



MEMORANDUM

TO: Patty Wahto, Airport Manager

FROM: Mike Greene, JNU Airport Project Manager

DATE: April 2, 2025

RE: Project Office Monthly Report

Project specific summaries of project status and activity are presented below.

Terminal Reconstruction: JNU continues to work on finalizing the following outstanding work items:

Ground Source Loop Field System Modifications: JNU Building Maintenance continues to observe contaminants/sediment within the loop field medium (methanol), even with the equipment strainers, pump strainers, by-pass filter and dirt separators in place. The continuing concern is that the system is not getting any cleaner over time, and that somehow the contaminants/sediment keeps replenishing itself. In a meeting with JNU staff, JNU Airport Maintenance and engineers from RESPEC conducted on December 12, it was decided that the samples of these contaminants should be lab-tested to determine what this material is. JNU has asked RESPEC to coordinate with McCool Carlson Green (MCG) and utilize their remaining contract fund balance to contract with a hydronic system fluid treatment specialist to examine the fluid chemistry, analyze the sediment, and inspect some of the piping in order to recommend or implement a treatment, cleaning, or fluid replacement plan for the distributed ground source piping system. RESPEC is also to provide additional mechanical engineering services to assist with the on-going effort to cleanse the loop field system and review the final Terminal Air Balance (TAB) report.

JNU Building Maintenance continues to work on blowing out the main pump strainers and the air separator strainers in the piping mains, cleaning branch piping heat pump strainers, and backwashing the heat pump coils. JNU Building Maintenance also continues to work on the replacement of the new flexible hoses for thirty (30) of the older heat pumps.

DOAS-1 (Dedicated Outside Air System) unit: This air-handler, originally installed in 2009, brings in outside air to the older portion of the terminal. Repairs to DOAS-1 were completed as part of the terminal reconstruction project, but additional repairs are now needed. Recent voltage spikes have damaged some of the air-handler components, including the VFD (Variable Frequency Drive) for the DOAS-1 exhaust fan. JNU Building Maintenance continues to look at repair options.

Heat Pumps: Approximately thirty (30) water-air heat pumps within the older portion of the terminal were installed in 2009. Many of these heat pumps have already reached the end of their serviceable life and the rest are nearing the end of their serviceable life. This has resulted in there being a number of these heat pumps that are non-operational at any given time while waiting for replacement parts to arrive and for repairs to be completed. JNU Building Maintenance and JNU staff are continuing to look at funding options for a phased replacement of these older heat pumps.

Lighting Control Replacement: Dawson Construction / ALCAN Electric has completed work on Request for Proposal (RFP) 183 – Lighting Control Replacement. This work replaced the failing lighting control equipment within the older portion of the terminal. ALCAN Electric has advised that they intend to provide Owner training for the new lighting controls during the week of April 7-11.

Terminal Power Conditioning: On March 10, 2025, RESPEC furnished a fee proposal to JNU, in the amount of \$14,255.00 to perform the following work tasks:

- Review JNU's field investigation that was intended to verify the presence of existing power surge suppression equipment in the Terminal, Snow Removal Equipment Building (SREB) and Sand-Chemical buildings.
- Provide recommendations for additional surge suppression equipment that might be needed to protect / prevent continued damage to sensitive electronic components within these three facilities. Include an estimate of cost with these recommendations.
- Provide a recommendation to implement additional surge suppressions or power conditioning as may be needed to protect Ground Source Heat Pump-1 (GSHP-1) within the Sand-Chemical Building. Include an estimate of cost with this recommendation.
- Provide 100% construction documents as needed to obtain bids for the additional power conditioning or surge suppression work.

JNU furnished a copy of this proposal to CBJ Contracts, along with a sole-source justification request to utilize RESPEC for this work under CBJ's Term Consultant Contract. The justification stated that:

- RESPEC has been the electrical engineer of record for the recent Terminal Electrical Service Upgrade project as well as for the on-going Terminal Reconstruction project.
- RESPEC was also the electrical engineer of record for the SREB and the Sand-Chemical Building.
- RESPEC already knows the electrical systems of these JNU facilities and is in the best position to help us to identify where additional surge protection is needed.

CBJ Contracts initially approved the sole-source justification (Modification Request to the Term Contract) and issued a Project Agreement to RESPEC. CBJ Contracts then reversed course and cancelled the Project Agreement following the determination that the justification provided by JNU was insufficient to warrant a purchasing code exemption (sole source). Per CBJ Contracts:

"We recognize that while there is a need for surge protection assessment at the Terminal, the Snow Equipment Removal Building (SREB) and the Sand-Chem Building, that these desired services requested can be provided by other firms. As such CBJ Engineering - Contracts will issue a Letter of Interest (LOI) to Firms that can provide the desired services, this will be handled through our established Professional Services Term Contract process."

On March 25, 2025, and at the request of CBJ Contracts, JNU submitted a full scope of work description to be used within the Letter of Interest (LOI). This scope description was expanded to address the fact that the LOI was going to be sent out to electrical engineering consultants that had no working knowledge of the Terminal, the Snow Removal Equipment Building or the Sand-Chemical Building.

The Board is advised that the cost for this work will most likely exceed the \$14,255.00, particularly if a design firm other than RESPEC is selected. As of the writing of this report, CBJ Contracts has not issued the LOI to prospective electrical engineering firms.

Safety Area Grading at Runway Shoulder and Navigational Aids (NAVAIDS): No change since last report. HDR Engineering is currently working on the development of their 60% design submittal for this project. As reported earlier, they have completed the site survey field work and continue to work on their grading analysis to determine the full extent of the grading work. Per the grading analysis, the project will primarily consist of the placement of borrow (fill) to reduce the runway shoulder slopes within the project work areas.

JNU continues to work with HDR on the development of the Construction Safety Phasing Plan (CSPP) and technical specifications, and JNU continues to work on the development of the Division 00 and Division 01 front-end contract documents.

JNU has confirmed with HDR that they will still be able to meet a deliverables schedule that reflects a bid-opening date of July 1, 2025. This revised bid opening date would have an anticipated construction contract award/notice-to-proceed date in late August 2025 or early September 2025. The construction contract will be written to allow the successful bidder to complete the project in the spring of 2026.

Rehabilitate Part 121/135 Apron and Remain Overnight (RON) Parking Apron: SECON / Chatham Electric continue to work on the preparation of the new light pole bases for the installation of the new apron lighting. Chatham completed work on the installation of the modified (simplified) pile cap assemblies at each of the new light pole locations and has begun work on the installation of the concrete casing assemblies that will wrap the exposed portions of the piling foundations. See photos below.



PHOTO 01: Typical Pile Cap Assembly



PHOTO 02: Typical Reinforcing Installed Around the Piling



PHOTO 03: Form Base Set in Position at LP-5

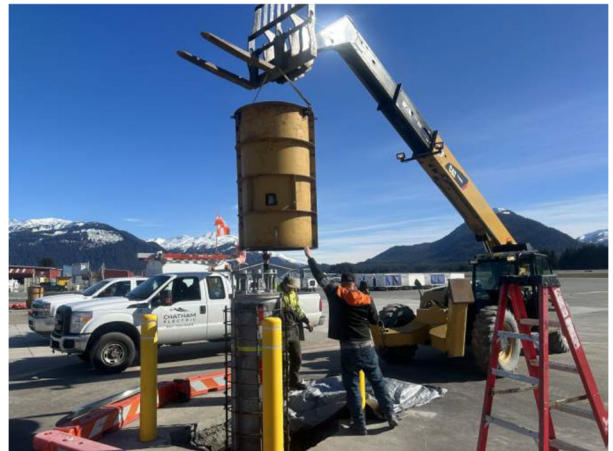
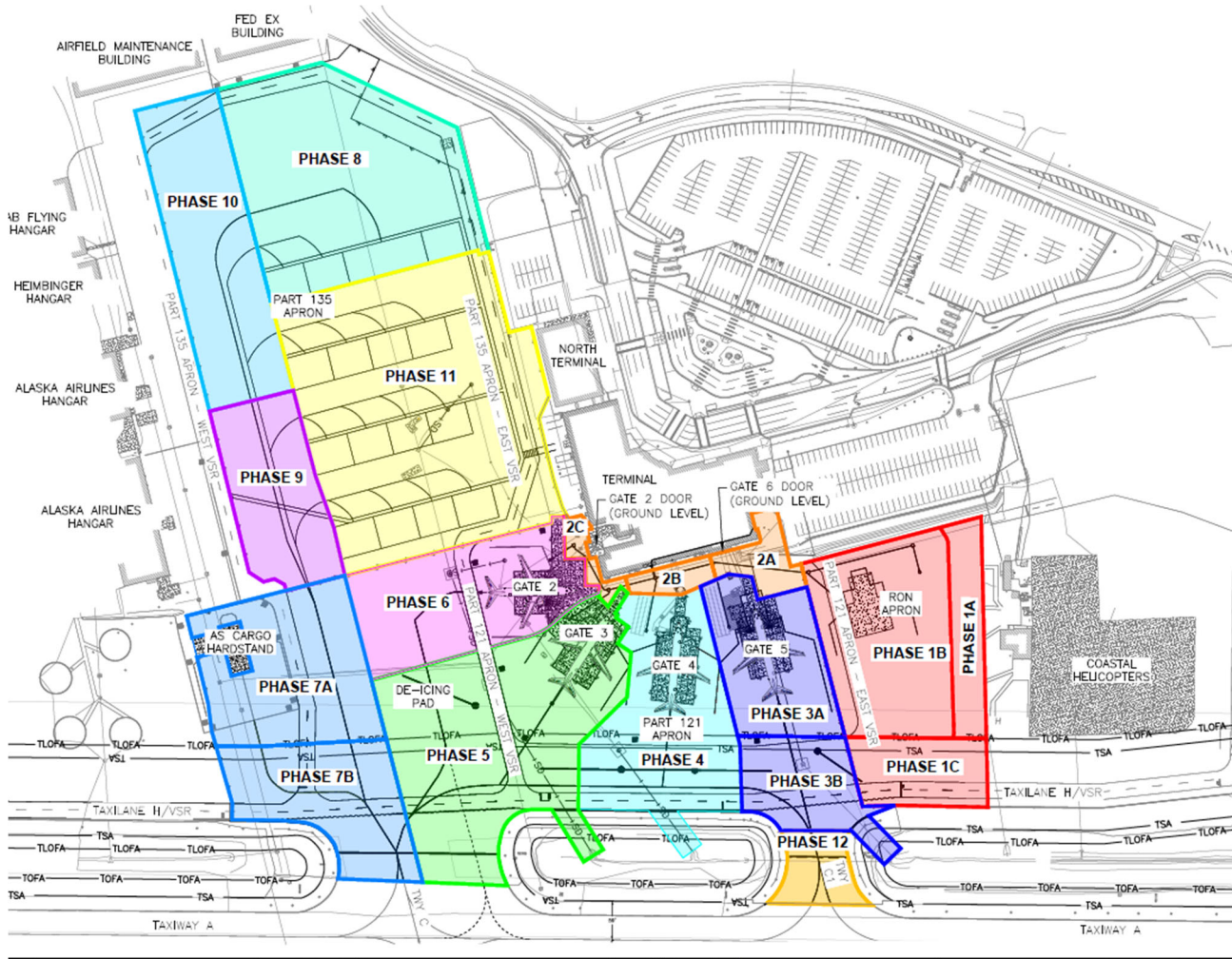


PHOTO 04: Concrete Form Being Lowered in Place at LP-5

SECON has completed work on the repairs to the structural steel piling foundation for light pole LP-6. This work consisted of the removal of the damaged portion of the piling (where it was struck by the Alaska Airlines baggage tug) and the addition of a new piling section. This work was performed by Trucano Construction (under subcontract to SECON) and was completed on March 13, 2025. The pile welds underwent visual inspection and ultrasonic testing and were accepted. The FAA has been notified that the structural integrity of the pile has been restored, and it is now suitable for use as a light pole. Alaska Airlines has been notified that the repair is complete, and that JNU will be billing them for the associated costs.



The following are the current start and completion dates for the remaining apron work:

- **Repair light pole LP-6 & complete work on the installation of the new exterior apron lighting.**
Start: March 10, 2025 Complete: April 10, 2025
- **Transition Alaska Airlines air cargo operations over to Gate 2.**
Start: April 15, 2025
- **Install concrete hardstand extension at Alaska Air Cargo under contract with Alaska Airlines.**
Start: April 16, 2025 Complete: April 30, 2025
- **Mill existing asphalt surface at Phase 7A and Phase 7B work areas and place asphalt paving.**
Start: April 18, 2025 Complete: May 6, 2025
- **Apply new pavement markings in the Phase 7A and Phase 7B work areas.**
Start: May 6, 2025 Complete: May 7, 2025
- **Transition Alaska Airlines air cargo operations back to the air cargo hardstand.**
Start: May 8, 2025 Complete: May 8, 2025

JNU has coordinated with DOWL to have construction updates issued to all stakeholders to advise of the status of construction and associated work schedule.

Culvert Condition Survey – Jordan Creek @ Runway 8-26: No change since last report. As previously reported, JNU has received the condition survey as prepared by proHNS engineering for the large half-arch aluminum culvert assembly which allows Jordan Creek to pass beneath Taxiway A and Runway 8-26. In

their report, proHNS stated the opinion that an immediate catastrophic failure of the culvert is unlikely. The report goes on to state that continued deterioration is likely, and that repair work is recommended, even if the source of deterioration is determined and eliminated. proHNS has identified three (3) repair-in-place options, recommending them for further study. They would not require open trenching, would not require a closure of Runway 8-26 and would not require extensive permitting.



The three recommended repair-in-place options are:

1. HDPE (High Density Polyethylene) Slip Lining

- Pros:
- a. Corrosion resistant structure.
 - b. Local contractors are familiar with construction installation methods.
 - c. Cost effective due to shipping and construction costs.
 - d. Would not require runway closure for construction.
- Cons:
- a. Grouting annular space where lengths are over 100' can be challenging.
 - b. 800' length push and pull resistance on pipe will be significant.
 - c. Requires large area for insertion/jacking/welding pit.
 - d. Potential to reduce flow capacity.

2. Carbon Fiber Lining

- Pros:
- a. Corrosion resistant structure.
 - b. Could be done while maintaining streamflow in existing pipe.
 - c. Wouldn't impact existing stream bed material, which should make for easier permitting process.
 - d. Can be designed to be structurally independent and fully withstand runway loading.

Cons: Specialized equipment and trained personnel required, known installer (National Plant Services, Michels Trenchless), known Manufacturer (Structural Technologies).

3. GeoPolymer Lining

- Pros:
- a. Corrosion resistant structure.
 - b. Could be done while maintaining streamflow in existing pipe.
 - c. Wouldn't impact existing stream bed material, which should make for easier permitting process. Product has extensive research on chemical properties not affecting fish.
- Cons:
- Specialized equipment and trained personnel required, known installer (National Plant Services, Michels Trenchless), known Manufacturer (Structural Technologies, GeoTree)
 - b. Questions on whether this product would be strong enough to fully withstand runway loading.

At this time, JNU does not have estimated construction costs for any of the three repair options. JNU has confirmed with the FAA that replacement / repair costs would not be AIP eligible because the culvert is within the 20-year useful life of grant 60-2014 and because the FAA considers this work to be a maintenance project.

JNU has requested a fee proposal from proHNS Engineering to complete the necessary design phase services and to provide bid-ready construction documents (technical specifications and drawings) based upon one of their three repair-in-place recommendations. The RFP has requested that the design consultant complete a structural analysis of the recommended repair option to verify that the repair would become a permanent load bearing replacement for the culvert in the eventuality that the old culvert fully deteriorated away. The RFP also requested that the design consultant prepare detailed construction cost estimates throughout the design process.

It was JNU's hope that proHNS' services could be obtained through CBJ's Term Consultant Contract – which has a \$50K cap. proHNS has advised that they cannot complete the identified scope for under \$50,000. proHNS also advised that based on their research into the three repair options that would not require runway shutdowns, the project is going to require specialty design services. Based on this communication, it would now appear necessary for JNU to obtain design services for this project by issuance of an official RFP for Consultant Design services through CBJ Contracting.

Snow Removal Equipment Building and Sand-Chemical Building Door Repairs: On March 26, 2025, JNU received notice from Airfield Maintenance that they are experiencing more problems with the large vertical lift and turnover doors in the SREB and Sand-Chemical buildings. In this notice, Airfield Maintenance asked if the manufacturer could be brought back to Juneau to repair these doors.

These door assemblies were originally installed by the manufacturer in 2018 (SREB) and 2019 (Sand-Chemical) and are no longer covered by any construction guarantee or by the manufacturer's warranty. While the absence of any active warranty would not prevent JNU from contracting with a local vendor to repair these doors, JNU has been unable to find anyone willing and able to work on these very large doors.

Last year, JNU contracted with the door manufacturer (International Door. Inc.) to perform an inspection of these doors. For the sum of \$21,800.00, International Door performed the following:

Provide 1 certified factory technician for inspection procedures of 18 Vertical Lift doors

- Inspect the structural integrity of the door panels, assess and record the condition.
- Inspect all operating components, gearboxes, motors, etc. and record the condition.
- Inspect all hardware and other parts, assess and record the condition.
- Observe door operation, assess and record the details.
- Determine the cause of any misalignment, provide an engineered report of what is found.

Estimate is based on 1 man and covers 3 days on site at 8 hours per day.

Complete estimated cost = \$21,800.00

INCLUDED: Travel expenses, Lodging expenses, Rental vehicle expenses, Inspection time, Inspection report, etc.

EXCLUDED: Equipment/man lift rental, any replacement parts, additional time, additional labor, etc.

JNU then requested a fee proposal from International Door to complete the repairs that had been identified during their on-site inspection. For the sum of \$118,765.00, International Door proposed to perform the following repairs:

FURNISH and INSTALL - PROVIDE 2 TECHNICIANS, PARTS and LABOR

- Remove and replace clutch assembly – 4 locations total.
- Remove and replace safety edges, harness, rubber, etc. – 4 locations total.
- Remove and replace limit switches – 3 locations total.
- Remove and replace safety edge “rubber only” – 1 location.
- Install new brush seal across the top of door panel – 1 location.
- Adjust, brace and anchor counterweight and guide towers as necessary – all locations.
- Adjust sheaves and brackets as necessary, may require rigging to complete – all locations.
- Adjust clutches as necessary, apply lock-tite, and tighten clutch bolts to spec. – all locations.
- Relocate bottom panel seal as necessary to fully contact the ground – 1 location.
- Troubleshoot and address electrical control issues – 1 location.

INCLUDED: All necessary parts and labor to complete the above stated work. All travel expenses, Lodging expenses, Rental vehicle expenses, Materials shipping costs, etc.

EXCLUDED: Equipment/man lift rental, Additional work, Additional time, Additional Labor, or anything else not specified above.

JNU did not accept this repair proposal.

JNU has asked Airfield Maintenance to create a list of the doors that are in need of repair, and to include on this list a description of the problem(s) associated with each door.

Parking Lot Concrete Repairs: Portions of the concrete curb and gutter within the public short term parking lot, the taxi waiting lot and the secure employee parking lot have been damaged by snow removal operations. See example photos below.



PHOTO 05: Damage at the east end of the employee lot.



PHOTO 06: Damage at one of the accessible ramps.

JNU had initially attempted to address this work by RFP (RFP 016) through the current construction contract with SECON but is now planning on running this work through CBJ’s small civil term contract. JNU is currently preparing the scope of work package for this small project.

Fuel Station Access Control/Fuel Monitoring/Tracking: No change since last report. In July 2022 JNU, working through CBJ Engineering - Contracts, released an RFP for design services under CBJ's term contract for design consultant services to develop design and construction documents for the introduction of an access control system for the airfield fuel station. The RFP had identified a scope of work that included the introduction of an access control / fuel theft-prevention system, fuel monitoring and usage tracking, and the introduction of a back-up generator to provide emergency stand-by power for the fuel station.

On September 1, 2022, CBJ Engineering - Contracts advised JNU that no responses to the RFP had been received. This indicated that, at that time, there was no interest (or availability) within the design community to work on this project. JNU is currently soliciting interest from local electrical engineers to provide a fee proposal for this project. This funding was previously approved for CARES funding by the Board.

Airport Construction Document Archiving: JNU Staff continues to work on sorting / culling the old, archived construction documents, as-built documents and miscellaneous reports.

End of Report