



City of Palo Alto

City Council Staff Report

(ID # 10914)

Report Type: Consent Calendar

Meeting Date: 12/16/2019

Summary Title: Amendment 2 with Freytag & Asso. to Extend Contract through Oct. 31, 2020 to Assess Airplane Noise

Title: Approval of Amendment Number 2 to Contract Number C16161182 With Freytag & Associates to Extend the Term of the Agreement to October 31, 2020 With no Additional Cost to the City for Professional Services Related to Airplane Noise Assessment and Mitigation

From: City Manager

Lead Department: City Manager

Recommendation:

Staff recommends that Council authorize the City Manager or his designee to approve Amendment No. 2 to contract C16161182 (Attachment A) with Freytag and Associates to extend the term through October 31, 2020, at no additional cost to the City. The contract is for assistance with airplane noise assessment and mitigation.

Background:

On February 8, 2016, the City Council approved the contract with Freytag and Associates after a competitive bidding process ([CMR 6607](#)). On June 25, 2018, the City Council approved a contract extension of one and a half years (1.5 years) to end December 31, 2019 with no additional cost to the city ([CMR 9378](#)).

Discussion:

Staff is in the process of assessing the relationship of consulting staff work from the Santa Clara/Santa Cruz Roundtable to the work of the City of Palo Alto related to airplane noise as part of the City's review of its own consulting needs to support airplane noise work. Staff anticipates developing a revised scope of work for consulting support for airplane noise and community impacts in 2020. In the meantime, staff recommends the City continue to retain Freytag and Associates for their work in airplane noise assessment and mitigation, particularly in regards to monitoring developments such as route change proposals by the Federal Aviation Administration. The proposed Amendment No. 2 (Attachment A) extends the term through October 31, 2020 with no additional cost to the City. A detailed scope of the consultant's monthly responsibilities can be found in the amendment.

Stakeholder Engagement

The recommended contract extension is an administrative action, therefore no stakeholder engagement has been undertaken.

Resource Impact

This contract amendment does not add any additional funds to the contract.

Environmental Review

This item is not a project for purposes of the California Environmental Quality Act (CEQA) and environmental review is not required.

Attachments:

- Attachment A: Freytag & Associates Contract (C16161182) Amendment No. 2

**AMENDMENT NO. 2 TO CONTRACT NO. C16161182
BETWEEN THE CITY OF PALO ALTO AND
FREYTAG & ASSOCIATES, LLC.**

This Amendment No. 2 (this "Amendment") to Contract No. C16161182 (the "Contract" as defined below) is entered into as of _____, by and between the CITY OF PALO ALTO, a California chartered municipal corporation ("CITY"), and FREYTAG & ASSOCIATES, LLC, a California Limited Liability Company, located at 925 Cresta Way, Ste. 9, San Rafael, CA 94903 ("CONSULTANT"). CITY and CONSULTANT are referred to collectively as the "Parties" in this Amendment.

RECITALS

A. The Contract (as defined below) was entered into by and between the Parties hereto for the provision of assessment of the history of air traffic patterns over the Northern California (NorCal) Metroplex, as detailed therein.

B. The Parties now wish to amend the Contract in order to extend the term to October 31, 2020 from December 31, 2019 and provide additional scope of work as specified in this Amendment.

NOW, THEREFORE, in consideration of the covenants, terms, conditions, and provisions of this Amendment, the Parties agree:

SECTION 1. Definitions. The following definitions shall apply to this Amendment:

- a. **Contract.** The term "Contract" shall mean Contract No. C16161182 between CONSULTANT and CITY, dated February 8, 2016, as amended by:

Amendment No.1, dated June 25, 2018

- b. **Other Terms.** Capitalized terms used and not defined in this Amendment shall have the meanings assigned to such terms in the Contract.

SECTION 2. Section 2. TERM of the Contract is hereby amended to read as follows:

"SECTION 2. TERM. The term of this Agreement shall be from the date of its full execution through October 31, 2020, unless terminated earlier pursuant to Section 19 of this Agreement."

SECTION 3. The following exhibit(s) to the Contract is/are hereby amended or added, as indicated below, to read as set forth in the attachment(s) to this Amendment, which is/are hereby incorporated in full into this Amendment and into the Contract by this reference:

- a. Exhibit "A" entitled "SCOPE OF SERVICES", AMENDED, REPLACES PREVIOUS.
- b. Exhibit "C-1" entitled "HOURLY RATE SCHEDULE", AMENDED, REPLACES PREVIOUS.

SECTION 4. Legal Effect. Except as modified by this Amendment, all other provisions of the Contract, including any exhibits thereto, shall remain in full force and effect.

SECTION 5. Incorporation of Recitals. The recitals set forth above are terms of this Amendment and are fully incorporated herein by this reference.

(SIGNATURE BLOCK FOLLOWS ON THE NEXT PAGE.)

SIGNATURES OF THE PARTIES

IN WITNESS WHEREOF, the Parties have by their duly authorized representatives executed this Amendment effective as of the date first above written.

CITY OF PALO ALTO

FREYTAG & ASSOCIATES, LLC.

City Manager

DocuSigned by:
Jack Freytag
By: 
Name: Jack Freytag
Title: President

APPROVED AS TO FORM:

City Attorney or designee

Attachments:

EXHIBIT "A": SCOPE OF SERVICES, AMENDED

EXHIBIT "C-1": HOURLY RATE SCHEDULE, AMENDED

EXHIBIT “A” SCOPE OF SERVICES

The scope of services below provides details describing each task. As circumstances with Federal Aviation Administration and United States Congress progress, CITY staff and CONSULTANT may update tasks to adapt to current market conditions. Additionally as work on Historical Operations and Noise Assessments begin CITY staff and CONSULTANT may amend specific outputs. The descriptions below are intended to provide a framework for the activity. CONSULTANT will not begin tasks until work order is issued by CITY.

Task 1: Historical Operations Assessment

- 1 Database preparation and mock data output
CONSULTANT shall generate sample ‘mock’ outputs of data deliverables so that all parties understand what the deliverables will look like and that they are acceptable.
 - 1.1 Data Base import and customization
 - 1.2 Initial mapping developed
 - 1.3 Develop 5x5 boxes, per 1000 feet
 - 1.4 Heat Maps for SFO, SJC & OAK
 - 1.5 SFO arrivals (36 graphic & database outputs)
 - 1.6 SJC arrivals (36 graphic and database outputs)
 - 1.7 OAK Arrivals (36 graphic and database outputs)
 - 1.8 Customize database to include Airport runway usage

- 2 Cell maps
A series of cell maps will be prepared to describe the distribution of various air operational parameters over the Bay Area.
 - 2.1 Basic historical data
Prepare a series of cell maps delineating various combinations of flight tracks, altitudes, periods of the day/evening/night, for operations to and from SFO, SJC and OAK for several base years and months.
 - 2.2 Changes in flight operations
Prepare a series of cell maps depicting changes in various air operations over specific years and/or seasons.
 - 2.3 Line charts
Prepare a series of line charts depicting changes in various air operations over specific years and/or seasons.
 - 2.4 Histograms
Prepare a series of histograms depicting the statistical distribution of various air operations over specific years and/or seasons.

Task 2: Historical Noise Assessment

3 Noise Assessments

3.1 Cell maps - DNL / SEL's / Respite minutes / day/evening /night

Prepare Cell maps of the above metrics for the Bay Area with color coding for noise metric levels. Noise contours for various years will be compared.

3.2 Line charts - Alternative metrics / years / months / day/evening/night

For each CITY, and for several years and months, analyze the Cell data for the CITY by month/year and prepare graphics to illustrate changes in noise patterns vs. time, separated by 'Day', 'Evening', and 'Night'.

3.3 Noise monitoring (1 month)

Install a temporary noise monitor (at least one month) at a location in Palo Alto and compare modeled data to actual data as a validation of the model.

Assumptions/Exclusions:

- The NOP data will be used to generate flight paths, number of operations, and runway use in the AEDT. Input files for flight tracks and operations will be provided by the NOP data manager.
- The NOP data does not provide all of the inputs needed for the AEDT. Specifically, we will need to make assumptions for the following:
 - Exact aircraft type (e.g., 737-700 versus 737-939).
 - Aircraft load
 - Meteorological conditions
 - Aircraft flap settings
 - Aircraft thrust settings

Task 3: FAA & Community Activity and Noise Mitigation

4.a.1 Airline route analysis - review published routes

Review published routes, procedures, and related documentation, identifying operational changes at SFO, SJC, and OAK with relevant impact on route usage and traffic levels over Palo Alto, since the year 2000. Prepare a report with findings.

4.a.ii Airline route analysis - ID ops changes for SFO, SJC and OAK

4.a.iii Airline route analysis - ID impact on route changes over Palo Alto

5.1 Assessing alternatives - ID lesser used airspace

Track data analysis, TRACON vectoring practices for metering / sequencing. Review TRACON SOP's, identify compliance.

- 5.2 Assessing alternatives - modified flight path fuel/operating costs
Explore T-Routes (GA), raise crossing fix altitudes, TEST options, fuel and CO₂ conservation, adjust vectoring pathology.
- 5.3 Assessing alternatives - reduced nighttime noise exposure
Propose new options to current Noise Abatement Program (SFO)/compliance, review STAR profiles and compliance, USER meetings.
- 5.4 Assessing alternatives - minimize over-terrain flights <8,000 ft.
Adjust / amend per 5.2.
- 5.5 Assessing alternatives - review MENLO "IAF" crossing altitude
Adjustments/procedural amendments will be incorporated per outcomes of 5.2 and 5.5 based on TRACON concurrence and operational impact.
- 5.6 Assessing alternatives - review SJC arrival impacts
This task will be analyzed and amendments incorporated per outcomes of 5.1 thru 5.6.
- 5.7 Assessing alternatives - costs/saving for alternative routing
Operational/fuel costs will be derived from final amendments of route and practices with considerations given to surrounding Cities and air traffic flows and GA usage.
- 5.8 Assessing alternatives - discuss and assess FAA directives
As required / per demand.

Task 4: Ongoing Community Noise Activity

- 1 SFO Round Table Meetings
- 2 NOR CAL TRACON On-Site Meetings
- 3 Palo Alto City Meetings
- 4 Congressional Meetings
- 5 CITY Teleconference Calls
- 6 Meeting with FAA Regional Administrator / Staff
- 7 Draft technical correspondence for City review

Task 5: Sleep Interference Study

- 1 Phase 1 – monitoring -- 1 week @ 2 locations
Two simultaneous noise monitors set inside and outside an unoccupied residence concurrently recording the sound level at least each one second intervals for seven consecutive days. This will identify all aircraft flyover events simultaneously inside and outside the residence.
- 2 Data reduction
The noise data recorded will be downloaded from the digital programmable sound level meters and all aircraft flyover events identified.
- 3 Sleep interference computation
The percentage of the population awakened by the series of aircraft flyover events will be computed in accordance with American National Standards Institute (ANSI) S12.9, Part 6, "Quantities and Procedures for Description and Measurement of Environmental Sound -- Part 6: Methods for Estimation of Awakenings Associated with Aircraft Noise Events Heard in Homes".

- 4 Sleep interference assessment
The degree of sleep interference will be quantified from the measurement results.
- 5 Sleep interference written report
The measurement, assessment procedure and results will be presented in a written report.
- 6 Sleep interference presentation
The measurement, assessment procedure and results will be presented in an oral report to a Palo Alto forum.

Task 6: Classroom Disruption Study

- 1 Phase 1 -- monitoring -- 1 week @ 2 locations
Two simultaneous noise monitors set inside and outside an unoccupied classroom concurrently recording the sound level at least each one second intervals for several consecutive weekdays. This will identify all aircraft flyover events simultaneously inside and outside the school during school hours.
- 2 Data reduction
The noise data recorded will be downloaded from the digital programmable sound level meters and all aircraft flyover events identified.
- 3 Classroom interference computation
The degree of classroom disruption from aircraft noise will be assessed with respect to American National Standards Institute (ANSI) Standard S12.60, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Parts 1 & 2".
- 4 Classroom interference assessment
The degree of classroom interference will be quantified from the measurement results.
- 5 Classroom interference written report
The measurement, assessment procedure and results will be presented in a written report.
- 6 Classroom interference presentation
The measurement, assessment procedure and results will be presented in an oral report to a Palo Alto forum.

Task 7: Property Valuation Study

- 1 Research
- 2 Property Valuation Report
- 3 Property Valuation Presentation

AMENDMENT No. 2

The scope of services below provides details describing each task. As circumstances with Federal Aviation Administration and United States Congress progress, CITY staff and CONSULTANT may update tasks to adapt to current market conditions. Additionally, as work on Historical Operations and Noise Assessments begin CITY staff and CONSULTANT may amend specific outputs. The descriptions below are intended to provide a framework for the activity. CONSULTANT will not begin tasks until work order is issued by CITY.

The monthly Santa Cruz-Santa Clara and San Francisco Roundtable agendas will be reviewed by CONSULTANT as soon as available, and prior to future meetings, recommendations will be provided as appropriate to CITY for City interaction at the meeting. Any relative information and recommendations from the previous minutes of each Roundtable meeting will be forwarded to CITY.

CONSULTANT will perform monthly review and comment as appropriate on the SFO, OAK, SJC, SQL, RHV and PAO posted to the FAA Air Traffic Instrument Flight Procedures Gateway, and any relative FAA Order changes.

CONSULTANT will monitor other relevant information sources for actions, policies, procedures, etc. from the Federal Register, Airport Director's Reports, community correspondence, etc. for items potentially affecting aircraft noise in Palo Alto.

EXHIBIT "C-1"
HOURLY RATE SCHEDULE

Overall Project Manager, Freytag & Associates, LLC	\$ 280/hr
Air Traffic Management Manager, Hughes AV Associates	\$ 240/hr
National Offload Program Manager, Clayton Smith Consulting	\$ 250/hr
Noise Modeling and Graphics Production Manager, CSDA Design Group	\$ 240/hr
Senior Acoustician/Analyst	\$ 145/hr
Acoustician/Analyst	\$ 110/hr
Technician Administrative	\$ 90/hr
Administrative	\$ 70/hr

AMENDMENT No. 2

Monthly Review and Report	Project Manager	Air Traffic Management Manager	Total Estimate
Santa Clara Roundtable	\$ 260	\$ 130	\$ 390
San Francisco Roundtable	\$ 130	\$ 130	\$ 260
FAA-IFP's	\$ 260	\$ 130	\$ 390
Federal Register, local news, etc.	\$ 130	\$ 130	\$ 260
Total	\$ 780	\$ 520	\$ 1,300

If additional time may be required for a complete review of detailed materials, CONSULTANT will provide a fee estimate.