



MEMORANDUM

TO: Patty Wahto, Airport Manager

FROM: Ke Mell, Airport Architect

DATE: December 4, 2024

RE: Airport Architect's Report

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

Gate 5 Passenger Boarding Bridge (PBB) Replacement: *(No change)* Jensen Yorba Wall is preparing the final project close out report for the FAA. On this account, their final pay request will likely be in December or January. Dawson has completed all work, and staff have approved their final pay request.

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.*

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 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, 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 avigation 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 City and 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 drawings prepared by proHNS engineers. The bid documents are currently under review by the State of Alaska Department of Military and Veteran's Affairs (DMVA), which is required before bidding. JNU will seek reimbursement from the Federal Emergency Management Agency (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 International (MBI) has rescheduled their visit to JNU for, December 4 and December 5.* My thanks to Jerry Godkin for stepping forward to represent the JNU Board on the Technical Advisory Committee (TAC). While they are here, Michael Baker's staff will meet w/JNU staff and the TAC, tour the facilities and lay the groundwork for their work over the next year.

Michael Baker International submitted and the FAA approved the scope of work, fee, and schedule for the master plan update. The work will include an update to JNU's 2009 Obstruction Survey as well as the Master Plan. This will push completion of the work to December 2025, as the aerial photography for the obstruction survey cannot be completed until early summer 2025. Michael Baker's fee for all for work except the obstruction survey is \$505,680, which is more or less in line with expectations. The fee for the obstruction survey is \$405,541.

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 does not look to change the sustainability goals, environmental inventory, nor financial plan.

ADL 107380: Conveyance: *On November 26 DNR reported that, “the Title Report request has moved up to number 36 in queue.”* 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. JNU staff have done everything that needs to be done on our end and await processing of the title report, which has been in the queue for over a year. Andrew Miller, Natural Resource Manager, Non-Competitive Land Conveyance provided an update on October 25. He said, “The title report for ADL 107380 is now at position 41 in the title report queue. I expect it will not be too much longer before the report is assigned to an adjudicator and work begins. The Realty Services Section (RSS) is still working on resolving a back log of title report requests and while they are making progress, it is a long process. I will keep an eye on this one and work with RSS so we can move to draft patent as soon as possible after the title report is completed.” Mr. Miller stated, “I would estimate it will be a couple months before they begin work on the title report but there are a lot of variables that will determine the exact timeline.”

Jordan Creek Greenbelt Lighting: *Begenyi Engineering is under contract and provided two schematic design options:*

*Option 1: Design using existing Owner-provided 30-foot poles and floodlights, with a construction cost of slightly less than \$30K. Lighting **would not** be compliant with IESNA (Illuminating Engineering Society of North America) G-1-03, Guideline for Security Lighting for People, Property, and Public Spaces.*

*Option 2: Pedestrian scale design **compliant** with IESNA G-1-03, with a construction cost of slightly less than \$50K.*

Construction costs do not include consultant fees required to complete the design and construct the project, nor JNU or CBJ (City & Borough of Juneau) Contracting staff costs. As the CBJ provided budget will cover either option, staff have directed Begenyi Engineering proceed with Option 2, as it will provide the better result. Incidental to design of Option 2, 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: *(No change)* Cox Environmental submitted the Site Characterization Report for JNU property south of the Loken in-holding to DEC for review and comment on July 15. Our next steps will depend on their response.

Cox Environmental is under contract for JNU's Alaska Department of Environmental Conservation (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: *(CBJ Contracts staff have handed the consultant Request for Proposals (RFP) to CBJ Purchasing. JNU staff will work with CBJ Purchasing to issue a new 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 Federal Aviation Administration (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.

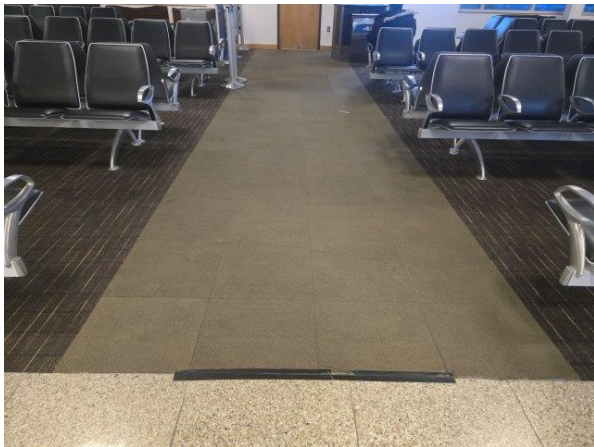
Departure Lounge Carpet Replacement: *Staff continue to work on the project.* Carpet in the Transportation Security Administration (TSA) passenger screening area and the Departure Lounge needs replacing and continues to deteriorate; the work must include repair of underlying irregularities in the floor 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 next year's operating budget.



Terrazzo damage at exit lanes



Detail of terrazzo damage



Gate 4 carpet damage



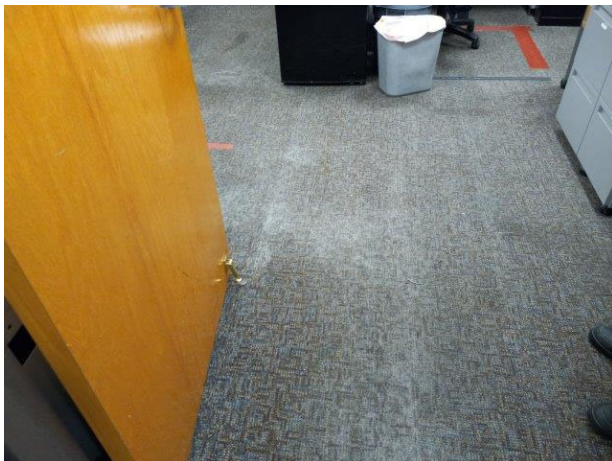
Gate 3 carpet damage



TSA screening carpet damage



TSA screening carpet damage



TSA office carpet damage



Detail of TSA office carpet damage

Taxi/Ground Transportation Additional Shelter: *Staff continue to work on the project. At the October 10 meeting, several members of the Board spoke in favor the Option 2, bus shelters, rather than Option 1, 10' canopy. Accordingly staffing will continue to research scope, costs, and revenue for Option 2, and will return to the Board with that information.*

Security Identification Display Area (SIDA) Americans with Disabilities Act (ADA) Elevator: *Staff are developing a scope for CBJ Contracts to put out an RFP for an architect to conceptually identify possible locations and associated costs for an elevator. 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: 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: *In response to a draft 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 are working with them.