

**Juneau International Airport Board
Operations Committee Meeting
August 16, 2022, 2:00PM
Alaska Room and via zoom**

Zoom: <https://juneau.zoom.us/j/83805211106?pwd=RjN4bnBtZkJOOG8vUVFudWVootVjZz09>

Or call 877-853-5257 US Toll-free, Meeting ID: 838 0521 1106

I. Introduction (meeting participants).

II. Airfield / Hangar Flooding and Drainage Problems (Attachment #1 and #2). In January 2022, the Airport Board was made aware of flooding issues occurring in the general aviation hangars on the east side of the airfield (Blocks M, N and O). An Operations Committee meeting was held in February 2022 to discuss the issues and hear from the impacted tenants. The Board directed staff to get the topography of the area and look at flow before any further direction was decided. The Airport hired DOWL to perform the study.

The attached survey heat map (Attachment #1) was created by DOWL from survey data collected around the Block M hangars. This map confirms what we already knew – that the site is extremely flat and that it drains poorly.

NORTH SIDE:

The map shows that most of the surface slopes within the five-foot lease line strip on the north side of the hangar actually slope towards the hangar. The slopes outside (north of) the lease line slope to the north towards the existing area drains. Having never worked on this side of the hangar and only recently receiving complaints of water infiltration, this reverse slope comes as a bit of a surprise.

WEST SIDE:

The map shows that the surface generally slopes away from the hangar and towards the existing area drain.

SOUTH SIDE:

The map shows that all of the surface slopes within the five-foot lease line strip on the south side of the hangar slope away from the hangar. All of the slopes outside (south of) the lease line slope away from the hangar to the existing strip drain. This confirms what we already knew and confirms that the efforts put into the recent tarmac and strip drain revisions have resulted in surface slopes that drain water away from the hangar.

EAST SIDE:

The map shows that the surface is generally flat, with areas that slope towards the hangar and areas that slope away from the hangar. There are no existing catchment drains of any kind on the east side of this hangar.

As previously discussed, the drainage, water runoff from hangars, and hangar elevation in relation to surrounding taxilanes all contribute to the problems on the east end. During the recent Taxiway (TWY) A-D1-E project, the Airport looked extensively at the work associated with the introduction of asphalt paving in front of the Block N and Block O hangars. The elevation differences between these hangar floors and the adjacent surface of Taxilane H were minimal – very much like the condition at the Block M hangars – very flat with slow drainage.

To address this, a trench drain was proposed that would have introduced three (3) sections of trench drain, to be placed between the south sides of these hangars and the north side of Taxilane H. These trench drains, with their associated revised grading, would have introduced a more positive drainage slope away from these hangars and away from the taxilane.

The next step, if we want to develop an actual construction project that would modify surface grades and introduce/expand the existing storm drain system, would be to obtain a fee proposal from a civil design firm to create a design solution with associated construction cost estimate and bid/construction documents.

The Federal Aviation Administration (FAA) will not fund these new trench drains and the associated asphalt paving; they are not FAA eligible expenses. During the Taxiway project, staff was able to get FAA approval to install three (3) new 12-inch culverts installed under Taxilane H to facilitate the anticipated future installation of these three sections of trench drains. Culverts are in place and ready for use.

While looking at these improvements, staff established a budgetary estimate of \$600,000 (in 2020 dollars) to re-grade, install three small catch basins, install the three trench drains and complete the asphalt paving (four-inch) in front of the Block N and Block O hangars. Block M would need to be added to this project. A rough estimate (not including design) for all of this work would be about \$1M. Staff has added this as a project on its CIP list.

If the Board decides to move forward with the Block M, N, O trench drain and pavement work, funding from the CARES/CRRSAA/ARP grant funding may be used.

Additionally, a tenant on the west side requested similar investigation into drainage for similar flooding.

Discussion points:

1. Install a trench drain system around hangars as discussed above.
2. Contain water runoff from the hangar roof in a gutter system would help with some of the water. Most hangars do not have a gutter system on their hangars. Reminder: Tenant lease lots have a five-foot set-back (front and back) that are the lessee's responsibility including pavement and drainage.
3. Require a change in leasing policy and future leases to construct buildings/hangars to an established elevation.
4. Attachment #2 is thoughts disseminated by Board Member Dennis Bedford as part of public records. For discussion.

III. Next Operations Meeting: TBD

IV. ADJOURN