



APPLICATION FOR LAND USE CONSISTENCY DETERMINATION  
San Mateo County Airport Land Use Commission  
C/CAG ALUC

APPLICANT INFORMATION

Agency: City of South San Francisco

Project Name: 40 Airport Boulevard - Residential Project

Address: 40 Airport Boulevard

APN: 015-126-010

City: South San Francisco

State: CA

ZIP Code: 94080

Staff Contact: Christopher Espiritu

Phone: (650) 877-8535

Email: christopher.espiritu@ssf.net

PROJECT DESCRIPTION

The proposed project is a new 8-story residential building with 292 dwelling units and 15 percent affordable units.

The proposed building would be a maximum height of approximately 95 feet tall, with at-grade parking for 308 vehicles.

An existing two-story industrial/warehouse building on-site would be demolished and the project would retain existing access to the site.

The parcel is located at 15.95 above MSL. The finished office building, including rooftop mechanical equipment, would be 111.03 feet tall.

**PLEASE SEE SUPPLEMENTAL APPLICATION MATERIALS AND ATTACHMENTS.**

REQUIRED PROJECT INFORMATION

For General Plan, Specific Plan or Zoning Amendments and Development Projects:

A copy of the relevant amended sections, maps, etc., together with a detailed description of the proposed changes, sufficient to provide the following:

1. Adequate information to establish the relationship of the project to the three areas of Airport Land Use compatibility concern (ex. a summary of the planning documents and/or project development materials describing how ALUCP compatibility issues are addressed):
  - a) Noise: Location of project/plan area in relation to the noise contours identified in the applicable ALUCP.
    - Identify any relevant citations/discussion included in the project/plan addressing compliance with ALUCP noise policies.
  - b) Safety: Location of project/plan area in relation to the safety zones identified in the applicable ALUCP.
    - Include any relevant citations/discussion included in the project/plan addressing compliance with ALUCP safety policies.
  - c) Airspace Protection:
    - Include relevant citations/discussion of allowable heights in relation to the protected airspace/proximity to airport, as well as addressment of any land uses or design features that may cause visual, electronic, navigational, or wildlife hazards, particularly bird strike hazards.

**C/CAG Application for Land Use Consistency Determination:  
Supplemental Information**

**AGENCY NAME:** City of South San Francisco  
**PROJECT NAME:** 40 Airport Boulevard Project

**PROJECT DESCRIPTION**

The project site is located south of the City of South San Francisco’s (City’s) “Downtown Station Area Specific Plan” boundaries and located within both Airport Influence Areas A and B. The project applicant, Blake-Griggs Properties, has submitted an application to construct a new eight-story, 332,726-square-foot building, containing 292 multi-family residential units. The proposed building would include 308 parking stalls on two levels of podium parking, approximately 17,566 square feet (sq. ft.) of amenity space, and associated improvements. See Attachment 1 for Project Site Area Map.

The project site consists of an approximately 1.63-acre parcel located at 40 Airport Boulevard (APN 015-126-010) in South San Francisco, California. The site is bound by Caltrain railroad tracks to the north, a restaurant to the south, a hotel and US 101 to the east, and Airport Boulevard/Produce Avenue, commercial businesses, and industrial businesses to the west. The entire site is located within 0.5-mile of the relocated South San Francisco Caltrain station.

The project site is currently developed with an approximately 35,000-sf two-story commercial building, which is used as an office, storage, and assembly facility for a produce distribution company. The existing development also includes a paved parking area.

The project plans indicate that the project would include 308 internal vehicle parking spaces, 104 long-term and 31 short-term bicycle parking spaces, indoor and outdoor amenity spaces, and public infrastructure improvements for the Airport Boulevard frontage. The proposed building would be eight stories and 85 feet tall. The proposed unit mix would consist of 57 studio units, 32 one-bedroom units, 122 two-bedroom units, 59 three-bedroom units, and 22 four-bedroom units.

The project site is located adjacent to the Caltrain station and within walking distance of the downtown area (approximately 0.25 miles away), which offers an array of multi-family residential, dining, and retail activities centered along Grand Avenue. SamTrans provides bus service on the west side of U.S. 101, with bus stops located approximately 0.25 miles from the project site, and commute.org provides shuttle service from the Caltrain station to/from the BART and WETA ferry station.

An environmental document has been prepared for the 40 Airport Boulevard Project. (Link to PMND: [www.ssf.net/ceqadocuments](http://www.ssf.net/ceqadocuments) (click on the 40 Airport Boulevard CEQA folder)

## **DISCUSSION OF RELATIONSHIP TO AIRPORT LAND USE COMPATIBILITY**

### **Noise**

ALUCP Exhibit IV-8 “Noise Compatibility Zones – Detail” is attached (Attachment 2), and the 40 Airport Boulevard project area is indicated on the map. As indicated on the map, and referenced in SCEA-IS, the project site remains well outside of the airport’s 65 and 70 dBA CNEL noise contours. Therefore, the noise policy is not applicable to the proposed project.

Multi-family residential land uses are compatible with aircraft CNEL below 65 dBA, and may be permitted without any special requirements related to the attenuation of aircraft noise. Therefore, the SCEA-IS found that impacts related to noise would be less than significant.

*40 Airport Boulevard Project SCEA-IS – Chapter X – Noise, pages 176-190:*

### **Existing Noise Levels**

The project noise setting is composed of commercial and industrial uses, with regular traffic and commuter rail noise. The primary noise surfaces in the vicinity are from the Caltrain tracks to the north of the site, overhead aircraft, surface transportation, and land uses in the surrounding area.

Further, the nearest noise-sensitive receptors to the project site are existing multi-family residences across the Caltrain tracks at 150 Airport Boulevard, approximately less than a ½-mile north of the project site. Surrounding uses in the project vicinity are commercial, office, or industrial. There are no sensitive receptors in the immediate project vicinity. In addition to traffic noise, noise from aircraft overflights traveling to or from SFO, approximately 2 miles south of the project site, is sometimes audible at the project site.

### **Safety**

The California Airport Land Use Planning Handbook requires ALUCPs to include safety zones for each runway end. The 2012 SFO ALUCP includes five safety zones and related land use compatibility criteria. The proposed project site is located outside of all safety zones established for the 2012 SFO ALUCP. The SCEA-IS also includes a discussion of compatibility with the airport land use plan, and if the project would result in a safety hazard for people residing or working in the project area.

The project site is located outside of the Outer Boundary of Safety Zones, and outside of the Outer Boundary of Terminal Instrument Procedure (TERPS) Approach and One Engine

Inoperative (OEI) Departure Surfaces. As shown in Exhibit IV-6 of the Land Use Plan (Attachment 2), the project site is located outside of the 65 dB contour.

Because the project site is not located within a Safety Zone or a TERPS Approach and OEI Departure Surface, no impact would occur related to safety hazards. In addition, because the project site would be subject to less than 65 dB from airport operations the project would not subject future residents and employees to excessive noise. Therefore, a less-than-significant impact would occur related to a safety hazard or excessive noise for people residing or working in the project area.

*40 Airport Boulevard Project SCEA-IS: Chapter VII – Hazards and Hazardous Materials, pages 156-163*

### **Airspace Protection**

#### **Building Heights**

ALUCP Exhibit IV-14 “14 CFR Part 77 Airport Imaginary Surfaces – North Side” is attached (Attachment 3), and 40 Airport Boulevard Project is indicated in the exhibit. As indicated on the map, and referenced in the SCEA-IS, the height for the imaginary surface established for the horizontal surface at the site location is between 163.2 and 200 feet above MSL. The project parcel is located at 15.95 above MSL. The proposed building is designed to be constructed at a maximum building height of 95.03 feet above ground level (including all rooftop mechanical equipment). The maximum structure height would be 111.03 feet above MSL at the top of building, well below the 200’ imaginary surface height established. Based on the proposed project’s maximum height of 111.03 feet above MSL, no additional safety requirements are anticipated. Therefore, the proposed project would be consistent with the airspace policies as established in the adopted 2012 SFO ALUCP.

#### **Impacts to Special Status Species and Habitat**

The project site has been previously developed for commercial land use and is primarily covered by structures and pavement. Because the project site is predominantly urbanized, the site has low habitat value, and low potential for the presence of special-status species. However, certain birds protected by the MBTA may nest within onsite trees, and a potentially significant impact could occur. Project-specific Mitigation Measures II-1 and II-2 require preconstruction surveys for nesting birds and the establishment of appropriate buffers, which would reduce impacts to a less-than-significant level. As such, the proposed project would not result in additional significant environmental effects related to Biological Resources.

*40 Airport Boulevard Project SCEA-IS: Chapter II – Biological Resources, pages 118-123.*

# Project Site Map

## 40 Airport Boulevard





# 40 AIRPORT BLVD

SAN FRANCISCO, CA



2231 SOUTH POINTE DR.  
LAGUNA HILLS, CA 92653  
949.267.1660  
CHRIS WEINHOLT



BLAKE GRIGGS PROPERTIES  
550 HARTZ AVE, SUITE 200  
DANVILLE, CA 94526  
925.975.9737

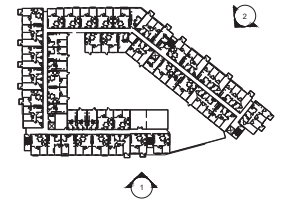
# 200027  
**40 AIRPORT BLVD**  
40 AIRPORT BLVD., SOUTH SAN FRANCISCO, CA

1ST SUBMITTAL 12/03/2020  
2ND SUBMITTAL 04/02/2021

**A0.0**  
TITLE SHEET



KEY PLAN



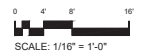
MATERIAL LEGEND:

- 1 EXTERIOR PLASTER
- 2 PLASTER SCREEDS
- 3 CEMENTITIOUS LAP SIDING
- 4 METAL CLAD AWNING
- 5 FAUX WOOD GUARDRAIL
- 6 WIRE MESH GUARDRAIL
- 7 GLASS GUARDRAIL
- 8 CONCRETE VENEER PANEL
- 9 VERTICAL METAL SIDING
- 10 STUCCO FOAM TRIM
- 11 VINYL WINDOW- BRONZE COLOR
- 12 STOREFRONT GLAZING SYSTEM
- 13 WIRE MESH PLANTING SCREENS

SOUTH ELEVATION 2



WEST ELEVATION 1





HOTEL

NOTE:  
All plans to comply with the City of South San Francisco  
Downtown Station Area Specific Plan and Section  
20.300.007 of the Zoning Ordinance

LEVEL 4 PODIUM COURTYARD  
• see enlargement, sheet L.4

RESTAURANT

DOG RUN

SHARED DRIVE

FITNESS

RAILROAD

LEVEL 8 ROOF TERRACE  
• see enlargement, sheet L.5

GROUND LEVEL  
• see sheet L.3

AIRPORT BOULEVARD



2323 SOUTH POINTE DR.  
LAGUNA HILLS, CA 92653  
949.287.1880  
CHRIS WEINHOLT



BLAKE GRIGGS PROPERTIES  
550 HARTZ AVE. SUITE 200  
DANVILLE, CA 94526  
925.575.8757

# 200007 **40 AIRPORT BLVD**  
40 AIRPORT BLVD., SOUTH SAN FRANCISCO, CA

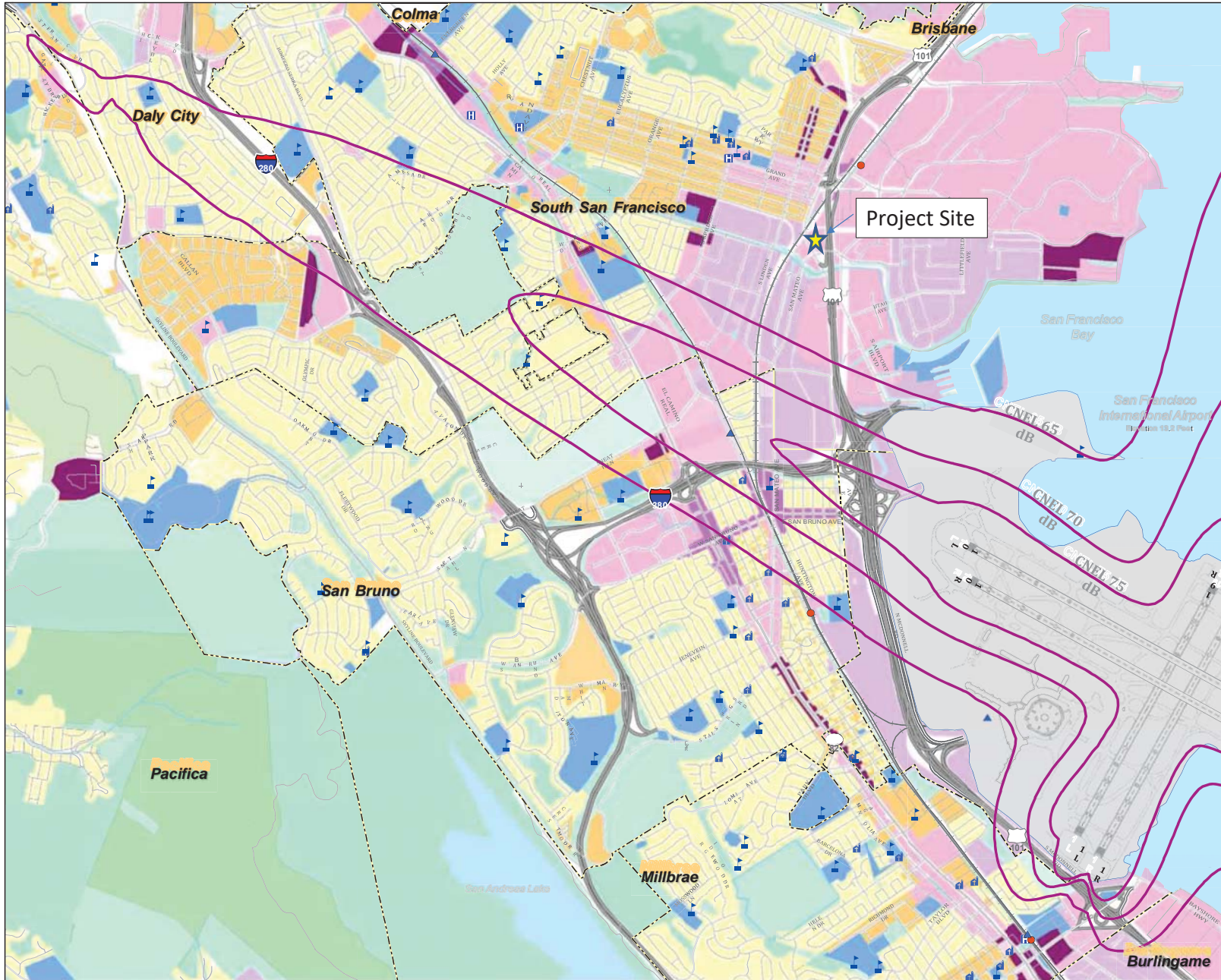


1ST SUBMITTAL 12/03/2020  
2ND SUBMITTAL 04/02/2021



COMPOSITE LANDSCAPE PLAN L.1





**LEGEND**

- CNEL Contour, 2020 Forecast
- Airport Property
- ▲ BART Station
- CALTRAIN Station
- School
- ⚓ Place of Worship
- ⚪ Hospital
- Municipal Boundary
- Railroad
- Freeway
- Road

**Planned Land Use Per General Plans:**

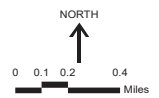
- Public
- Multi-Family Residential
- Single Family Residential
- Mixed Use
- Transit Oriented Development
- Commercial
- Industrial, Transportation, and Utilities
- Local Park, Golf Course, Cemetery
- Regional Park or Recreation Area
- Open Space
- Planned use not mapped

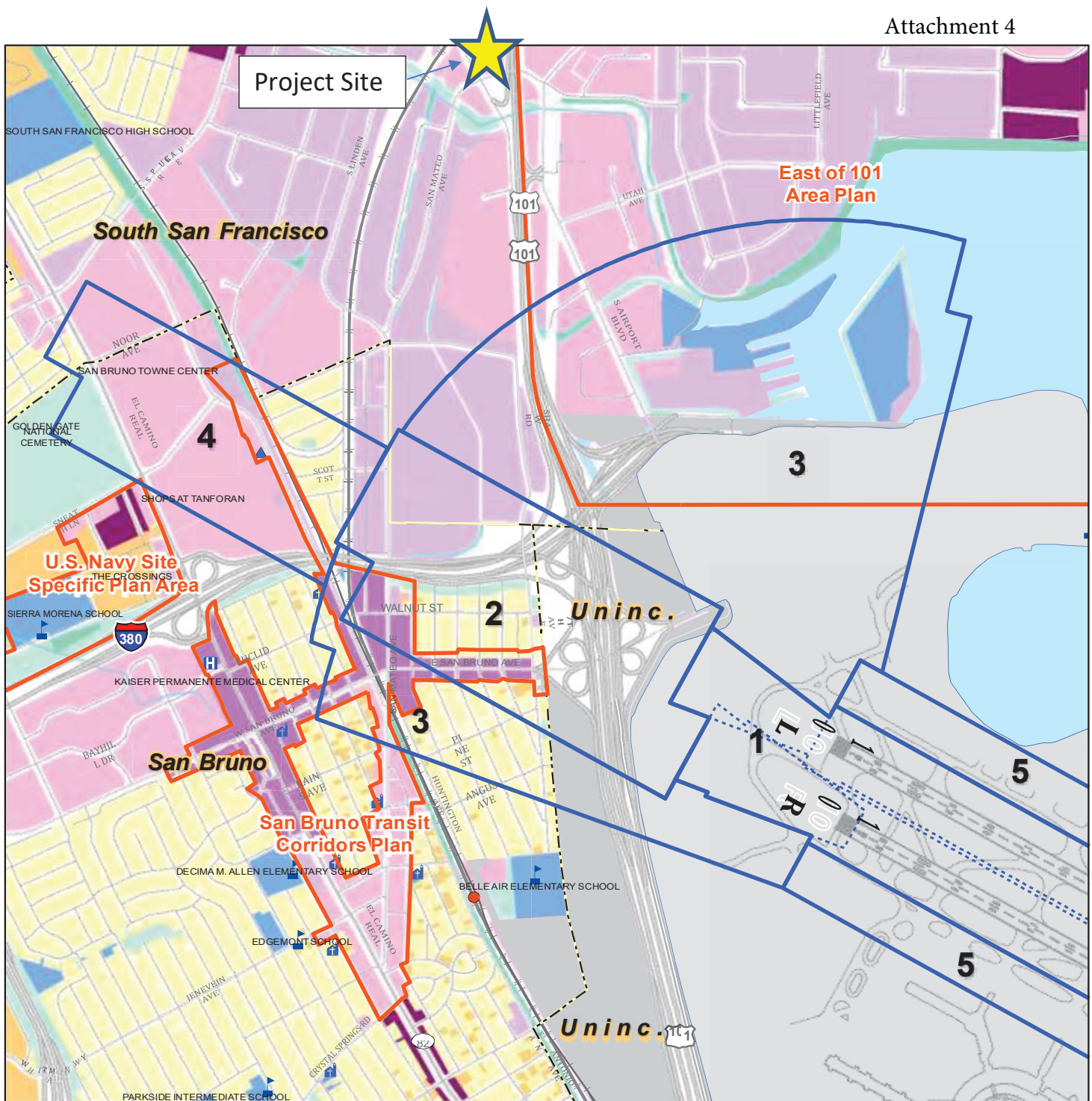
**Sources:**

Noise Contour Data:  
 - Draft Environmental Assessment, Proposed Runway Safety Area Program, San Francisco International Airport. URS Corporation and BridgeNet International, June 2011

**County Base Maps:**  
 - San Mateo County Planning & Building Department, 2007

- Local Plans:**
- Burlingame Bayfront Specific Area Plan, August 2006
  - Burlingame Downtown Specific Plan, January 2009
  - Burlingame General Map, September 1984
  - North Burlingame/Rollins Road Specific Plan, February 2007
  - Daly City General Plan Land Use Map, 1987
  - Colma Municipal Code Zoning Maps, December 2003
  - Hillsborough General Plan, March 2005
  - Millbrae Land Use Plan, November 1998
  - Pacifica General Plan, August 1996
  - San Bruno General Plan, December 2008
  - San Mateo City Land Use Plan, March 2007
  - San Mateo County Zoning Map, 1992
  - South San Francisco General Plan, 1998





**LEGEND**

**Safety Compatibility Zones**

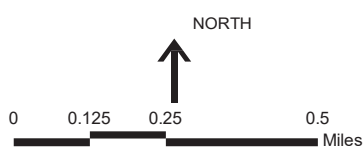
- 1 - Runway Protection Zone-Object Free Area
- 2 - Inner Approach/Departure Zone
- 3 - Inner Turning Zone
- 4 - Outer Approach/Departure Zone
- 5 - Sideline Zones
- Internal boundaries of ALP-defined areas
- Specific Plan Area
- Airport Property
- ▲ BART Station
- CALTRAIN Station
- ✎ School
- ✎ Place of Worship
- H Hospital
- Municipal Boundary
- Railroad
- Freeway
- Major Road
- Road

**Planned Land Use Per General Plans**

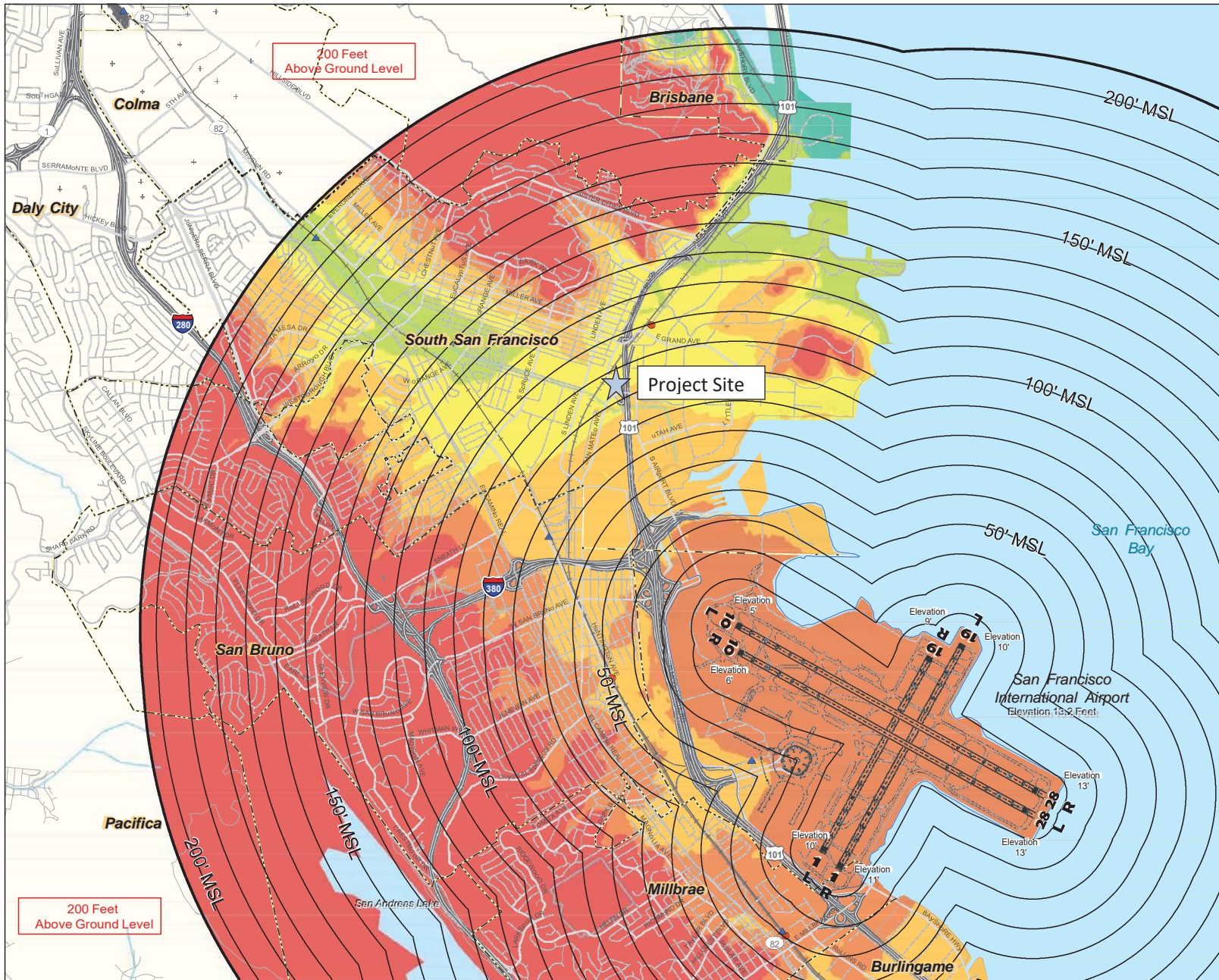
- Public
- Multi-Family Residential
- Single Family Residential
- Mixed Use
- Transit Oriented Development
- Commercial
- Industrial, Transportation, and Utilities
- Local Park, Golf Course, Cemetery
- Regional Park or Recreation Area
- Open Space

**Sources:**

- Local Plans:**
- San Bruno General Plan, December 2008
  - South San Francisco General Plan, 1998



SURFACE INTERSECTION ANALYSIS INFORMATION - AIRPORT CODE "SFOP"								
Coordinate System: WGS84			Date: 06/09/22			Model: SFO_Composite_2012_11DEC12_R2		
Latitude	Longitude	Site El.(AMSL)	Ht.(AGL)	Overall Ht.(AMSL)	Max Ht. (AMSL)	Exceeds By	Under By	Surface
37° 39' 2.8674"	122° 24' 30.9062"	16.16	95	111.16	362.89		251.73	SFO_VFR77_Exist_Conical
Total penetrations above surfaces: 0								
Total penetrations below surfaces: 1								
Zone Analysis								
X	Y	Range	Safety Zones					
6009160.686	2065066.4	Under 65 db	None					



**FAA NOTIFICATION REQUIREMENTS**

A structure proponent must file FAA Form 7460-1, Notice of proposed Construction or Alteration, for any proposed construction or alteration that meets any of the following Notification Criteria described in 14 CFR part 77.9:

§77.9(a) - A height more than 200 feet above ground level (AGL) at its site;

§77.9(b) - Within 20,000 feet of a runway more than 3,200 feet in length, and exceeding a 100:1 slope imaginary surface (i.e., a surface rising 1 foot vertically for every 100 feet horizontally) from the nearest point of the nearest runway. The 100:1 surface is shown as follows:

- 20,000 Feet Limit From Nearest Runway
- 100 — Elevation Above Mean Sea Level

**Heights of 100:1 Surface Above Ground (AGL)**

- Terrain penetrations of Airspace Surface
- Less than 30
- 30-65
- 65-100
- 100-150
- 150-200
- 200 and more

§77.9(c) - Roadways, railroads, and waterways are evaluated based on heights above surface providing for vehicles; by specified amounts or by the height of the highest mobile object normally traversing the transportation corridor;

§77.9(d) - Any construction or alteration on any public-use or military airport (or heliport).

Structure proponents or their representatives may file via traditional paper forms via US mail, or online at the FAA's e/AAA website, <http://oeaaa.faa.gov>

**LEGEND**

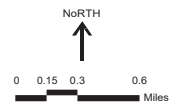
- ▲ BART Station
- CALTRAIN Station
- Municipal Boundary
- Railroad
- Freeway
- Road

Note:

per 14 CFR part 77, developers proposing structures taller than the indicated elevations must file Form 7460-1 with the FAA at least 30 days before the proposed construction. However, due to local requirements for a favorable FAA determination as a contingency for project approval, it is advisable to file the Form 7460-1 as soon as possible because the FAA can take several months to undertake aeronautical reviews.

Source:

Ricondo & Associates, Inc. and Jacobs Consultancy, based on 14 CFR part 77, Subpart B, Section 77.9.





San Francisco International Airport

June 14, 2022

TRANSMITTED VIA E-MAIL  
 kkalkin@smcgov.org

Susy Kalkin  
 ALUC Staff  
 City/County Association of Governments of San Mateo County  
 555 County Center, 5th Floor  
 Redwood City, California 94063

**Subject:***Application for Land Use Consistency Determination for New Apartment Building at 40 Airport Blvd, South San Francisco*

Thank you for notifying San Francisco International Airport (SFO or the Airport) regarding the Airport Land Use Commission's (ALUC) land use consistency determination for the proposed construction of a new eight-story apartment building at 40 Airport Boulevard (the Proposed Project) within the city of South San Francisco (the City). We appreciate this opportunity to coordinate with ALUC in considering and evaluating potential land use compatibility issues for the Project.

According to the Application for Land Use Consistency Determination, the Proposed Project is located at 40 Airport Blvd (Assessor's Parcel Number 015-126-010), bounded by Caltrain railroad tracks to the north, a restaurant to the south, a hotel and US 101 to the east, and Airport Boulevard/Produce Avenue, commercial businesses, and industrial businesses to the west, in the City of South San Francisco. The Proposed Project would demolish an existing 35,000-square-foot two-story commercial building and construct a new eight-story apartment building with 292 multi-family residential units. In addition, the proposed building would include 308 parking stalls on two levels of podium parking, approximately 17,566 square feet of amenity space, and associated improvements. The maximum height of the Proposed Project would be 95 feet above ground level.

The Proposed Project site is inside Airport Influence Area B as defined by the *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport* (SFO ALUCP). The Proposed Project site would be located outside the 65 decibel (dBA) Community Noise Equivalent Level (CNEL) contour and the Safety compatibility zones, and therefore would not appear inconsistent with the noise and safety policies as adopted in the SFO ALUCP. However, many airport departure procedures are designed to ascend over or near the Project area, and residents may experience some noise disturbances from aircraft departures, especially during the overnight hours. The Project sponsor is encouraged to study these flight patterns and make appropriate accommodations in the building design to ensure residents' comfort.

As described in Exhibit IV-17 of the SFO ALUCP (see Attachment), the critical aeronautical surfaces at the Proposed Project location are at an elevation of above approximately 575 feet above mean sea level (AMSL) as defined from the origin of the North American Vertical Datum of 1988 (NAVD88). Given that the ground elevation at the Proposed Project site is at 15.95 feet AMSL (NAVD88) and maximum height of the building is defined as 95.03 feet above ground level (AGL), the top elevation of the structure at 111.03 feet AMSL (NAVD88) would be below the critical aeronautical surfaces and the Proposed Project would not appear incompatible with the Airspace Compatibility Policies of the SFO ALUCP, subject to the issuance of a Determination of No Hazard from the Federal Aviation Administration (see below) for any proposed

**AIRPORT COMMISSION** CITY AND COUNTY OF SAN FRANCISCO

LONDON N. BREED  
 MAYOR

ELEANOR JOHNS  
 PRESIDENT

MALCOLM YEUNG  
 VICE PRESIDENT

EVERETT A. HEWLETT, JR.

JANE NATOLI

JOSE F. ALMANZA

IVAR C. SATERO  
 AIRPORT DIRECTOR

*Susy Kalkin, ALUC*  
*June 14, 2022*  
*Page 2 of 2*

structures, and determinations from the City/County Association of Governments of San Mateo County as the designated Airport Land Use Commission.

This determination does not negate the requirement for the Proposed Project sponsor to undergo Federal Aviation Administration review as described in 14 Code of Federal Regulations (CFR) Part 77 for both (1) the permanent structure and (2) any temporary cranes or other equipment taller than the permanent structure required to construct those structures.

The Application for Land Use Consistency Determination Supplemental Information states incorrectly that the criterion for compatibility should be based on the 14 CFR Part 77 imaginary surfaces shown in Exhibit IV-14. As detailed above, the critical aeronautical surfaces are described in Exhibit IV-17. While this does not have a material effect on the analysis, the Project sponsor is advised to cite the correct exhibits and land use compatibility policies in any future submissions.

Due to the proximity of the Proposed Project to the Airport, Airspace Protection Policies (AP-1 through AP-4) from the SFO ALUCP are enclosed as reminders of incompatible site characteristics, especially as it pertains to wildlife attractants, particularly large flocks of birds, that pose threats to safe aircraft operations, and building materials/features that reflect and create bright lights/glare.

\* \* \*

The Airport appreciates your consideration of these comments. If I can be of assistance, please do not hesitate to contact me at (650) 821-6678 or at [nupur.sinha@flysf.com](mailto:nupur.sinha@flysf.com).

Sincerely,

DocuSigned by:

*Nupur Sinha*

7D552AE8A4CE495...

Nupur Sinha  
Director of Planning and Environmental Affairs  
San Francisco International Airport

Attachment

cc: Sean Charpentier, C/CAG  
Audrey Park, SFO

and associated with human disease of varying severity.

- b. Biosafety Level 3 practices, safety equipment, and facility design and construction are applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents with a potential for respiratory transmission, and which may cause serious and potentially lethal infection.
- c. Biosafety Level 4 practices, safety equipment, and facility design and construction are applicable for work with dangerous and exotic agents that pose a high individual risk of life-threatening disease, which may be transmitted via the aerosol route and for which there is no available vaccine or therapy.

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## 4.5      Airspace Protection

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The compatibility of proposed land uses with respect to airspace protection shall be evaluated in accordance with the policies set forth in this section. These policies are established with a twofold purpose:

1. To protect the public health, safety, and welfare by minimizing the public's exposure to potential safety hazards that could be created through the construction of tall structures.
2. To protect the public interest in providing for the orderly development of SFO by ensuring that new development in the Airport environs avoids compromising the airspace in the Airport vicinity. This avoids the degradation in the safety, utility, efficiency, and air service capability of the Airport that could be caused by the attendant need to raise visibility minimums, increase minimum rates of climb, or cancel, restrict, or redesign flight procedures.

### 4.5.1      FEDERAL REGULATIONS REGARDING TALL STRUCTURES

14 Code of Federal Regulations (CFR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, governs the FAA's review of proposed construction exceeding certain height limits, defines airspace obstruction criteria, and provides for FAA aeronautical studies of proposed construction. **Appendix F** describes the FAA airspace review process and the extent of FAA authority related to airspace protection.

### 4.5.2      PART 77, SUBPART B, NOTIFICATION PROCESS

Federal regulations require any person proposing to build a new structure or alter an existing structure with a height that would exceed the elevations described in CFR Part 77, Subpart B, Section 77.9, to prepare an FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, and submit the notice to the FAA. The regulations apply to buildings and other structures or portions of structures, such as mechanical equipment, flag poles, and other projections that may exceed the aforementioned elevations.

**Exhibit IV-10** depicts the approximate elevations at which the 14 CFR Part 77 notification requirements would be triggered; see **Exhibit IV-11** for a close-up view of the northern half and **Exhibit IV-12** for a close-up view of the southern half of the area. These exhibits are provided for informational purposes only. Official determinations of the areas and elevations within which the federal notification requirements apply are subject to the authority of the FAA. The FAA is empowered to require the filing of notices for proposed construction based on considerations other than height. For example, in some areas of complex airspace and high air traffic volumes, the FAA may be concerned about the potential for new construction of any height to interfere with electronic navigation aids. In these areas, the FAA will want to review all proposed construction projects.

The FAA has developed an on-line tool for project sponsors to use in determining whether they are required to file a Notice of Proposed Construction or Alteration. Sponsors of proposed projects are urged to refer to this website to determine whether they are required to file Form 7460-1 with the FAA:

<https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm>

### 4.5.3 AIRSPACE MAPPING

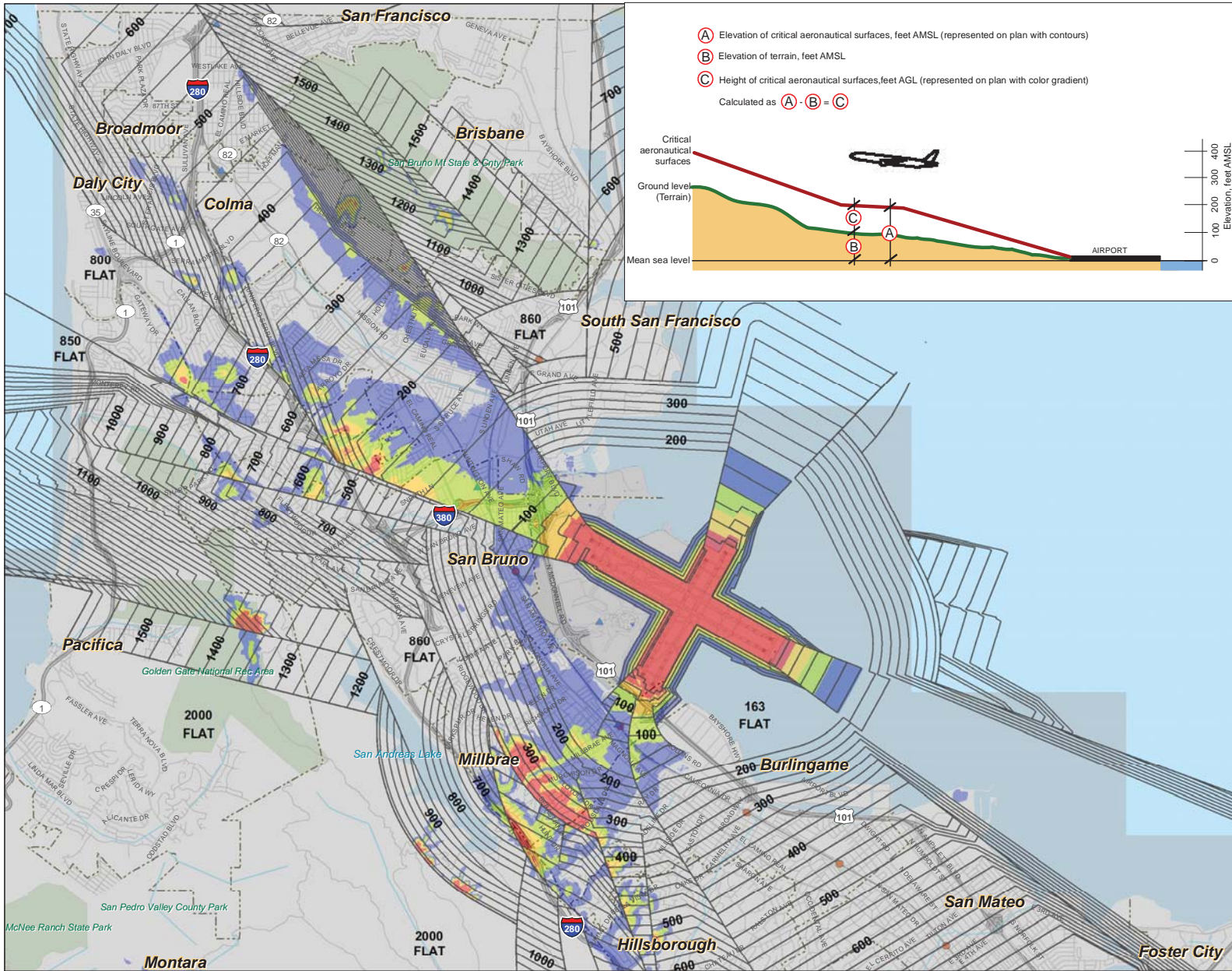
Part 77, Subpart C, establishes obstruction standards for the airspace around airports including approach zones, conical zones, transitional zones, and horizontal zones known as “imaginary surfaces.” **Exhibit IV-13** depicts the Part 77 Civil Airport Imaginary Surfaces at SFO. The imaginary surfaces rise from the primary surface, which is at ground level immediately around the runways. The surfaces rise gradually along the approach slopes associated with each runway end and somewhat more steeply off the sides of the runways. The FAA considers any objects penetrating these surfaces, whether buildings, trees or vehicles travelling on roads and railroads, as obstructions to air navigation. Obstructions may occur without compromising safe air navigation, but they must be marked, lighted, and noted on aeronautical publications to ensure that pilots can see and avoid them.

Close-up views of the north and south sides of the Part 77 surfaces are provided in **Exhibit IV-14** and **Exhibit IV-15**, respectively. Additionally, **Exhibit IV-16** provides an illustration of the outer approach and transitional surfaces located on the southeast side of the Part 77 surfaces.

Together with its tenant airlines, SFO has undertaken a mapping effort to illustrate the critical aeronautical surfaces that protect the airspace required for multiple types of flight procedures such as those typically factored into FAA aeronautical studies, as shown on **Exhibit IV-17** and **Exhibit IV-18**. These aeronautical surfaces include those established in accordance with FAA Order 8260.3B, *U.S. Standard for Terminal Instrument Procedures (TERPS)*, and a surface representing the airspace required for One-Engine Inoperative (OEI) departures from Runway 28L (to the west through the San Bruno Gap).<sup>16</sup> The exhibits depict the lowest elevations from the combination of the OEI procedure surface and all TERPS surfaces. The surfaces are defined with Required Obstacle Clearance (ROC) criteria to ensure safe separation of aircraft using the procedures from the underlying obstacles. Any proposed structures penetrating these surfaces are likely to receive Determinations of Hazard (DOH) from the FAA through the 7460-1 aeronautical study process. These surfaces indicate the maximum height at which structures can be considered compatible with Airport operations.

<sup>16</sup> See Appendix F, Section F.3.2 for a discussion of one-engine inoperative procedures.





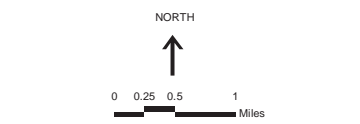
**LEGEND**

- (A) — 100 — Elevation of critical aeronautical surfaces, feet Above Mean Sea Level (AMSL), North American Vertical Datum of 1988 (NAVD88)
- (C) **Height of Critical Aeronautical Surfaces, Feet Above Ground Level (AGL)**
  - 35 and lower
  - 35- 65
  - 65 - 100
  - 100 - 150
  - 150 and more
- Airport Property
- ▲ BART Station
- CALTRAIN Station
- Regional Park or Recreation Area
- Municipal Boundary
- Railroad
- Freeway
- Road

**Notes:**

- This map is intended for informational and conceptual planning purposes, generally representing the aeronautical surfaces considered most critical by San Francisco International Airport (SFO) and its constituent airlines. It does not represent actual survey data, nor should it be used as the sole source of information regarding compatibility with airspace clearance requirements in the development of data for an FAA Form 7460-1, Notice of Proposed Construction or Alteration. SFO does not certify its accuracy, information, or title to the properties contained in this plan. SFO does make any warrants of any kind, express or implied, in fact or by law, with respect to boundaries, easements, restrictions, claims, overlaps, or other encumbrances affecting such properties.
- This map does not replace the FAA's obstruction evaluation / airport airspace analysis (OE/AAA) review process. Proposing construction at elevations and heights that are lower than the critical aeronautical surfaces shown on this map, (a) does not relieve the construction sponsor of the obligation to file an FAA Form 7460-1, and (b) does not ensure that the proposal will be acceptable to the FAA, SFO, air carriers, or other agencies or stakeholders. SFO, San Mateo County, and local authorities having jurisdiction reserve the right to re-assess, review, and seek modifications to projects that may be consistent with this critical aeronautical surfaces map but that through the FAA OE/AAA process are found to have unexpected impacts to the safety or efficiency of operations at SFO.

Sources: San Francisco International Airport, Jacobs Consultancy, and Planning Technology Inc., 2009



**Exhibit IV-19**, which is provided for information purposes only, depicts a profile view of the lowest critical airspace surfaces along the extended centerline of Runway 10L-28R – the TERPS Obstacle Departure Procedure (ODP) surface, representing standard all-engines departures, and the approximate OEI surface developed by SFO through independent study in consultation with the airlines serving SFO. The exhibit also shows the terrain elevation beneath the airspace surfaces and various aircraft approach and departure profiles, based on varying operating assumptions. The exhibit illustrates a fundamental principle related to the design of airspace protection surfaces. The surfaces are always designed below the actual aircraft flight profile which they are designed to protect, thus providing a margin of safety. Note that the ODP climb profile is above the ODP airspace surface, and the OEI climb profile is above the OEI airspace surface.

#### 4.5.4 AIRSPACE PROTECTION POLICIES

The following airspace protection policies (AP) shall apply to the ALUCP.

##### **AP-1 COMPLIANCE WITH 14 CFR PART 77, SUBPART B, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION**

###### **AP-1.1 Local Government Responsibility to Notify Project Sponsors**

Local governments should notify sponsors of proposed projects at the earliest opportunity to file Form 7460-1, *Notice of Proposed Construction or Alteration*, with the FAA for any proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10. Under Federal law, it is the responsibility of the project sponsor to comply with all notification and other requirements described in 14 CFR Part 77. This requirement applies independent of this ALUCP.

###### **AP-1.2 FAA Aeronautical Study Findings Required Before Processing Development Application**

The sponsor of a proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10, shall present to the local government permitting agency with his or her application for a development permit, a copy of the findings of the FAA's aeronautical study, or evidence demonstrating that he or she is exempt from having to file an FAA Form 7460-1. It is the responsibility of the local agency to consider the FAA determination study findings as part of its review and decision on the proposed project.

##### **AP-2 COMPLIANCE WITH FINDINGS OF FAA AERONAUTICAL STUDIES**

Project sponsors shall be required to comply with the findings of FAA aeronautical studies with respect to any recommended alterations in the building design and height and any recommended marking and lighting of their structures for their proposed projects to be deemed consistent with this ALUCP.

**AP-3 MAXIMUM COMPATIBLE BUILDING HEIGHT**

In order to be deemed consistent with the ALUCP, the maximum height of a new building must be the lower of (1) the height shown on the SFO critical aeronautical surfaces map (Exhibits IV-17 and IV-18), or (2) the maximum height determined not to be a “hazard to air navigation” by the FAA in an aeronautical study prepared pursuant to the filing of Form 7460-1.

For the vast majority of parcels, the height limits established in local zoning ordinances are lower than the critical airspace surfaces. In those cases, the zoning district height regulations will control. Compliance with the zoning district height and the SFO critical aeronautical surfaces map, however, does not relieve the construction sponsor of the obligation to file a FAA Form 7460-1 *Notice of Proposed Construction or Alteration*, if required, and to comply with the determinations resulting from the FAA’s aeronautical study.

For a project to be consistent with this ALUCP, no local agency development permits shall be issued for any proposed structure that would penetrate the aeronautical surfaces shown on Exhibits IV-17 and IV-18 or the construction of which **has not** received a Determination of No Hazard from the FAA, or which would cause the FAA to increase the minimum visibility requirements for any instrument approach or departure procedure at the Airport.

**AP-4 OTHER FLIGHT HAZARDS ARE INCOMPATIBLE**

Proposed land uses with characteristics that may cause visual, electronic, or wildlife hazards, particularly bird strike hazards, to aircraft taking off or landing at the Airport or in flight are incompatible in Area B of the Airport Influence Area. They may be permitted only if the uses are consistent with FAA rules and regulations. Proof of consistency with FAA rules and regulations and with any performance standards cited below must be provided to the Airport Land Use Commission (C/CAG Board) by the sponsor of the proposed land use action.

Specific characteristics that may create hazards to aircraft in flight and which are incompatible include:

- (a) Sources of glare, such as highly reflective buildings or building features, or bright lights, including search lights or laser displays, which would interfere with the vision of pilots making approaches to the Airport.
- (b) Distracting lights that that could be mistaken by pilots on approach to the Airport for airport identification lighting, runway edge lighting, runway end identification lighting, or runway approach lighting.
- (c) Sources of dust, smoke, or water vapor that may impair the vision of pilots making approaches to the Airport.
- (d) Sources of electrical interference with aircraft or air traffic control communications or navigation equipment, including radar.
- (e) Land uses that, as a regular byproduct of their operations, produce thermal plumes with the potential to rise high enough and at sufficient velocities to interfere with the control of aircraft in

flight. Upward velocities of 4.3 meters (14.1 feet) per second at altitudes above 200 feet above the ground shall be considered as potentially interfering with the control of aircraft in flight.<sup>17</sup>

(f) Any use that creates an increased attraction for wildlife, particularly large flocks of birds, that is inconsistent with FAA rules and regulations, including, but not limited to, FAA Order 5200.5A, *Waste Disposal Sites On or Near Airports*, FAA Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, and any successor or replacement orders or advisory circulars. Exceptions to this policy are acceptable for wetlands or other environmental mitigation projects required by ordinance, statute, court order, or Record of Decision issued by a federal agency under the National Environmental Policy Act.

#### 4.5.5 iALP AIRSPACE TOOL

In consultation with C/CAG, SFO developed the iALP Airspace Tool, a web-based, interactive tool to evaluate the relationship of proposed buildings with the Airport's critical airspace surfaces. The iALP Airspace Tool is designed to assist planners, developers, and other interested persons with the implementation of the airspace protection policies of the SFO ALUCP. The tool helps users determine: (1) the maximum allowable building height at a given site, and/or (2) whether a building penetrates a critical airspace surface, and by how much, given the proposed building height.

A more detailed description of the iALP Airspace Tool and a tutorial explaining how to use it is presented in **Appendix J**. Use of this tool, however, does not relieve a project sponsor of the duty to comply with all federal regulations, including the obligation to file Form 7460-1, Notice of Proposed Construction or Alteration, with the FAA.

<sup>17</sup> This is a threshold established by the California Energy Commission in its review of power plant licensing applications. See *Blythe Solar Power Project: Supplemental Staff Assessment, Part 2*, CEC-700-2010-004-REVI-SUP-PT2, July 2010. California Energy Commission. Docket Number 09-AFC-6, p. 25. This criterion is based on guidance established by the Australian Government Civil Aviation Authority (Advisory Circular AC 139-05(0), June 2004). The FAA's Airport Obstructions Standards Committee (AOSC) is studying this matter but has not yet issued specific guidance.