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Agenda Date: 3/20/2018
Agenda Placement: 6P

NAPA COUNTY BOARD OF SUPERVISORS
Board Agenda Letter

TO:	Board of Supervisors
FROM:	Steven Lederer - Director of Public Works Public Works
REPORT BY:	Nate Galambos, ENGINEERING MANAGER - 259-8371
SUBJECT:	Approval of Plans and Specifications, Authorization to Advertise the 'Napa County Airport Runway 18R-36L Rehabilitation Project', PW18-04

RECOMMENDATION

Director of Public Works requests approval of plans and specifications for the "Napa County Airport Runway 18R-36L Rehabilitation Project," PW 18-04, authorization to advertise for sealed bids and opening of the bids at a time, date and location to be published by the Director of Public Works pursuant to Section 20150.8 of the Public Contract Code.

EXECUTIVE SUMMARY

The Napa County Airport's (the Airport) main runway 18R-36L (the Runway) was built by the War Department in the early 1940's. The Runway has not received any major renovation work since it was originally constructed. A pavement management system report was prepared in early 2017 for the Airport and rated the Runway condition as 'poor' based on a pavement condition index (PCI) of 47. The Airport retained Mead and Hunt to prepare plans and specifications that is being funded by a Federal Aviation Administration (FAA) grant with funding contributions from the California Department of Transportation (DOT) and the Airport's fund balance. The project consists of pavement rehabilitation work on the Runway, along with pavement rehabilitation on the west end of runway 6-24 where it intersects with the Runway, taxiway connections with the Runway, and finally pavement rehabilitation on the parallel runway 18L-36R. The construction cost along with all other associated costs to be included in an upcoming FAA grant application is estimated at $14.9M. Similar to the design grant with the FAA, the anticipated cost sharing will be 90% FAA, 4.5% DOT, and 5.5% Airport fund balance. While the DOT typically matches the FAA grant with 4.5%, there is a real possibility that the DOT funding may not occur and the Airport fund balance would absorb the DOT match.

FISCAL IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	No
What is the revenue source?	Airport CIP Program 18006. The FAA supports this project and has encouraged the Airport to pursue a construction grant. Airport staff will be submitting a grant application for this construction project with the FAA, pending approvals by the Board of Supervisors (Board) of the plans and specifications and award of contract upon conclusion of the advertisement process. The anticipated grant would fund the project costs based upon the following percentage break down; FAA 90%, California Department of Transportation 4.5%, and Airport funds 5.5%. Based on the engineer's estimate and all other project elements, the grant application request will be approximately $14.9M. While the DOT typically provides a 4.5% match to the FAA grant, there is a real possibility that the DOT will not be able to fund their portion of the match resulting in the Airport fund balance funding the DOT portion. If budget adjustment is needed, it will be requested at the time of the construction award.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	The Napa County Airport's (the Airport) main runway 18R-36L (the Runway) received a 'poor' condition rating in an April 2017 pavement management systems report. The Runway serves as the main runway for the Airport as it is equipped with an Instrument Landing System (ILS) not available on the other two runways (runway 6-24 and parallel runway 18L-36R). The Airport received a grant from the Federal Aviation Administration (FAA) to prepare a design for pavement rehabilitation of the Runway and retained Mead and Hunt to perform the design work. The plans and specifications are complete and reviewed by both Public Works and Airport staff as well as the FAA.
Is the general fund affected?	No
Future fiscal impact:	The duration of the construction project is anticipated to extend through fiscal year 2018-2019 and end in fiscal year 2019-2020.
Consequences if not approved:	The pavement condition will continue to decline on the Airport's main runway resulting in additional annual maintenance costs and potential impacts to the regular operation of the Runway.
Additional Information:	The Airport will develop a full project cost pending a Board approved construction contract following the opening of bids, and will be the basis for FAA grant application.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: Pursuant to Sections 15022(a)(1)(C) and 15300.4 of the State CEQA Guidelines, the Napa County Board of Supervisors have adopted implementation procedures, identifying specific projects that would be categorically exempt from established CEQA Guidelines. The proposed project would therefore be Categorically Exempt from the provisions of CEQA pursuant to Title 14 CCR Section 15301 Class 1 – Existing Facilities. Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public; or private structures, facilities, mechanical equipment, or topographical features,

involving negligible or no expansion of use beyond that existing a the time of the lead agency's determination.

The Federal Aviation Administration has determined the proposed project is Categorically Excluded pursuant to FAA Order 1050.1F as it relates to the National Environmental Policy Act of 1969 as amended (NEPA) per letters dated June 27, 2016 and February 18, 2018, from the FAA to the Napa County Airport.

BACKGROUND AND DISCUSSION

The Napa County Airport's (the Airport) runway 18R-36L (the Runway) was built in the early 1940's as part of the war effort by the War Department and has been in service since without any major renovation. The Runway, in an April 2017 pavement management system inspection report prepared by Mead & Hunt, received a pavement condition index (PCI) rating of 47, which based on FAA standards is considered 'poor' condition. Additionally, the Runway is the Airport's longest and is equipped with a precision approach (Instrument Landing System) that is not available on the Airport's other two runways (runway 6-24 and parallel runway 18L-36R). Due to its age and PCI rating, the Runway needs rehabilitation work to maintain its function as the primary airport runway.

In August 2016, Napa County entered into a grant agreement with the Federal Aviation Administration (FAA) to fund the design of a project to rehabilitate the Runway in an amount not to exceed $836,969. In addition to the FAA grant, the Airport received a matching grant of $41,849 from the California Department of Transportation (DOT) through adoption of a resolution by the Board of Supervisors (Board) in October 2016, and the airport contributed $51,148 from its fund balance. The Airport retained Mead & Hunt to conduct the necessary environmental and design work required to prepare plans and specifications for the Runway restoration work. The project will also include rehabilitation of the west end of runway 6-24 where it intersects with the Runway, pavement work at taxiway approaches to the Runway, and pavement rehabilitation of the shorter parallel runway 18L-36R.

Mead & Hunt evaluated several design alternatives to improve the Runway to current FAA standards including hot mix asphalt (HMA) pavement reconstruction; concrete pavement reconstruction; crack and seat concrete with HMA; rubblize concrete with HMA overlay; and HMA overlay on existing concrete pavement. After conducting a life cycle cost analysis considering significant costs and benefits over the economic life of each alternative, Mead & Hunt recommended the crack and seat concrete with HMA overlay as the most cost effective and economic beneficial design alternative. Because the crack and seat process is not a standard FAA method, the project staff developed a separate engineering report to request a Modification of Standards (MOS) for the FAA to review and ultimately approve. The FAA has provided feedback that this MOS request is supported. The crack and seat concrete with HMA overlay consists of mechanically cracking the existing concrete runway in a grid pattern, compacting the concrete in place seating it into the existing subgrade, and then overlaying the runway with approximately 4-6 inches of hot mix asphalt in multiple lifts. The scope of work for the shorter parallel runway, 18L-36R is to grind and remove 2" of the existing HMA and replace with 2.5" of new HMA.

After the advertisement and award process, pending Board approval, the Airport will apply for a FAA grant to fund the project. The grant from the FAA will fund 90% of the total project cost, with an additional 4.5% of the total project cost funded by the DOT, and the remaining 5.5% funded through the Airport fund balance. While the DOT typically provides the 4.5% match to the FAA grant, there is a real possibility that the DOT may not be able fund the match. In the event that the DOT does not provide the 4.5% match, then the Airport would use their fund balance to absorb the 4.5% DOT share. The construction cost of grind and overlay of 18L-36R, the crack and seat process for 18R-36L and a portion of runway 6-24, along with all other associated costs to be included in an upcoming FAA grant application, is estimated at $14.9M.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve

Reviewed By: Bret Prebula