



# MEMORANDUM

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TO: Patty Wahto, Airport Manager

FROM: Ke Mell, Airport Architect

DATE: January 3, 2025

RE: Airport Architect's Report

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

**Gate 5 Passenger Boarding Bridge (PBB) Replacement:** *Jensen Yorba Wall has provided an as-built drawings for the project. They continue 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. There are some major warranty issues (freezing up) with the PBB at this time that staff is trying to work with all parties.*

**Mendenhall Riverbank Stabilization:** With assistance from the State of Alaska Department of Military and Veteran's Affairs (DMVA), JNU staff have applied for an eight-month time extension to complete the work. *Staff have submitted the pre-bid requirements to DMVA and are awaiting a response.*

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. That is the middle of winter, and we cannot reasonably require a contractor to work on a slope of 45 degrees or steeper under icy winter conditions and tides. In Juneau, for a contractor to work safely, the work would need to be completed by November 1.

JNU received bid-ready documents and a cost estimate from the design engineer in late February 2024. Of the several permits required, the one with the longest lead time is from the State of Alaska Department of Natural Resources for an easement to permit the contractor to work in the Mendenhall River below mean high tide. The lead time for such easements is typically six to eight months. Eight months from March 1, 2024, is November 1, 2024. As of today, we have not received the permit. This leaves no window of opportunity for the contractor to do the work safely before winter, even if we had advertised and opened bids, and executed a contract, which we have not due to the workload on both JNU staff and City & Borough of Juneau (CBJ) contracting staff.

An extension will enable us to complete the project before the next jökulhlaup (potentially in July/early August 2025). If we do not receive an extension, we will lose support from DMVA/FEMA (Federal Emergency Management Agency) and may be unable to secure alternate funding in time to complete the work before the next jökulhlaup.

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, 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, 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 November 21, State of Alaska Department of Natural Resources (DNR) suggested processing the request as an amendment to our existing ADL 107597 aviation easement. JNU agreed. The amendment is less expensive; processing time is estimated at 2 to 3 months. On August 12, proHNS submitted an application to DNR for a permit for work below 'ordinary high water', in this case the high tide line. Of the permits, this has the longest lead time, possibly as long as 6 or 8 months, pushing the actual construction to the spring/summer of 2025.
4. On October 23, proHNS submitted an application to the 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 drawings prepared by proHNS engineers. The bid documents are currently under review by the State of Alaska DMVA, which is required before bidding. JNU will seek reimbursement from the FEMA 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.

**Master Plan Update:** *Michael Baker provided their proposed schedule for Technical Advisory Committee meetings through the spring. All meetings will be on Thursdays, every month to two months.*

*Staff provided CAD drawings of the north terminal addition and Alaska Seaplanes cargo building to Michael Baker for their use in updating the current ALP to reflect the actual footprints of the two buildings.*

Michael Baker International (MBI) visited JNU on December 4 and December 5. They met w/JNU staff and members of the Technical Advisory Committee (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:** *On January 3, 2025, the Alaska Department of Natural Resources (ADNR) reported that the Title Report request is in its second draft; there will likely be a third draft which may be the final draft.*

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 to reflect the conveyance in the airport boundaries.

**Jordan Creek Greenbelt Lighting:** *CBJ Contracts issued Notice to Proceed (NTP) for construction documents (CDs), bidding, and construction and inspection services to Begeyi Engineering. Begeyi Engineering expects to complete the CDs by January 31. 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:** On December 9 the Alaska Department of Environmental Conservation (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 working with CBJ Purchasing staff to finalize 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 continue to work on the project.* 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.

**Taxi/Ground Transportation Additional Shelter:** *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.*

**Security Identification Display Area (SIDA) Americans with Disabilities Act (ADA) Elevator:** *Staff continue to work with CBJ Contracts to put out an RFP for an architect to conceptually identify possible locations and associated costs for an elevator. 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.

**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:** 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).