

TRUCKEE TAHOE AIRPORT DISTRICT
BOARD OF DIRECTORS AGENDA ITEM SUMMARY

Topic: Engineering Related Project Activities

Purpose Information: **X** Guidance: Decision:

Recommendation None, for information only

Last Action

Discussion The purpose of this memorandum is to update the Board of Directors on the status of various engineering, construction, and/or management related projects.

DRAINAGE REPAIR – HANGAR ROW C

During the 2012 construction season, asphalt patching was done in the taxiway between the east facing “C” row and west facing “D” row hangar buildings. The work involved filling wide cracks with a 12-inch asphalt patch, both in the taxi area and adjacent to the hangar floors. Unfortunately, the result is that drainage from the roof of the “C” row structure flows back into the hangars as the floor (concrete slab) elevations are lower than the adjacent asphalt; likely as a result of frost heaving. An elevation survey by Damon Brandley and staff showed varying differences in height, typically between one-half and 1-1/2 inches. Staff and Brandley developed three alternatives:

- Saw cut a groove perpendicular to the building toward the center of the taxiway until the groove “daylights”. Depending upon the difference in elevation, the length of the groove varies between five and twenty feet as shown on the attached section. Brandley’s initial estimate of the cost is less than \$5,000.
- Instead of the grooving, mill the entire area to provide positive drainage. The cost of this approach is preliminarily estimated at \$15,000.
- The permanent solution, and also the most expensive (\$125,000), is to remove the frost-susceptible soils and pavement section to the depth of frost penetration and replace them with new soils and pavement section using frost-free materials. The Pavement Management Plan has identified this area for reconstruction in 2015.

Staff believes the first alternative (grooving) should be tried initially as the cost is the least and we believe it will be effective. The dollar value allows staff to move forward without formal competitive bidding and the work will be done using maintenance funds.

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RUNWAY SAFETY AREA – TREE REMOVAL

During the summer of 2012, Caltrans Division of Aeronautics conducted an inspection to confirm the Airport's compliance with the State Permit and the FAA Airport Master Record (Form 5010-1). The major item identified as requiring attention was the height of the trees affecting the instrument approaches to Runways 11 and 20. Impacted areas include both approaches, both thresholds, and portions of the northwest side of Runway 11 and portions of the west and east sides of Runway 20. The regulations require a clear "Transitional Surface" measured at a 7:1 (horizontal: vertical ratio) from the edge of the runway. Staff retained a local land surveyor to map the location and height of the adjacent trees; slightly less than 300 trees encroach (from less than one-foot to more than 52-feet) in the imaginary plane and have to be either topped or removed. Staff believes removal is a more appropriate approach (as compared to topping) both cost-wise and tree health-wise, and are in the process of formulating a plan to effect that option. Although the removal is considered an exempt activity by CalFire, staff is of the opinion that input from the Forester on stand health, along with archaeological and biological/wildlife reviews are important to the process.

The General Manager will discuss this project with the Town of Truckee and other potentially affected agencies before the project commences.

FACILITIES MAINTENANCE PLAN – AIRPORT STRUCTURES

In order to keep structures in good repair, the District has budgeted to create a capital *Facilities Maintenance Plan* that will handle upkeep of the District's buildings. Staff believes the Plan can be developed in-house with support from building and infrastructure professionals within the Truckee-North Lake Tahoe area in lieu of preparing an RFQ and soliciting Statements of Qualifications from an outside firm. We have just started the process of identifying areas of study but will likely include: a metal building supplier, a roofing contractor, a painting/coating specialist and structural, electrical and mechanical engineers.

Fiscal Impact

Hangar Row C – Projected to cost less than \$5,000.

Runway Safety Area – Tree Removal – Budgeted at \$50,000

Facilities Maintenance Plan – Budgeted at \$50,000. However, staff is confident that this study can be completed for less than the budgeted amount.

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Communication
Strategy

Solicit input from hangar and building tenants re: issues with
buildings

Attachments

Drainage Modification Detail
Photo of Affected Area – Hangar Row C