The Airport is still working with ADNR to convey these parcels to the Airport's property. Once this is completed and recorded, the Airport Layout Plan and 'Exhibit A' will need to be updated by Michael Baker International to reflect the conveyance in the airport boundaries.

Jordan Creek Greenbelt Lighting: *Begenyi Engineering has submitted 95% drawings, 65% structural drawings, and a cost estimate. The estimate is \$73,565, which combined with contracted and estimated construction phase consultant services (\$38,220) and JNU staff time keeps us within our \$150K budget provided by the Assembly for the project. Of the total construction estimate, approximately 40% is for the pole foundations. The ground adjacent to Jordan Creek is very wet and although the poles are only 15' tall, local experience indicates that adequate foundations are essential. Staff anticipate bid-ready documents in February.*

The design will be pedestrian scale, compliant with IESNA (Illuminating Engineering Society of North America) G-1-03, Guideline for Security Lighting for People, Property, and Public Spaces, with a preliminary estimate of slightly less than \$50K for construction cost. Construction cost does not include JNU or CBJ Contracting staff costs. Incidental to the design, costs will be estimated to extend pedestrian scale lighting along the path on the north side of Jordan Creek between Teal Street/ Jordan Avenue and Alpine Avenue just north of Airport Boulevard if funding is available, extended path lighting could be included in the project.

In a September 16 email to the Airport Manager, Bruce Denton of the Glory Hall Board said "In the past leftover funds from completed CIP projects have been re-allocated to augment projects that are short. Given that this project is an effort to improve safety of folks who are legitimately using the path to transit between the airport and the adjoining neighborhood, and to deter the use of the path as a hangout or camping spot for vagrants, I would think it warrants the funding needed to do it right. I can't help but think that JPD [Juneau Police Department] and the city manager would support this. I believe this needs to be initiated by the city manager. Does anyone have any idea how much is needed to do it right? I'd be happy to follow up with Katie with an increased funding request."

The \$150K appropriated by the CBJ Assembly appears to be the right order of magnitude to do something, but it will likely not be pretty. Staff have had a couple of conversations with Darrell

Wetherall, transmission and distribution engineer for Alaska Electric Light & Power (AEL&P), as to where to draw power. He said AEL&P has programs that might be helpful, but it will be complicated to figure out. Andrés has asked for cameras, so we will try to incorporate some in the project.

Channel/Loken/Coastal Contamination: *CBJ Contracting staff are working to get Cox Environmental under contract for the additional work that the Alaska Department of Environmental Conservation (ADEC) has requested. At the January Board meeting the Board approved the appropriation of \$43,338 for Cox Environmental for an updated site work plan and additional drilling/testing groundwater wells, as required by ADEC, for the contaminated site abutting Airport-Coastal/Loken property; up-front funding provided by Airport Fund Balance and repaid through an insurance claim through CBJ Risk Management.*

On December 9 ADEC approved the Site Characterization Report submitted by Cox Environmental on July 15, 2024. In the letter ADEC stated, "Additional site characterization is required south of JIA-12 and west of CF-12 to determine the extent of the groundwater contaminant plume." Cox Environmental has submitted a budget for the work required.

Cox Environmental is under contract for JNU's ADEC required Site Assessment Work Plan (SAWP), and under contract with Loken for their parallel SAWP. Drilling on both properties to assess the extent of below grade contamination was completed on May 9. Cox Environmental reported that "Based on field screening, contamination is likely present in soil borings ... located in the vicinity of the decommissioned waste oil burner. The contamination was present down to the water table which was encountered at a depth of 9-10 ft. below ground surface (bgs). The borings on the eastern portion of the Coastal/JIA properties did not indicate contamination is likely present. We will issue a full report after we complete sampling of the newly installed groundwater wells next week and have the results of the soil/groundwater samples from the lab."

Channel/Loken Land Acquisition Support: *Staff are reviewing CBJ Purchasing's final draft of the second Request for Proposals (RFP).*

The first RFP yielded one proposal from Electric Power Systems (EPS); however, EPS admitted that they did not have FAA experience required by the RFP.

JNU seeks a qualified consultant to provide land acquisition support services and coordination for a FAA funded acquisition of one parcel, currently owned by Channel Flying, Inc., and identified for acquisition on the Airport Layout Plan. The consultant will assist JNU and the CBJ Lands in navigating the FAA's airport land acquisition process. The parcel is currently listed for sale by the current owner, so this would be a willing sale. FAA funded land acquisition is extremely complicated, and JNU does not have current staff expertise in this.

Departure Lounge Carpet Replacement: *Staff are drafting a scope of work and have estimated the cost at \$150,000. Staff anticipates funding the work through the local match for the terminal renovation project. When staff have a quote, this will come back to the Board for approval. The work is not included in the FY26 budget.*

Carpet in the Transportation Security Administration (TSA) passenger screening area and the Departure Lounge needs replacing and continues to deteriorate; the work must include repair of underlying irregularities in the floor slab that are telegraphing through the carpet and accelerating wear. The FAA will not pay for this work. Staff are drafting a scope of work and budget. Ideally work would take place in February, when the terminal is relatively quiet. The very rough cost estimate is \$100K. This may come back to the Board in FY26's operating budget.

Security Identification Display Area (SIDA) Americans with Disabilities Act (ADA) Elevator:

On February 3, the CBJ Assembly introduced and set for public hearing an ordinance appropriating \$50,000 to the Manager for the Departure Lounge ADA Elevator Capital Improvement Project (CIP); Funding Provided by Airport Revolving Funds. From the Assembly Agenda: "This ordinance would appropriate \$50,000 to the Departure Lounge ADA Elevator CIP. The funds would be used to hire an architect to conceptually identify locations and associated costs for an elevator in the Departure Lounge. This elevator would serve the Departure Lounge to the 121 Air Carrier apron and would facilitate ground boarding for passengers who are unable to navigate stairs to board at Gate 6 or when ground boarding is necessary. The total cost of the design and installation is currently estimated at \$2.5M and has been deemed eligible for Federal FAA funding. The Airport Board of Directors reviewed this at the December 12, 2024, meeting."

CBJ Contracts issued an RFP for an architect for design of an elevator on January 21. There was a pre-proposal meeting on January 28, which was attended only by JNU and CBJ Contracts staff. Attendance at the pre-proposal meeting is not required to submit a proposal. Proposals are due on Tuesday, February 11.

The work will be in two phases: 1) to conceptually identify possible locations and associated costs for an elevator; and 2) once a location is chosen, the architect and consultants will prepare bid documents. Staff estimate that concept design will be less than \$50K. Total design and construction costs will depend on the concept selected.

An elevator serving the Departure Lounge, Bagwell, and 121 Apron would facilitate ground boarding for passengers who cannot use stairs, and employee access between the floors. The elevator would require a SIDA badge for access and operation. FAA has reviewed the concept and stated that the project would be eligible for AIP or BIL funding.

JNU Water & Sewer Systems and Subtractive Billing: *In the next few weeks JNU staff and CBJ Water and Sewer Utility staff will be meeting to discuss the water and sewer systems and billing for them. This is complicated, and over time confusion has arisen as to how this works. The airport waterline has jurisdictional issues, as it is owned by JNU, but also serves neighboring private properties through subtractive metering.*

Taxi/Ground Transportation Additional Shelter: *(No change)* Per direction of the Board at their October 2024 meeting, staff are researching the size and cost of one or two additional Capital Transit-type pedestrian shelters east of the heated sidewalk. This will come back to the Board when the scope, cost, funding, and potential revenue are established. Shelter north of the heated sidewalk

will be significantly more expensive and can be pursued later, if appropriate. The north shelter will need to be recessed into the planting bed as the existing sidewalk is not wide enough.

Shell Simmons/Yandukin Reconstruction: (*No change*) This project would reconstruct the Shell Simmons/ Yandukin road loop that surrounds the parking lots. Remaining portions of Shell Simmons and Yandukin could be separate projects to limit cost and scope. This project should happen before and would lay groundwork for a future parking garage. JNU needs to seek funding for a \$7-10M project.

As with to the 2023 parking lot upgrades, the scope of a Shell Simmons/Yandukin project would address drainage and deterioration of the roadbed (there are sink holes in front of the terminal, in which we periodically dump more asphalt), improve traffic flow and calm traffic to limit speeds on Shell Simmons, improve lighting, provide an 8' truck-plowable sidewalk along Yandukin, provide a crosswalk w/crossing light at the footbridge across Jordan Creek, and modify the very awkward north intersection between Shell Simmons and Yandukin.

In addition, it is likely we will need to replace the 12" and 14" ductile iron water main that serves the terminal and related facilities. It is common engineering knowledge that ductile iron water lines are not designed for more than 50 years in any case, and that in Juneau one seldom gets that—40 years being about the maximum reasonable service life. The water line under Shell Simmons was installed in 1984 and is now 40 years. The airport waterline has jurisdictional issues, as it is owned by JNU, but also serves neighboring private properties through subtractive metering. This situation needs to be clarified and documented; this could take up to a year in advance of design and construction.

Before the 2023-2025 grant cycle, I researched applying for the State sponsored Community Transportation Program (CTP) for Shell Simmons and Yandukin. JNU did not apply, as the local match required started at 9% of project cost, and to buy our way up the queue and significantly improve our chances of receiving funding, the local match would have been about 25% of the project cost, then estimated at \$5M (this was before we knew that the waterline would need replacing), and JNU could not come up with the funds for the local match in a couple of months.

According to Ken Nichols, former JNU Airport Engineer, FAA rules allow them to fund or partially fund one access road; he suggested for JNU that would be Shell Simmons, as it goes directly in front of the terminal. He suggested that Yandukin might be eligible for a different sort of funding, as it is a fire station access road.

Staff are working on the jurisdictional issues relating to the waterline, as those need to be resolved in advance of design or construction.

Parking Garage: (*No change*) In response to a draft Capital Projects Submission and Information System (CAPSIS) request sent by Jason Custer, I investigated the potential scope of the project. To determine the capacity of the parking garage, I calculated the reasonable maximum capacity of a garage covering the entirety of the parking lots and three stories high (about the height of the terminal). Without allowing for a loading dock or garbage compactors, the capacity is about 1600

cars, which is more than adequate for our purposes, and raises the possibility that a garage could be built in phases. I do not expect that JNU will ever need parking for 1600 cars, as at some point (20 years to 50 years?) self-driving cars will actually work in Juneau, and only rental cars will need to park at JNU.

Phasing of the parking garage would require a conceptual or schematic level design of the entire garage to establish the general layout, locations of entrances/exits, interior ramps, etc. In order to properly coordinate the work, preliminary parking garage design should include a similar level of design for the upgrade of Shell Simmons and Yandukin, see that project above.

The Capital Improvement Plan (CIP) has a placeholder cost of \$75M. Current planning assumptions include: the garage will occupy the entirety of the current parking and ground transportation areas, but no horizontal expansion beyond is reasonable on account of the locations of the terminal, Shell Simmons, Yandukin, and the Jordan Creek Greenbelt. The garage would be three stories, with possible structural capacity for a fourth story depending on cost and need closer to the time of construction.

Alaska Seaplanes Cargo Facility: *(No change.)* Alaska Seaplanes has submitted a proposal for truck access to the cargo facility parking lot on lease Lot 2 through the former taxi staging area on the west side of Shell Simmons. Staff is still waiting to sign off on the final Tenant Improvement Request (TIR) form for the building (TIR #2).