



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

APPLICANT INFORMATION

Agency: [City of San Bruno](#)

Project Name: [170 San Bruno Ave Mixed Use Project](#)

Address: [170 San Bruno Ave](#)

APN: [020-111-160](#)

City: [San Bruno](#)

State: [CA](#)

ZIP Code:

Staff Contact: [Ralph Robinson, Roscoe Mata](#)

Phone: [650-745-1743](#)

Email: rmata@sanbruno.ca.gov
rrobinson-pt@sanbruno.ca.gov

PROJECT DESCRIPTION

[8-story 57-unit multifamily condos with 910 sf of ground floor retail and 41 parking spaces. The site is within the 65-70 dB, therefore is conditionally compatible.](#)

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.

- If applicable, identify how property owners are advised of the need to submit Form 7460-1, *Notice of Proposed /Construction or Alteration* with the FAA.

2. Real Estate Disclosure requirements related to airport proximity
3. Any related environmental documentation (electronic copy preferred)
4. Other documentation as may be required (ex. related staff reports, etc.)

Additional information For Development Projects:

1. 25 sets of scaled plans, no larger than 11" x 17"
2. Latitude and longitude of development site
3. Building heights relative to mean sea level (MSL)

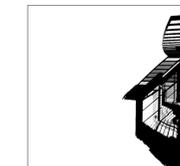
ALUCP Plans can be accessed at <http://ccag.ca.gov/plansreportslibrary/airport-land-use/>

Please contact C/CAG staff at 650 599-1467 with any questions.

<i>For C/CAG Staff Use Only</i>
<i>Date Application Received</i>
<i>Date Application Deemed Complete</i>
<i>Tentative Hearing Dates:</i>
- <i>Airport Land Use Committee</i>
- <i>C/CAG ALUC</i>



VIEW OF BUILDING FROM THE CORNER OF MILLS AVENUE, WEST ELEVATION (LEFT) AND SAN BRUNO AVENUE, SOUTH ELEVATION (RIGHT)



ELEVATION architects

590 Matheson Street
Healdsburg, CA 95448

707.433.2509 v
www.elevationarchitects.com w



MIXED USE DEVELOPMENT

170 San Bruno Avenue
San Bruno CA 94066

APN: 02011 1160

#	date	issue

Rendering I: SW view

project:	21.07
drawn by:	JP, KC
checked by:	JP
date:	01.22.25
scale:	

A-0.4



ELEVATIONarchitects

590 Matheson Street
Healdsburg, CA 95448

707.433.2509 v
www.elevationarchitects.com w



PRIVATE OPEN SPACE: 1,882 SQ. FT.
OWNED AND MAINTAINED BY BUILDING OWNER

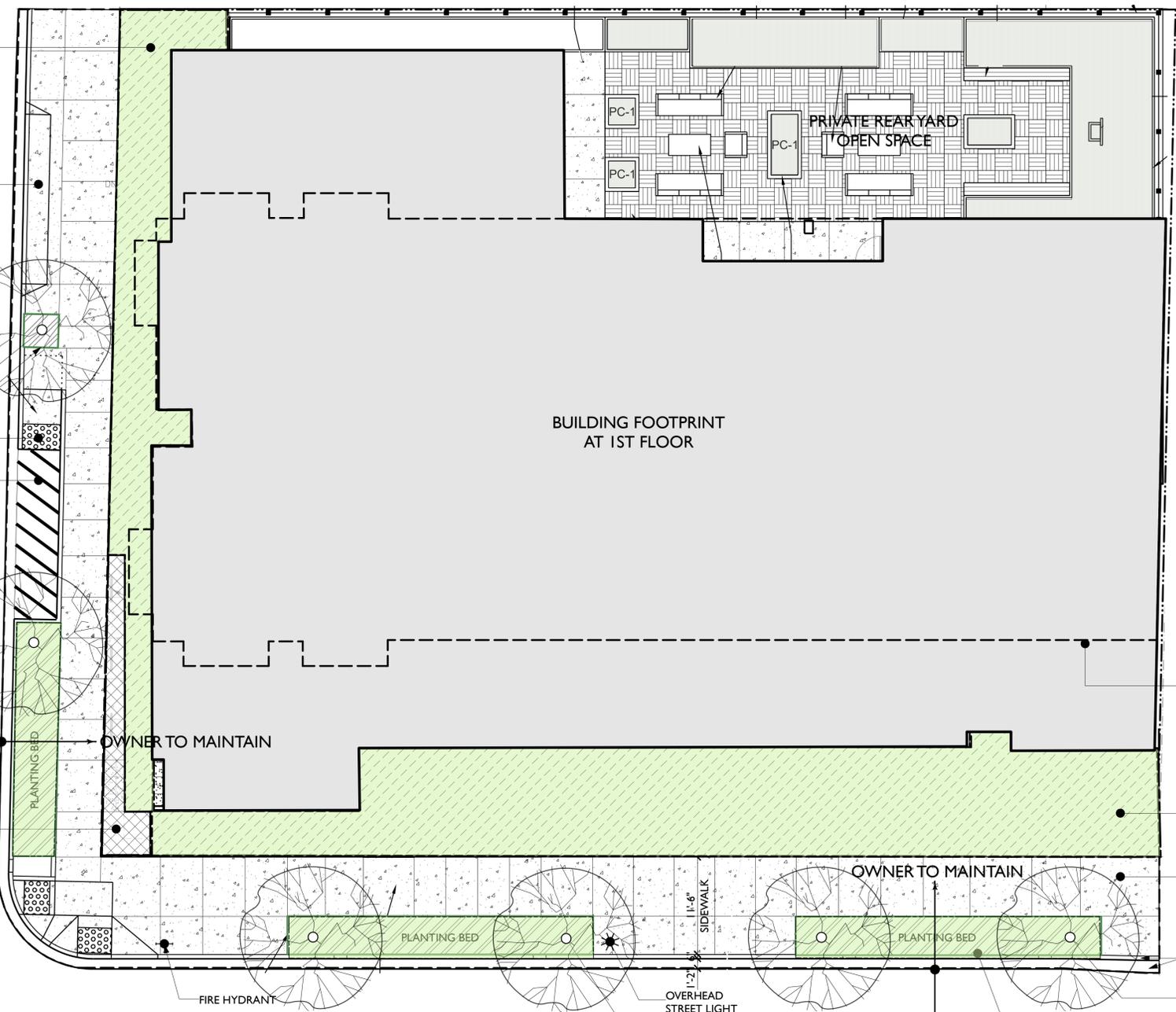
DRIVEWAY
CURB CUT

TYPICAL STREET TREE, TYP:
'LITTLE GEM MAGNOLIA'
PLANTING BED, TYP:
TRUCATED CONES
AND RAMP TO SIDEWALK

20' DROP OFF AREA

CITY TO MAINTAIN

SIDEWALK AREA WITHIN
PRIVATE PROPERTY:
BUILT AND MAINTAINED BY OWNER



BUILDING FOOTPRINT
AT 1ST FLOOR

PRIVATE REARYARD
OPEN SPACE

LINE OF BUILDING TOWER ABOVE

OWNER TO MAINTAIN

OWNER TO MAINTAIN

PRIVATE OPEN SPACE: 1,980 SQ. FT.
OWNED AND MAINTAINED BY BUILDING OWNER

PUBLIC SIDEWALK: 3,000 SQ. FT.
BUILT BY BUILDING OWNER,
MAINTAINED BY OWNER

STREET CURB AND GUTTER:
BUILT BY BUILDING OWNER,
MAINTAINED BY OWNER

STREET TREES, TYP:
PLANTED AND MAINTAINED BY OWNER,
OWNED BY CITY

PLANTING BED, TYP:
BUILT AND MAINTAINED BY OWNER,
OWNED BY CITY

ALL STREET LIGHTS, FIRE HYDRANTS
AND OTHER CITY UTILITIES:
BUILT AND MAINTAINED BY CITY

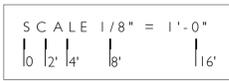
NOTE:
A LONG-TERM ENCROACHMENT AND
MAINTAINANCE PLAN WILL BE PREPARED
AS PART OF THE FINAL ENTITLEMENT
OF THE PROJECT.

MIXED-USE DEVELOPMENT
170 SAN BRUNO AVENUE
SAN BRUNO, CA 94066

date issue

Ownership &
Maintenance Exhibit

project: 21.07
drawn by: kc
checked by: JP
date: 12.15.24
scale: 1/4" = 1'-0"



A-0.7



ELEVATIONarchitects

590 Matheson Street
Healdsburg, CA 95448

707.433.2509 ~v
www.elevationarchitects.com ~w



MIXED USE DEVELOPMENT
170 SAN BRUNO AVENUE
SAN BRUNO, CA 94066

date issue

South Elevation

project: 21.07
drawn by: JP
checked by: KC
date: 01.22.25
scale:

A-3.1



2 SOUTH ELEVATION - SAN BRUNO AVENUE
Scale: 1/8" = 1'-0"



SCALE 1/8" = 1'-0"
0 2' 4' 8' 16'



ELEVATIONarchitects

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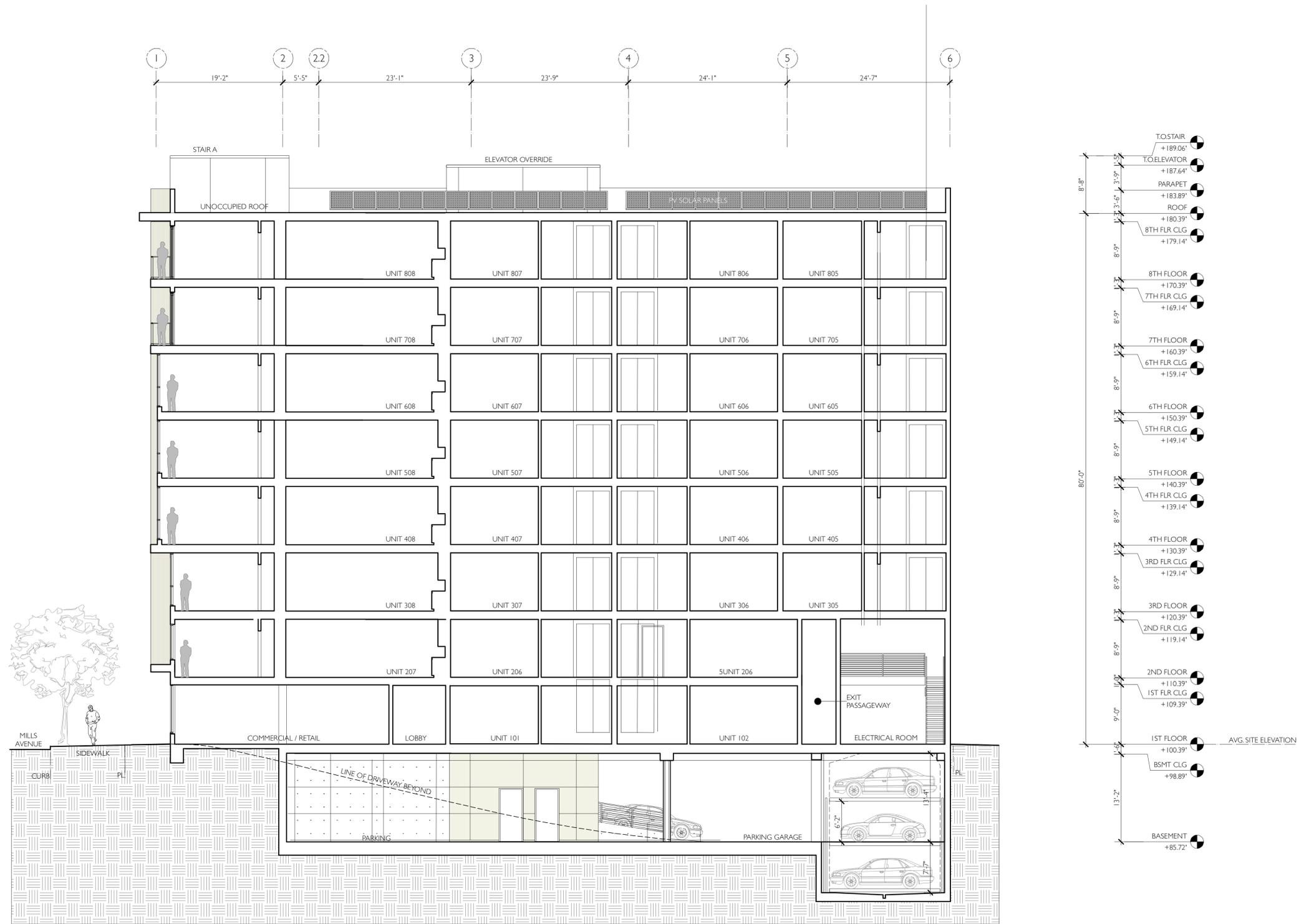


MIXED USE DEVELOPMENT
170 SAN BRUNO AVENUE
SAN BRUNO, CA 94066

#	date	issue

Sections AA

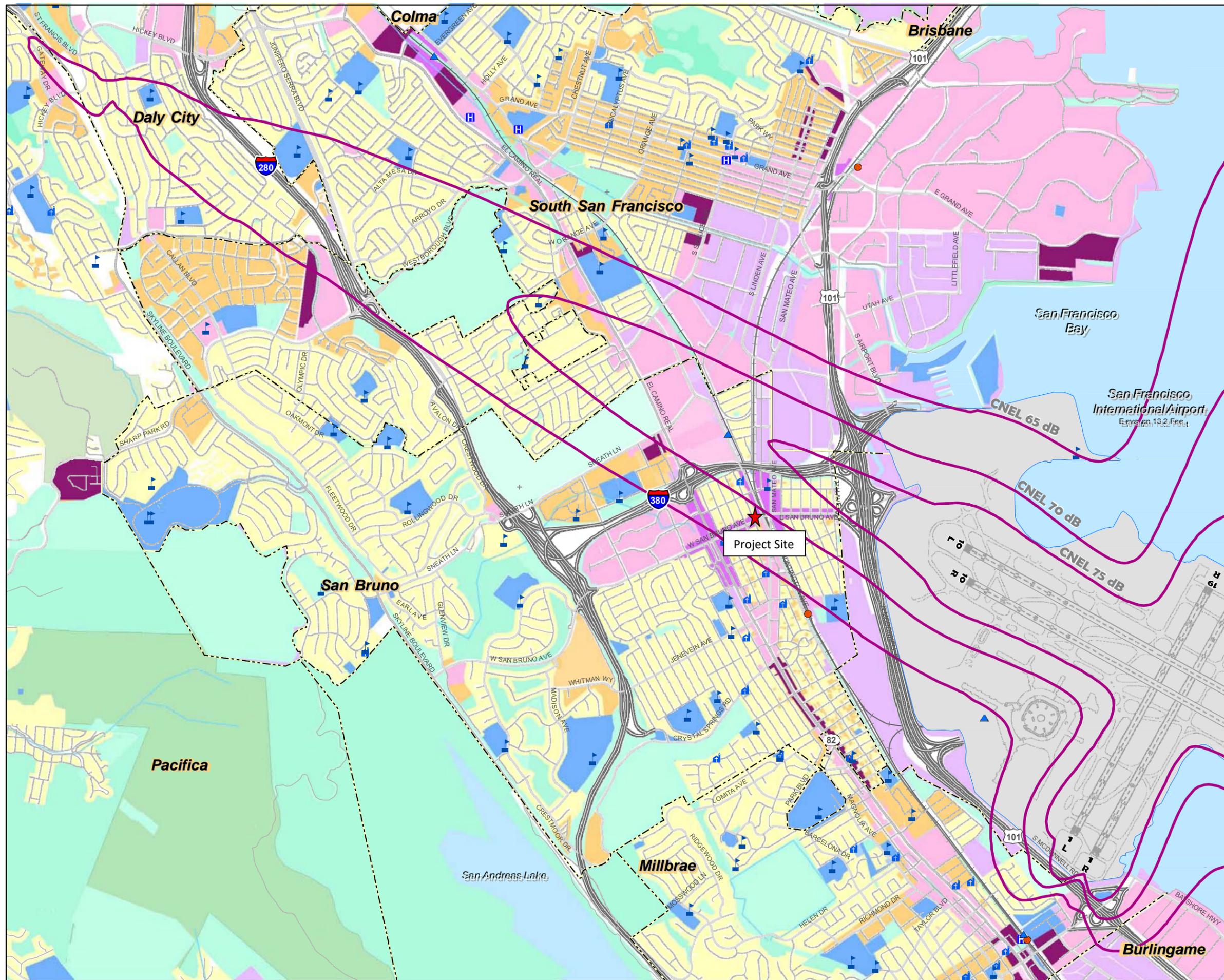
project: 21.07
 drawn by: JP
 checked by: KC
 date: 01.22.25
 scale:



EAST - WEST SECTION AA
Scale: 1/8" = 1'-0"

SCALE 1/8" = 1'-0"
10 12' 14' 16'

A-3.5



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:

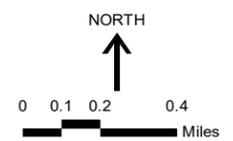
- Public
- Multi-Family Residential
- Single Family Residential
- Mixed Use
- Transit Oriented Development
- Commercial
- Industrial, Transportation, and Utilities
- Local Park, Golf Course, Cemetery
- Regional Park or Recreation Area
- Open Space
- Planned use not mapped

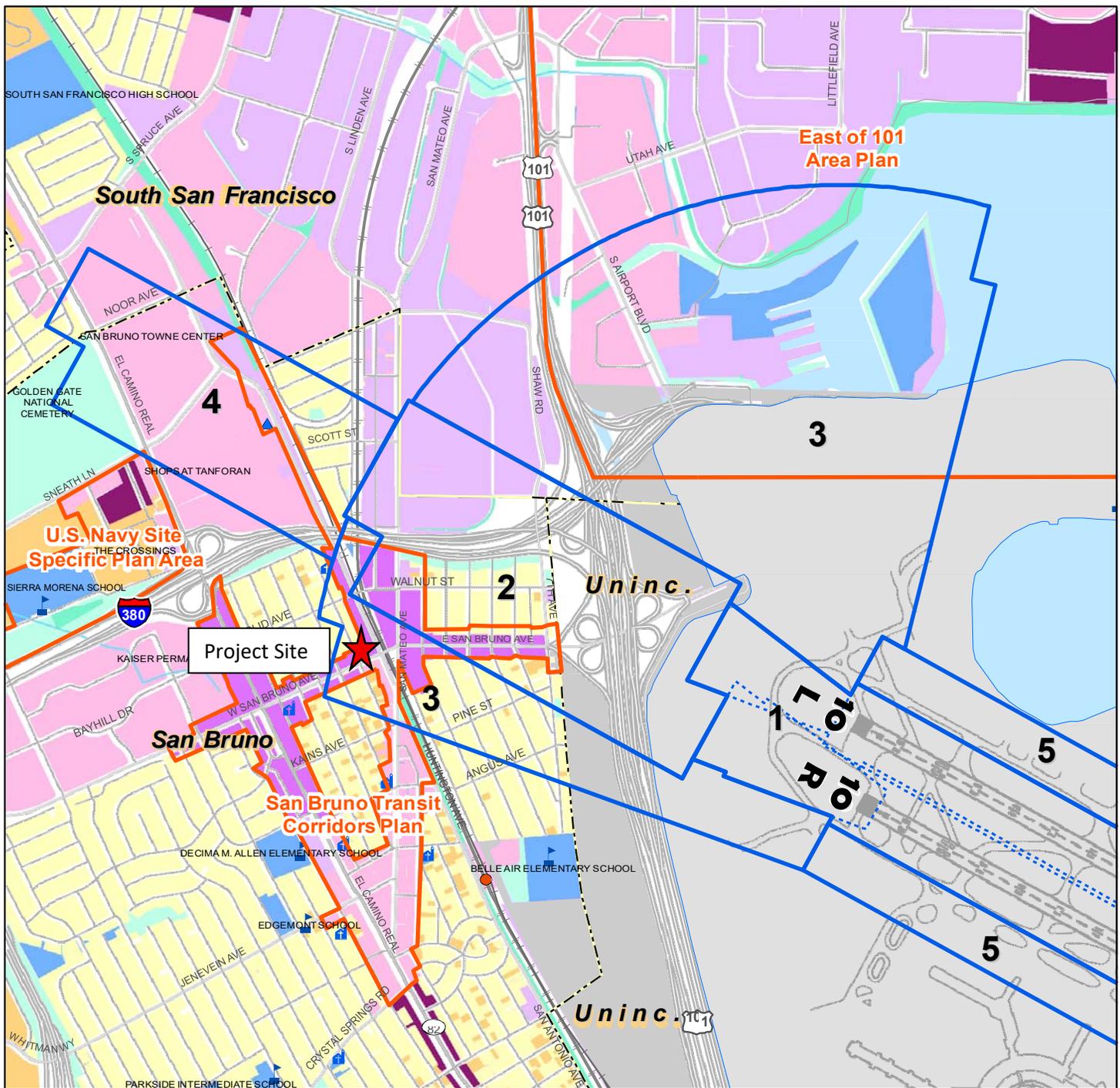
Sources:

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
 - Colma Municipal Code Zoning Maps, December 2003
 - Daly City General Plan Land Use Map, 1987
 - 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
- 🏥 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

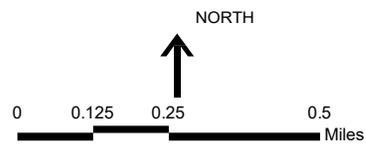


Exhibit IV-8
**SAFETY COMPATIBILITY ZONES
 IN THE CITIES OF SOUTH SAN FRANCISCO
 AND SAN BRUNO**
 Comprehensive Airport Land Use Plan
 for the Environs of San Francisco International Airport
C/CAG
 City/County Association of Governments
 of San Mateo County, California

170 San Bruno Ave.

SURFACE INTERSECTION ANALYSIS INFORMATION - AIRPORT CODE "SFOP"								
Coordinate System: WGS84			Date: 12/01/25			Model: SFO_Composite_2012_11DEC12_R2		
Latitude	Longitude	Site El.(AMSL)	Struct Ht.(AGL)	Overall Ht.(AMSL)	Max Ht. (AMSL)	Exceeds By	Under By	Surface
37° 37' 49.8218"	122° 24' 45.7931"	23.66	89	112.66	185.7		73.04	SFO_VFR77_Exist_Conical
Total penetrations above surfaces: 0								
Total penetrations below surfaces: 1								
Zone Analysis								
X	Y	Range	Safety Zones					
6007812.772	2057704.356	65-70 db	3					

FAANOTIFICATION 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 oE/AAA website, <http://oeaaa.faa.gov>

LEGEND

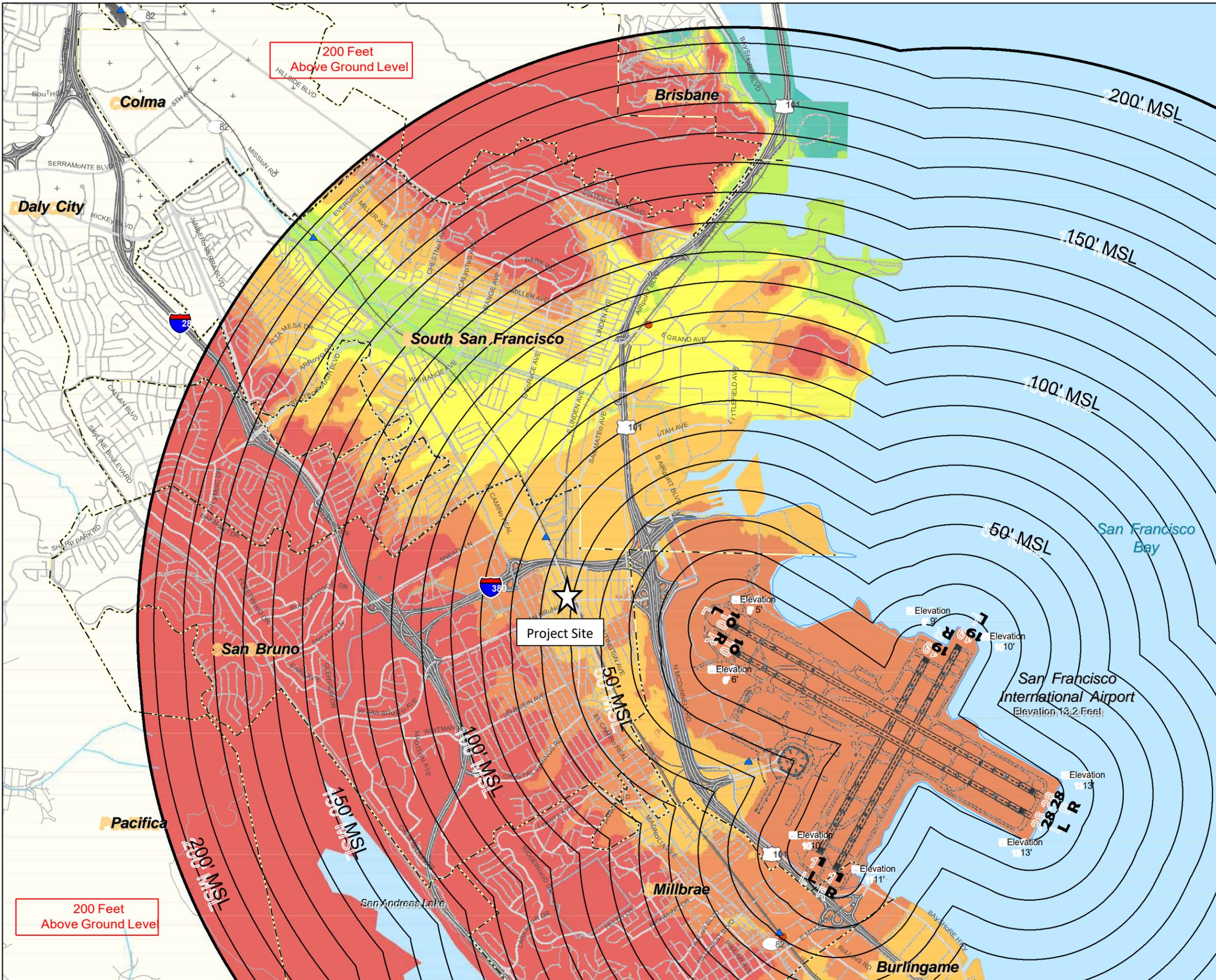
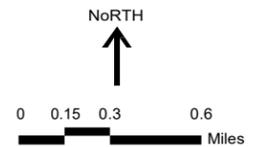
- ▲ BART Station
- CALTRAIN Station
- Municipal Boundary
- Railroad
- Freeway
- Road

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.



200 Feet Above Ground Level

200 Feet Above Ground Level

Project Site

San Francisco International Airport
Elevation 13.2 Feet



December 2, 2025

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

TRANSMITTED VIA EMAILkkalkin@smcgov.org

Subject: San Francisco International Airport's Comments on the Land Use Consistency Determination for 170 San Bruno Avenue Mixed Use Project

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 170 San Bruno Avenue Mixed Use Project (the Proposed Project) within the City of San Bruno (City). We appreciate this opportunity to coordinate with the ALUC in evaluating the Proposed Project. According to the application, the Proposed Project would redevelop the 12,478 square foot site with a transit-oriented, mixed-use development consisting of an eight-story, 57-unit, multifamily condo building with ground floor retail, and 41 parking spaces located in the basement level. The site is generally bounded by adjoining parcels to the north and east, San Bruno Avenue West to the south, and Mills Avenue to the west.

AIRPORT INFLUENCE AREAS

The Proposed Project lies within two Airport Influence Areas (AIAs): Area A – Real Estate Disclosure Area (all of San Mateo County) and Area B – Policy/Project Referral Area, as defined by the *Comprehensive Airport Land Use Compatibility Plan for the Environs of SFO* (SFO ALUCP). Within Area A, the real estate disclosure requirements of state law apply. A property owner offering a property for sale or lease must disclose the presence of planned or existing airports within two miles of the property. Within Area B, the Board of Directors of the City/County Association of Governments of San Mateo County, acting as the designated ALUC, shall review proposed land use policy actions, including new general plans, specific plans, zoning ordinances, plan amendments and rezonings, and land development proposals. The real estate disclosure requirements in Area A also apply in Area B.

Compatibility Policies and Airspace Protection

The Proposed Project site is within the 65-70 decibel Community Noise Equivalent Level (dB CNEL) noise contour. As shown in Table IV-1 of the SFO ALUCP, residential uses are conditionally compatible within this contour if the conditions described in Table IV-1 are met, specifically that insulation is provided to reduce interior noise levels from exterior sources to CNEL 45 dB or lower, and that an aviation easement is provided to the City and County of San Francisco as operator of SFO (see **Attachment A**).

The project site is located beneath the critical aeronautical surfaces for Airport operations. As described in Exhibit IV-17 (see **Attachment B**) of the SFO ALUCP, the elevations of the critical aeronautical surfaces above the Proposed Project site are at least 150 feet above mean sea level, as defined from the 0-foot origin of the North American Vertical Datum of 1988 (AMSL NAVD88). ground elevation at the Proposed Project site ranges from 22 to 25 feet AMSL NAVD88. While the drawings provided do not include a translation between the local vertical

AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO

DANIEL LURIE
MAYOR

MALCOLM YEUNG
PRESIDENT

SUSAN LEAL
VICE PRESIDENT

JOSE F. ALMANZA

MARK BUELL

NANCY TUNG

MIKE NAKORNKHET
AIRPORT DIRECTOR

POST OFFICE BOX 8097 SAN FRANCISCO, CA 94128 TEL 650.821.5000 FLYSFO.COM

Susy Kalkin, ALUC

December 2, 2025

Page 2 of 2

coordinate system and a standard vertical datum, the Proposed Project appears to be no taller than 89 feet tall, and so it would not appear to be incompatible with the airspace protection requirements of the SFO ALUCP.

The Airport emphasizes that no portion of the permanent structures, including any antennas, appurtenances, davits, or architectural parapets, may penetrate the critical aeronautical surfaces of the SFO ALUCP.

This evaluation does not waive the requirement for any developments which result from the Proposed Project to undergo Federal Aviation Administration (FAA) airspace review as described in 14 Code of Federal Regulations Part 77 and in Exhibit IV-10 of the SFO ALUCP (see **Attachment B**) for both (1) the permanent structures and (2) any equipment taller than the permanent structures required to construct those structures. A Determination of No Hazard from the FAA must be obtained prior to project approval.

ALUCP Policy SP-2 defines incompatible uses within each Safety Compatibility Zone. The Proposed Project site is within Safety Zone 3. Incompatible uses within Safety Zone 3 are identified in **Attachment C**. As the application describes the proposed land uses as residential and commercial, the requirements of the SFO ALUCP, the Proposed Project would not appear to be incompatible with the safety compatibility criteria of the SFO ALUCP, provided that the commercial spaces do not include incompatible uses.

* * *

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.

Sincerely,

DocuSigned by:
Nupur Sinha
7D552AE6A4CE495...

Nupur Sinha

Director of Planning and Environmental Affairs
San Francisco International Airport

Attachments:

- Attachment A - SFO ALUCP Noise Compatibility Policies
- Attachment B - SFO ALUCP Airspace Compatibility Policies
- Attachment C - SFO ALUCP Safety Compatibility Zones

cc: Katherine Kennedy, SFO
cc: Christopher DiPrima, SFO

ATTACHMENT A

City of San Bruno and SFO ALUCP Noise Compatibility Policies

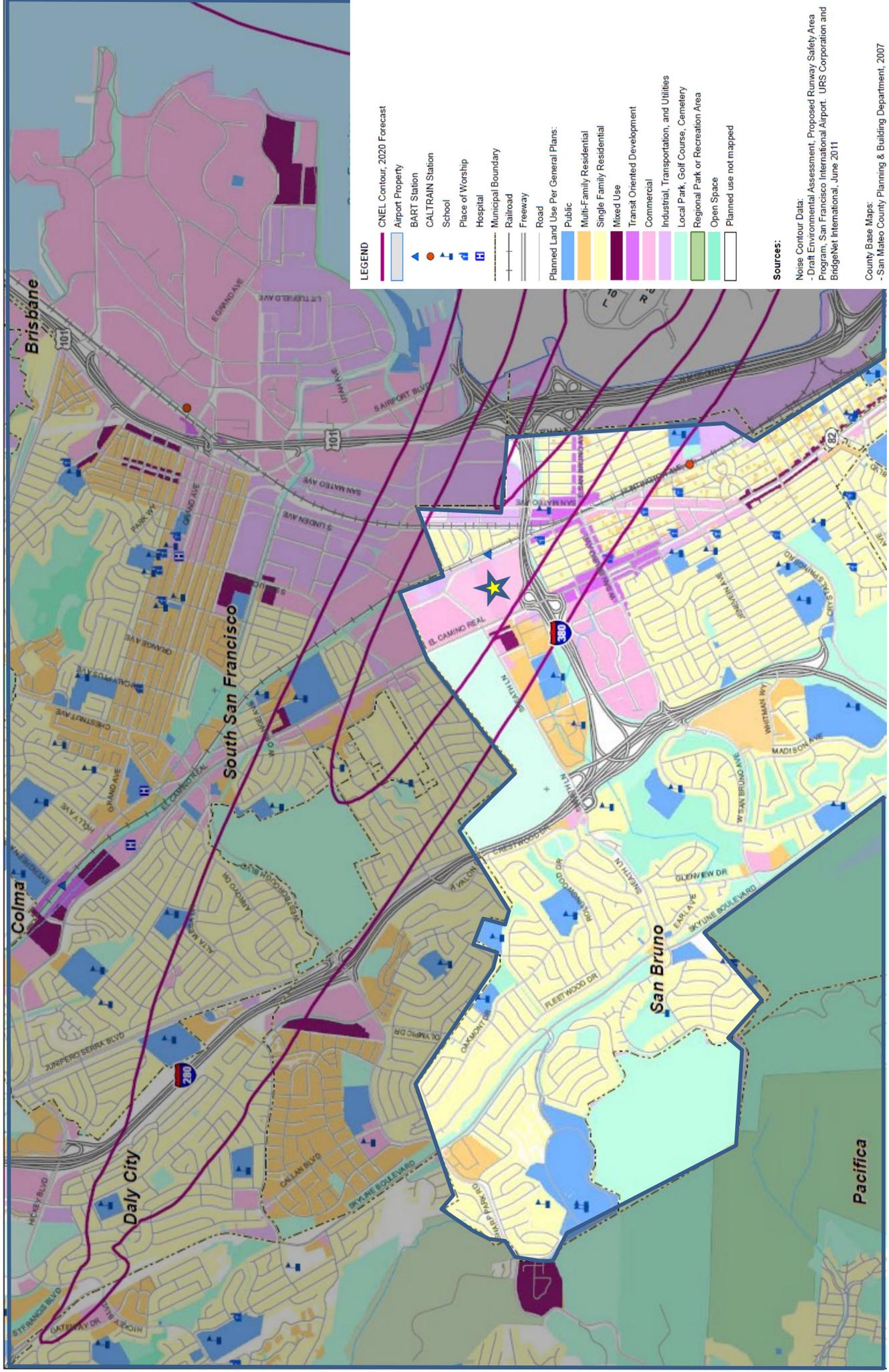


Table IV-1 Noise/Land Use Compatibility Criteria

LAND USE	COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)			
	BELOW 65 dB	65-70 dB	70-75 dB	75 dB AND OVER
Residential				
Residential, single family detached	Y	C	N (a)	N
Residential, multi-family and single family attached	Y	C	N (a)	N
Transient lodgings	Y	C	C	N
Public/Institutional				
Public and Private Schools	Y	C	N	N
Hospitals and nursing homes	Y	C	N	N
Places of public assembly, including places of worship	Y	C	N	N
Auditoriums, and concert halls	Y	C	C	N
Libraries	Y	C	C	N
Outdoor music shells, amphitheaters	Y	N	N	N
Recreational				
Outdoor sports arenas and spectator sports	Y	Y	Y	N
Nature exhibits and zoos	Y	Y	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N
Golf courses, riding stables, and water recreation	Y	Y	Y	Y
Commercial				
Offices, business and professional, general retail	Y	Y	Y	Y
Wholesale; retail building materials, hardware, farm equipment	Y	Y	Y	Y
Industrial and Production				
Manufacturing	Y	Y	Y	Y
Utilities	Y	Y	Y	Y
Agriculture and forestry	Y	Y (b)	Y (c)	Y (c)
Mining and fishing, resource production and extraction	Y	Y	Y	Y

Notes:

CNEL = Community Noise Equivalent Level, in A-weighted decibels.

Y (Yes) = Land use and related structures compatible without restrictions.

C (conditionally compatible) = Land use and related structures are permitted, provided that sound insulation is provided to reduce interior noise levels from exterior sources to CNEL 45 dB or lower and that an avigation easement is granted to the City and County of San Francisco as operator of SFO. See Policy NP-3.

N (No) = Land use and related structures are not compatible..

(a) Use is conditionally compatible only on an existing lot of record zoned only for residential use as of the effective date of the ALUCP. Use must be sound-insulated to achieve an indoor noise level of CNEL 45 dB or less from exterior sources. The property owners shall grant an avigation easement to the City and County of San Francisco prior to issuance of a building permit for the proposed building or structure. If the proposed development is not built, then, upon notice by the local permitting authority, SFO shall record a notice of termination of the avigation easement.

(b) Residential buildings must be sound-insulated to achieve an indoor noise level of CNEL 45 dB or less from exterior sources.

(c) Accessory dwelling units are not compatible.

SOURCES: Jacobs Consultancy Team 2010. Based on State of California General Plan Guidelines for noise elements of general plans; California Code of Regulations, Title 21, Division 2.5, Chapter 6, Section 5006; and 14 CFR Part 150, Appendix A, Table 1.

PREPARED BY: Ricondo & Associates, Inc., June 2012.

ATTACHMENT B

SFO ALUCP Airspace Compatibility Policies

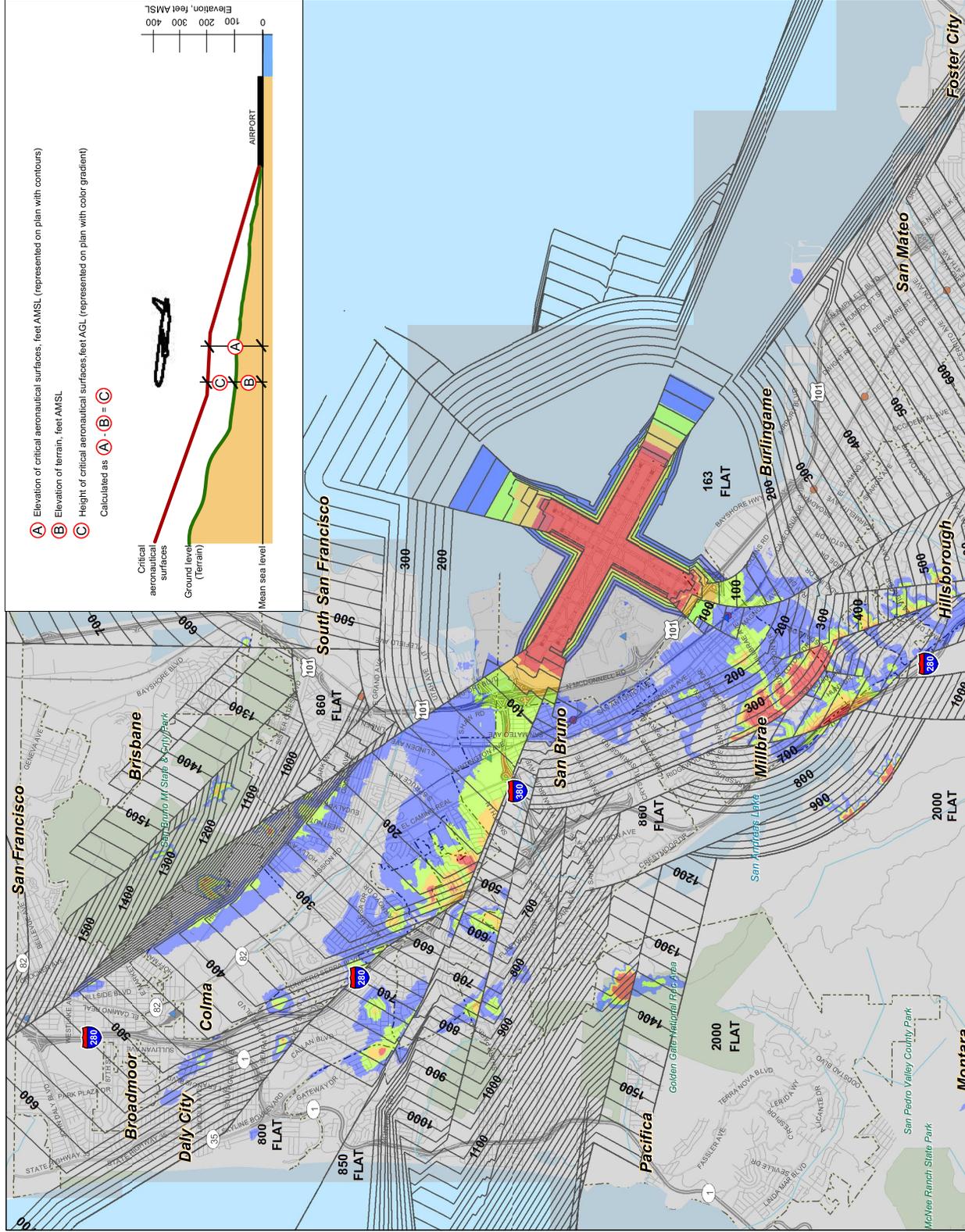


Exhibit IV-19, which is provided for information purposes only, depicts a profile view of the lowest critical airspace surfaces along the extended centerline of Runway 10L-28R – the TERPS Obstacle Departure Procedure (ODP) surface, representing standard all-engines departures, and the approximate OEI 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

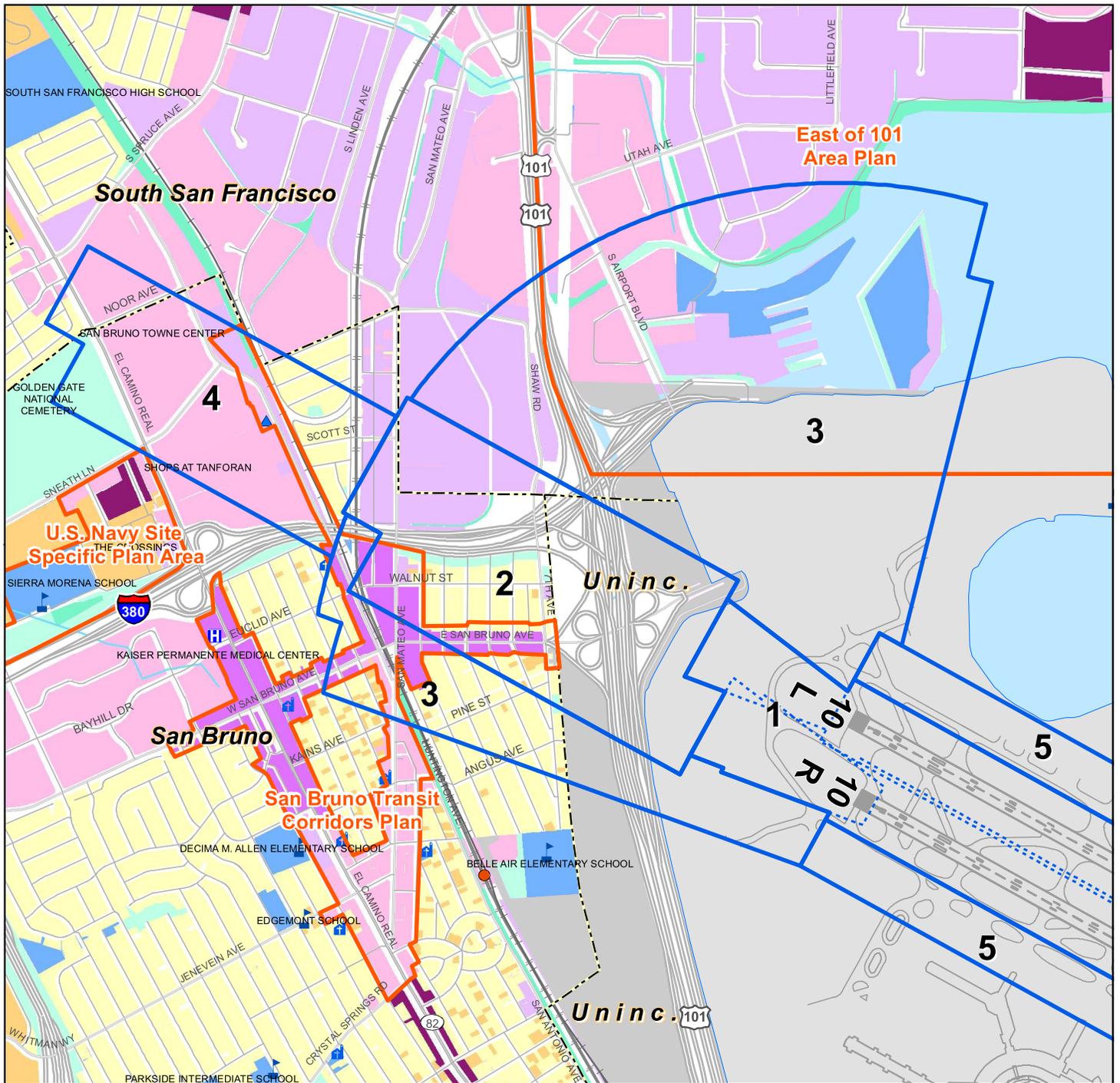
The sponsor of a proposed project that would exceed the FAA notification heights, as shown approximately on Exhibit IV-10, shall present to the local government permitting agency with his or her application for a development permit, a copy of the findings of the FAA's aeronautical study, or evidence 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.

ATTACHMENT C

SFO ALUCP Safety Compatibility Policies



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
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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

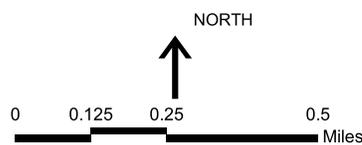


Exhibit IV-8
**SAFETY COMPATIBILITY ZONES
 IN THE CITIES OF SOUTH SAN FRANCISCO
 AND SAN BRUNO**
 Comprehensive Airport Land Use Plan
 for the Environs of San Francisco International Airport
C/CAG
 City/County Association of Governments
 of San Mateo County, California

Table IV-2 (1 of 2) Safety Compatibility Criteria

ZONE	LAND USE CRITERIA	
	INCOMPATIBLE ^{1/}	AVOID ^{1/}
Zone 1: Runway Protection Zone and Object Free Area (RPZ-OFA)		
	All new structures ^{3/} Places of assembly not in structures Hazardous uses ^{2/} Critical public utilities ^{2/}	Nonresidential uses except very low intensity uses ^{4/} in the “controlled activity area.” ^{2/}
Zone 2: Inner Approach/Departure Zone (IADZ)		
	Children’s schools ^{2/} Large child day care centers and noncommercial employer-sponsored centers ancillary to a place of business ^{2/} Hospitals, nursing homes Hazardous uses ^{2/} Critical public utilities ^{2/} Theaters, meeting halls, places of assembly seating more than 300 people Stadiums, arenas	---
Zone 3: Inner Turning Zone (ITZ)		
	Biosafety Level 3 and 4 facilities ^{2/} Children’s schools ^{2/} Large child day care centers ^{2/} Hospitals, nursing homes Stadiums, arenas	Hazardous uses other than Biosafety Level 3 and 4 facilities ^{2/} Critical public utilities ^{2/}
Zone 4: Outer Approach/Departure Zone (OADZ)		
	Biosafety Level 3 and 4 facilities ^{2/} Children’s schools ^{2/} Large child day care centers ^{2/} Hospitals, nursing homes Stadiums, arenas	Hazardous uses other than Biosafety Level 3 and 4 facilities ^{2/} Critical public utilities ^{2/}
Zone 5: Sideline Zone (SZ)		
	Children’s schools ^{2/} Large child day care facilities and noncommercial employer-sponsored centers ancillary to a place of business Hospitals, nursing homes Hazardous uses ^{2/} Critical public utilities ^{2/} Stadiums, arenas	---

Table IV-2 (2 of 2) Safety Compatibility Criteria

Notes:

- 1/ *Avoid:* Use is not fully compatible and should not be permitted unless no feasible alternative is available. Where use is allowed, habitable structures shall be provided with at least 50 percent more exits than required by applicable codes. Where the 50-percent factor results in a fraction, the number of additional exits shall be rounded to the next highest whole number.
- Incompatible:* Use is not compatible in the indicated zones and cannot be permitted.
- 2/ Definitions
- *Biosafety Level 3 and 4 facilities:* Medical and biological research facilities involving the storage and processing of extremely toxic or infectious agents. See Policy SP-3 for additional detail.
 - *Children's schools:* Public and private schools serving preschool through grade 12, excluding commercial services.
 - *Controlled Activity Area:* The lateral edges of the RPZ, outside the Runway Safety Area (RSA) and the extension of the RSA, which extends to the outer edge of the RPZ. See FAA Advisory Circular 150/5300-13, Airport Design, Section 212a.(1)(b).
 - *Critical public utilities:* Facilities that, if disabled by an aircraft accident, could lead to public safety or health emergencies. They include the following: electrical power generation plants, electrical substations, wastewater treatment plants, and public water treatment facilities.
 - *Hazardous uses:* Uses involving the manufacture, storage, or processing of flammable, explosive, or toxic materials that would substantially aggravate the consequences of an aircraft accident. See Policy SP-3 for additional detail.
 - *Large child day care centers:* Commercial facilities defined in accordance with Health and Safety Code, Section 1596.70, et seq., and licensed to serve 15 or more children. Family day care homes and noncommercial employer-sponsored facilities ancillary to place of business are allowed.
- 3/ Structures serving specific aeronautical functions are allowed, in compliance with applicable FAA design standards.
- 4/ Examples include parking lots and outdoor equipment storage.

SOURCE: Ricondo & Associates, Inc., June 2012.

PREPARED BY: Ricondo & Associates, Inc., June 2012.

ZONE 2 -- INNER APPROACH/DEPARTURE ZONE (IADZ)

In Zone 2, the IADZ, a variety of uses that involve hazardous materials, critical public utilities, theaters, meeting halls, places of assembly seating more than 300 people, stadiums, arenas, and those accommodating potentially vulnerable populations – such as children's schools, child day care facilities, hospitals, and nursing homes – are incompatible.

ZONE 3 -- INNER TURNING ZONE (ITZ)

The compatibility criteria in Zone 3, the ITZ, are somewhat less restrictive than in Zone 2. This is because the area is subject to less accident risk by virtue of the lower density of overflights in this area. In Zone 3, stadiums, arenas, and uses accommodating potentially vulnerable populations are incompatible. Hazardous uses and critical public utilities are not incompatible in Zone 3, but are classified as uses to be avoided. This means that they should not be permitted unless no feasible alternative is available.

ZONE 4 - OUTER APPROACH/DEPARTURE ZONE (OADZ)

The compatibility criteria in Zone 4, the OADZ, are the same as in Zone 3.

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.¹⁷

(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.

¹⁷ 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.

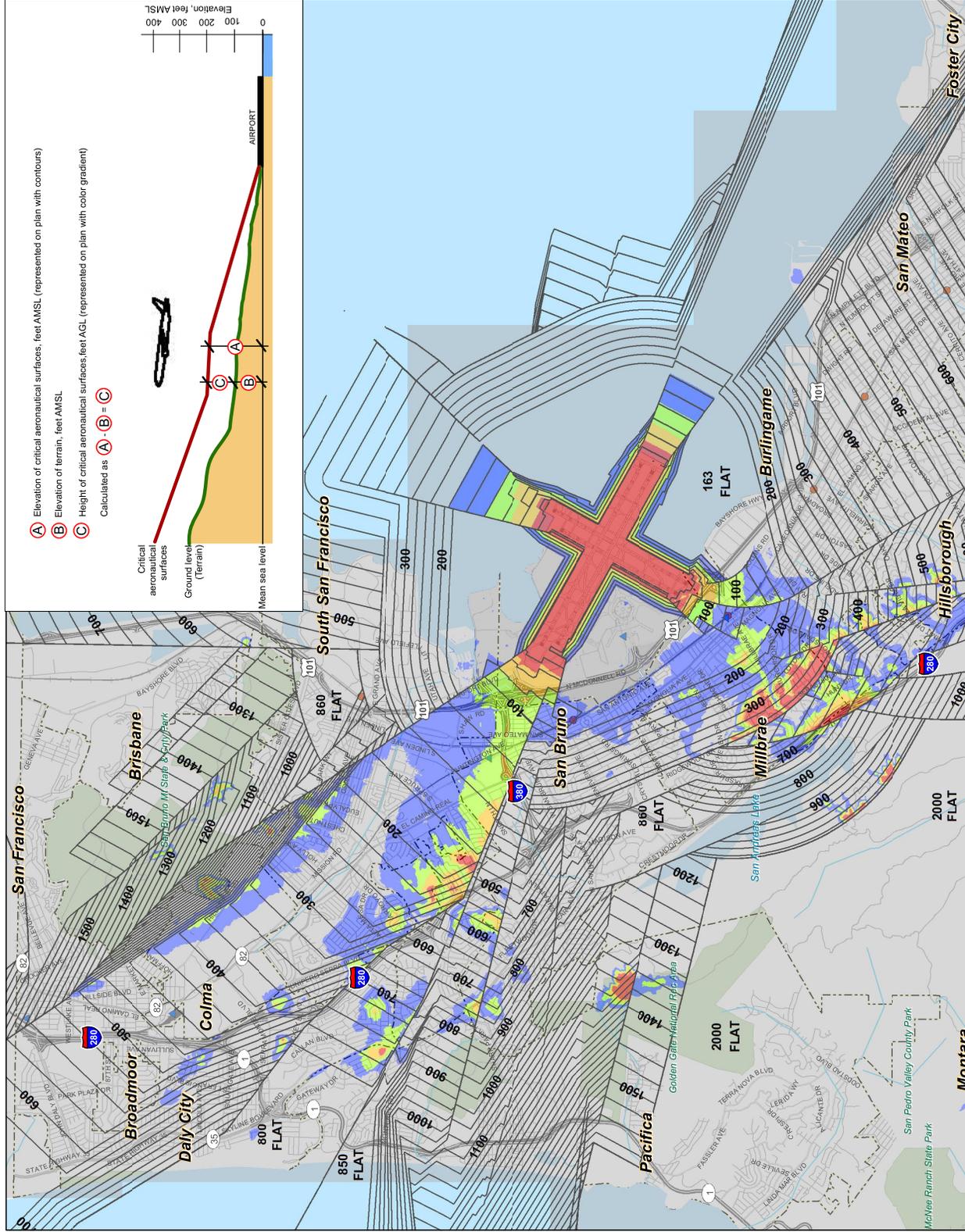


Exhibit IV-19, which is provided for information purposes only, depicts a profile view of the lowest critical airspace surfaces along the extended centerline of Runway 10L-28R – the TERPS Obstacle Departure Procedure (ODP) surface, representing standard all-engines departures, and the approximate OEI 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.

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- (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

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