

## HMMH

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February 13, 2020

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Senior Legislative Aide  
Office of Supervisor Dave Pine  
County of San Mateo, District One  
400 County Center  
Redwood City, ca 94063  
P: 650.363.4571  
LWolin@smcgov.org

Subject: Proposal to Provide a Ground Based Noise (GBN) Modeling Study

Reference: HMMH Proposal Number 20-0152



Dear Ms. Wolin:

HMMH is pleased to present this proposal to provide a Ground Based Noise (GBN) modeling study.

### Scope of Work:

HMMH proposes to conduct GBN noise modeling of San Francisco International Airport (SFO) utilizing a software program called SoundPLAN<sup>1</sup>. In order to conduct the initial GBN noise modeling, we will need the following GIS data:

- Current Airport Layout Plan (ALP)
  - Should include runway end and taxiway coordinates and elevations, threshold crossing heights and taxiway positions, and displaced thresholds and glideslope for each runway end
  - Should include on airfield surface type identification (i.e. concrete, grass, rubber, etc.)
- On and Off Airport Building Footprints and Heights
- Surrounding Roadway Centerlines

HMMH proposes to conduct the following modeling scenarios. The two (2) aircraft types shall be determined by the SFO Aircraft Noise Abatement Office (ANAO) and should be based on the most frequent and loudest aircraft departing Runway 1L/1R. HMMH will then determine if we have measured and modeled spectral and directivity information for those aircraft. The location, types, heights and thickness of the vegetation will be provided to us by the client.

**Scenario 1** – 2 Aircraft Types Departing Runway 1L at Start of Takeoff Roll – Without and With Vegetation

**Scenario 2** – 2 Aircraft Types Departing Runway 1R at Start of Takeoff Roll – Without and With Vegetation

**Scenario 3** – 2 Aircraft Types Departing Runway 1L at Secondary Takeoff Point – With and Without Vegetation

**Scenario 4** – 2 Aircraft Types Departing Runway 1R at Secondary Takeoff Point– With and Without Vegetation

**Scenario 5** – 2 Aircraft Types Departing at the Same Time but Staggered on Runway 1L and 1R – With and Without Vegetation

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<sup>1</sup> <https://www.soundplan.eu/english/>

The model will output the following information:

- Maximum noise Level (Lmax) noise contours
- Unweighted spectral noise values at up to 12 receiver points

Utilizing the noise modeling outputs, HMMH will create Lmax noise contour figures overlaid over a basemap and receiver point tables to be incorporated into the technical memorandum.

HMMH proposes to create a technical memorandum that provides a statement of purpose, background information on GBN and details the noise modeling results.

## Cost Estimate and Delivery:

HMMH can perform the scope of work described above on a time and materials basis utilizing our previously agreed upon contractual hourly rates and for a Not-To-Exceed (NTE) amount of \$50,000.

We will not exceed this amount without your prior written consent. Please note that this proposal is valid for a period of 60 days from the date of this letter.



If this proposal and our Standard Terms & Conditions are acceptable to you, you may accept it by signing below, and then HMMH will return a countersigned copy to you to serve as our contractual agreement. We are prepared to begin work on this project within two (2) weeks of receipt of a signed agreement, or an alternative contracting mechanism.

Thank you for the opportunity to submit a proposal for the subject project. We very much look forward to the opportunity to assist you with this interesting project. Please feel free to contact me if you have any questions or concerns about this proposal.

Sincerely yours,

**Harris Miller Miller & Hanson Inc. d/b/a/ HMMH**

A handwritten signature in blue ink that reads 'Justin W. Cook'. The signature is written in a cursive, flowing style.

Justin W. Cook - INCE, LEED GA  
Principal Consultant

Note: Once we come to agreement on the terms for these services, Mary Ellen Eagan, President and CEO, will need to sign the contract and/or task order(s) to bind HMMH.

cc: Gene Reindel