



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: 840 San Bruno Avenue

Address: 840 San Bruno Avenue

APN: 020-071-050

City: San Bruno

State: CA

ZIP Code: 94066

Staff Contact: Matt Neuebaumer

Phone: (650) 616-7042

Email: mneuebaumer@sanbruno.ca.gov

PROJECT DESCRIPTION

See Attached Project Description.

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.

840 San Bruno Avenue – C/CAG Application For Land Use Consistency Determination

Project Description:

Site Description: The subject property is 1.57 acres in total area and is located on the northeast corner of San Bruno Avenue and Elm Avenue. The site is currently developed with a vacant commercial building. The applicant proposes to demolish the existing vacant building, and construct in its place a new 10 story multi-family development consisting of 341 residential units and 115 parking spaces. A total of two buildings are proposed, which are referred to as Building A and Building B. Building A is located on the western portion of the site and Building B is located on the eastern portion of the site. The 341 units would have the following mix of unit types:

Building A – Unit Count	
Unit Type	# of Units Proposed
1-Bedroom	45
2-Bedroom	116
3-Bedroom	43
Total	204

Building B – Unit Count	
Unit Type	# of Units Proposed
1-Bedroom	41
2-Bedroom	53
3-Bedroom	43
Total	137

State Density Bonus Request: The project will be 100% affordable and is seeking to take advantage of the State Density Bonus Law. State Density Bonus Law allows a developer to exceed the maximum allowable density in a development, with the incorporation of additional affordable units. The amount of density bonus is set on a sliding scale, based upon the percentage of affordable units at each income level. Density bonuses range from 20% for projects providing 5% of units affordable to very low-income families, to an 80% density bonus for 100% affordable housing projects. In this particular instance, the project would be 100% affordable; therefore, the applicant is seeking an 80% density bonus.

In addition to increased density, State Density Bonus Law allows for the developer to request concessions and incentives, to exercise waivers and reductions of development standards and to use a reduced parking standard for qualifying locations. A concession or incentive may include the following:

- A change in development or zoning standards, such as setback, height, number of stories or setbacks;
- Approval of mixed-use zoning; or
- Other regulatory incentives or concessions that increase the project's financial feasibility.

The developer may also request to exercise a waiver or reduction of development standards that would otherwise make the new construction physically impossible. A waiver can include modification to the allowed Floor Area Ratio (FAR), maximum lot coverage, setback or height requirements.

Concessions: The applicant has requested the following concession:

- **Provision of Common and Private Open Space:** Per Table 12.280-12 of the San Bruno Municipal Code Standards for the TOD-2 zoning district, a residential project shall provide a combination of private or common outdoor open space measuring at least 40 square feet for each unit, which would equate to 13,640 square feet. As proposed, the project provides common area open space totaling approximately 8,973 square feet.

Maximum Allowable Building Height: The applicant elects to proceed under Government Code section 65915(d)(2)(D), which grants the project a height increase of up to three additional stories, or 33 feet. The height allowance does not constitute a concession or waiver under Density Bonus Law.

Waivers: The applicant has requested the following waivers:

- **Maximum Building Stories:** Per Table 12.280-2 of the San Bruno Municipal Code, within the TOD-2 Zoning District a project cannot exceed 5 stories and 70 feet in total building height. As noted above, the provisions of Government Code section 65915(d)(2)(D) allow the proposed project to be built to a total height of 8 stories or 103 feet. As proposed, the project will not exceed the 103-foot height limit but will require a total of 10 stories. Therefore, the applicant has requested a waiver to allow for 9th and 10th floor, as currently proposed.
- **Stepback Requirements When Facing Corridor Street:** Per Table 12.280-2 of the San Bruno Municipal Code, within the TOD-2 Zoning District, buildings over four stories facing corridor streets must step back the fifth floor and above by a minimum of 15 feet. As proposed, the project does not incorporate building stepbacks. Therefore, the applicant has requested a waiver.
- **Provision of Short-Term Bicycle Parking Spaces:** Per Table 12.100-3 of the San Bruno Municipal Code, a total of 35 short-term bicycle parking spaces are required (1 space per 10 units). A total of 4 short-term bicycle parking spaces are provided. Therefore, the applicant has requested a waiver.
- **Dimensional Standards for Long-Term Bicycle Parking Spaces:** Section 12.100.050(G)(2) of the San Bruno Municipal Code specifies that two feet of clearance shall be provided between bicycle parking spaces and adjacent walls, poles, landscaping, pedestrian paths, and other similar features. The applicant has provided long-term bicycle parking in a stacked configuration, which does not meet the two feet clearance requirement. As such, the applicant has requested a waiver.

Additional Application Information:

1a) Noise: Location of project/plan area in relation to the noise contours identified in the applicable ALUCP:

- The subject site is located in the <65 dB noise exposure area.

1b) Safety: Location of project/plan area in relation to the safety zones identified in the applicable ALUCP:

- The subject site is not located in a safety zone.

1c) Airspace Protection: The proposed project includes two buildings that will include a total of 10-stories.

- Building A: 103 feet tall. The associated top of building elevation would be 176.3 feet.
- Building B: 103 feet tall. The associated top of building elevation would be 158.8 feet.
 - The site slopes downwards as you head in the easterly direction. There is approximately a 35 foot difference in grade. The site elevation at the western edge of the property is approximately 80 feet, and the site elevation at the eastern edge of the property is approximately 45 feet.

3. Any related environmental documentation (electronic copy preferred): The project is located within the Transit Corridors Plan (TCP) Specific Plan area. A Program Environmental Impact Report (EIR) and Mitigation Monitoring and Reporting Program was prepared for the TCP and was adopted by the City Council on February 12, 2013. Therefore, site specific, individual projects, such as the proposed project, can be evaluated using the Program EIR to decide if all potentially significant environmental impacts of the individual project:

- a. Have been previously identified (are not new) and are not substantially more severe than those identified in the Program EIR;
- b. Will be avoided or mitigated to the extent feasible as a result of the EIR; and
- c. Have been examined in the EIR, site-specific project revisions, or the implementation of standards development standard regulations.

Staff anticipates that the environmental review will culminate in a CEQA Exemption pursuant to Government Code Section 65457 for a residential project consistent with a Specific Plan, the Community Plan or Specific Plan consistency exemption, 15182 (Specific Plan Consistency), and/or 15183 (General Plan Consistency); however, the official determination regarding the appropriate level of environmental review will not be determined until the Initial Study/Environmental Checklist is completed. The City recently issued the Notice to Proceed to our environmental consultant to begin work on the associated environmental checklist.

Additional Information for Development Project:

- The project plans can be found by clicking on the link provided within the 7/6/23 e-mail.
- Latitude (Center of Site): 37.62861
- Longitude (Center of Site): 122.41799
- Building Height: 103 feet
- Average Grade Elevation: 73.3
- Site Elevation: 82' (Per IALP website).
- Overall Height Above Mean Sea Level: 176.3



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A7.43	Waiver Justification Exhibit

Civil:

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C6.0	Preliminary Fire Access & Service Plan

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L.10	Landscape Lighting Plan



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VIEW AT SAN BRUNO
840 W. San Bruno Ave
San Bruno, CA 94066 #2021-1285

CONCEPTUAL DESIGN
APRIL 4TH, 2023

COVER SHEET
SHEET INDEX

A0.10



CONCEPTUAL DESIGN

APRIL 4TH, 2023



BUILDING SECTIONS

A4.10



840 W. SAN BRUNO AFFORDABLE APARTMENTS - SAN BRUNO, CA

JEMCOR DEVELOPMENT PARTNERS

MARCH 29, 2023

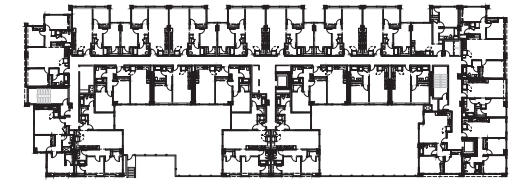
CONCEPTUAL LANDSCAPE PLAN - L.1





Material Legend

1. Stucco or equivalent material
2. Cultured Stone Veneer or equivalent material
3. Painted CMU or equivalent material
4. Vinyl Window or equivalent
5. Hard Surface Panel Siding Window Panel or equivalent material
6. Commercial Glazing or equivalent
7. Metal Trellis with Vines
8. Metal Fence
9. Metal Door Painted To Match Adjacent Field Material



Building Key Plan N.T.S.

Note Regarding Signage:

All signage is demonstrated conceptually. A signage package will be submitted for approval at a later date.



South Elevation (San Bruno Ave)

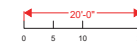


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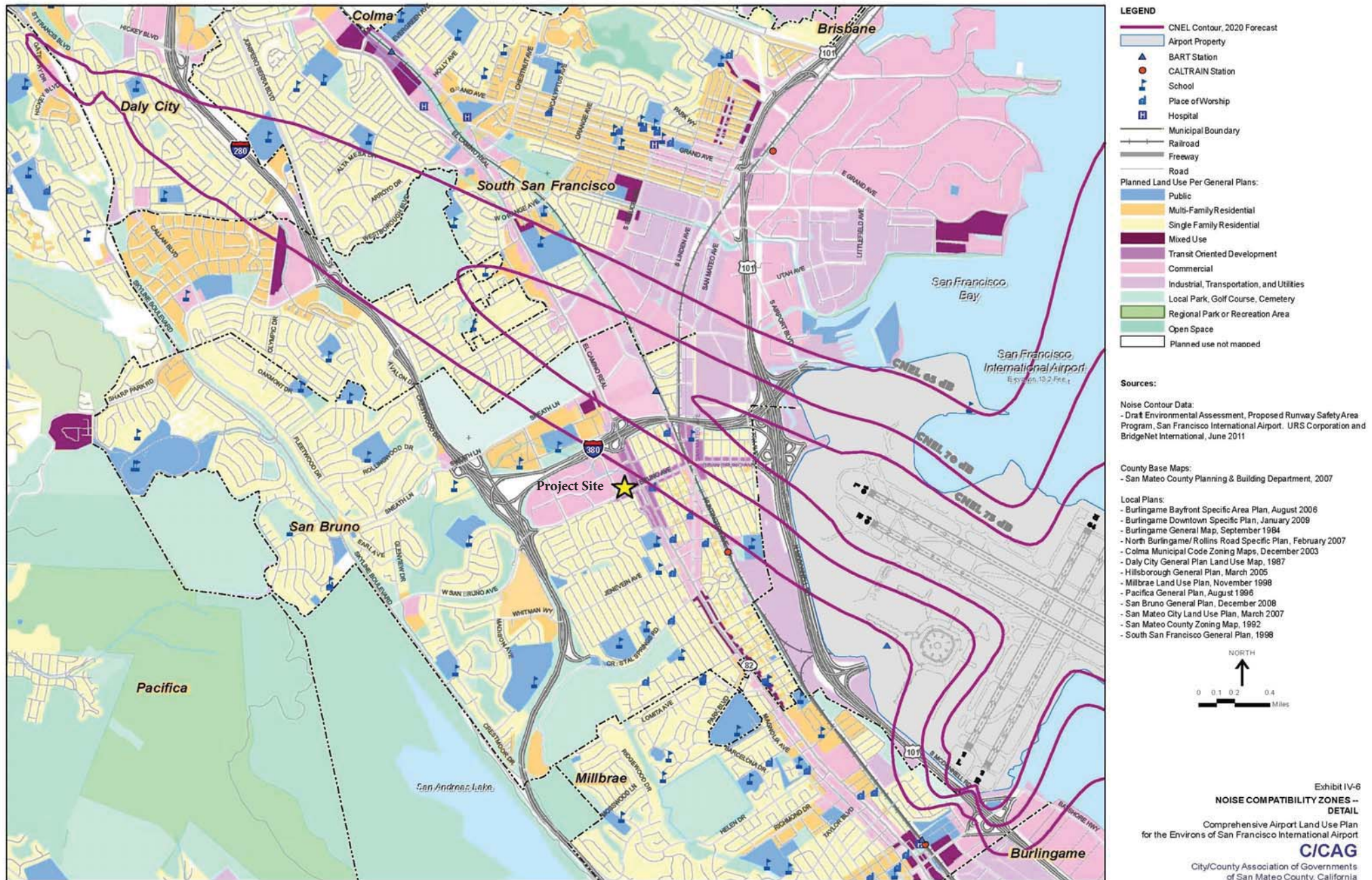
VIEW AT SAN BRUNO
840 W. San Bruno Ave
San Bruno, CA 94066 #2021-1285

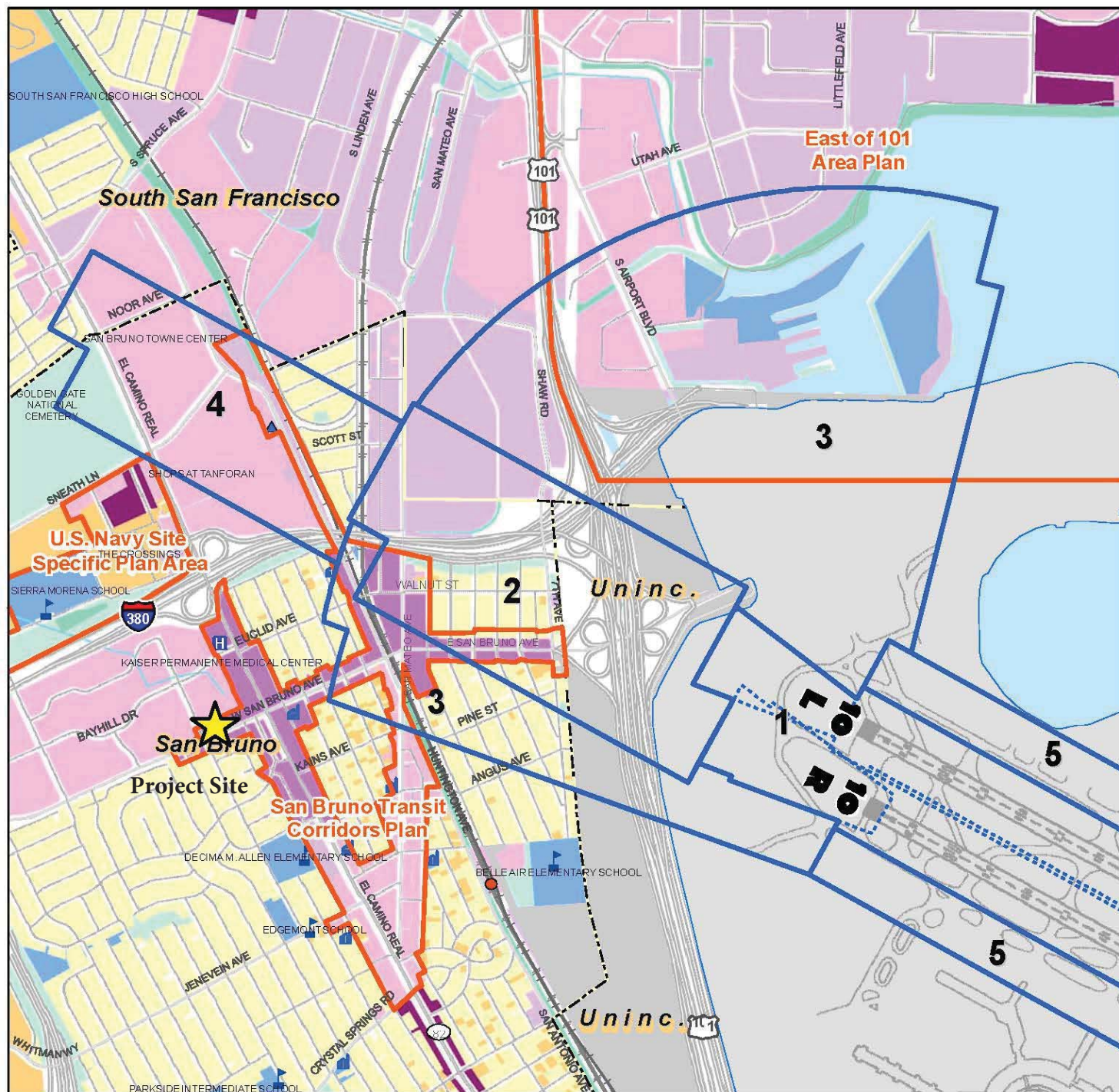
CONCEPTUAL DESIGN
APRIL 4TH, 2023



BUILDING ELEVATIONS
BUILDING A

A2.11





LEGEND

Safety Compatibility Zones

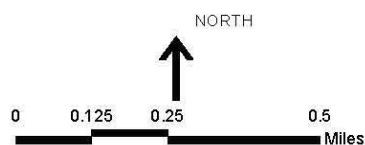
- 1 1 - Runway Protection Zone-Object Free Area
- 2 2 - Inner Approach/Departure Zone
- 3 3 - Inner Turning Zone
- 4 4 - Outer Approach/Departure Zone
- 5 5 - Sideline Zones
- Internal boundaries of ALP-defined areas
- Specific Plan Area
- Airport Property
- ▲ BART Station
- CALTRAIN Station
- ▲ School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

Planned Land Use Per General Plans

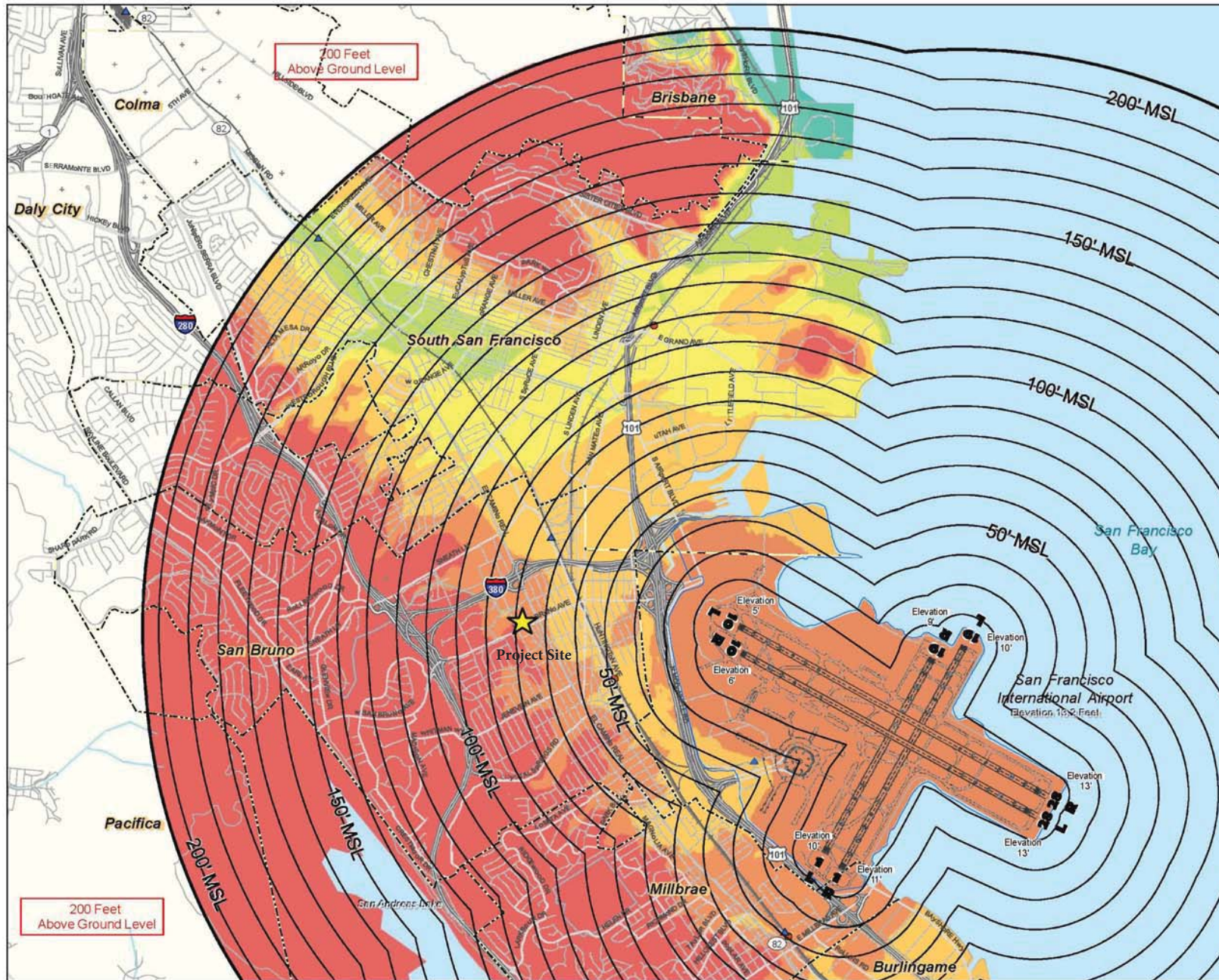
- Public
- Multi-Family Residential
- Single Family Residential
- Mixed Use
- Transit Oriented Development
- Commercial
- Industrial, Transportation, and Utilities
- Local Park, Golf Course, Cemetery
- Regional Park or Recreation Area
- Open Space

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: 08/10/23			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' 41.5235"	122° 25' 8.3964"	78.57	91.00	169.57	275.52		105.95	SFO_VFR77_Exist_Conical
Total penetrations above surfaces: 0								
Total penetrations below surfaces: 1								
Zone Analysis								
X		Y			Range		Safety Zones	
6005977.73894859		2056902.44259068			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://eeaaa.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.

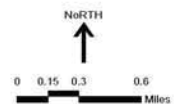


Exhibit IV-11
FAA NOTIFICATION FORM 7460-1
FILING REQUIREMENTS -- NORTH SIDE
Comprehensive Airport Land use plan
for the Environs of San Francisco International Airport
C/CAG
City/County Association of Governments
of San Mateo County, California



San Francisco International Airport

July 19, 2023

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

TRANSMITTED VIA EMAIL ONLY

kkalkin@smcgov.org

Subject: *Land Use Consistency Determination for 840 San Bruno Avenue West, City of San Bruno*

Thank you for notifying the San Francisco International Airport (SFO or the Airport) of an Application for Land Use Consistency Determination for the 840 San Bruno Avenue West Residential Project (Proposed Project) and the Airport Land Use Commission's (ALUC) pending land use consistency determination for the Proposed Project. We appreciate this opportunity to provide comments to the ALUC in evaluating potential land use compatibility issues for the Proposed Project.

According to the application materials, the Proposed Project is on a 1.57-acre site at the northeast corner of San Bruno Avenue West and Elm Avenue (Assessor's Parcel Number 020-071-050). The site is currently occupied by a vacant one-story commercial building that would be demolished and replaced with two buildings containing a total of 341 dwelling units and 115 parking spaces. The height of each building would be 10 stories and approximately 103 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 is located outside the 65-decibel (dBA) Community Noise Equivalent Level (CNEL) contour and the Safety Compatibility Zones and, therefore, would not appear to be inconsistent with the Noise and Safety Compatibility policies adopted in the SFO ALUCP.

As described in Exhibit IV-17 of the SFO ALUCP (see Attachment), the critical aeronautical surfaces above the Proposed Project location are at an elevation of approximately 250 to 275 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 ranges from 45 to 80 feet AMSL, the maximum height of the Proposed Project, listed as 103 feet above ground level, would be below the critical aeronautical surfaces. Therefore, the Proposed Project would not appear to be inconsistent 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 structures.

This evaluation does not waive the requirement for the Proposed Project sponsor to undergo Federal Aviation Administration airspace review as described in 14 Code of Federal Regulations Part 77 for both (1) the permanent structures and (2) any equipment taller than the permanent structures required to construct those structures.

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 they pertain to building materials or features that reflect and create bright lights or glare.

AIRPORT COMMISSION CITY AND COUNTY OF SAN FRANCISCO

LONDON N. BREED
MAYORMALCOLM YEUNG
PRESIDENTEVERETT A. HEWLETT, JR.
VICE PRESIDENT

JANE NATOLI

JOSE F. ALMANZA

IVAR C. SATERO
AIRPORT DIRECTOR

Susy Kalkin, ALUC

July 19, 2023

Page 2 of 2

* * *

The Airport appreciates that the City of San Bruno (City) intends to add new housing stock within its limits and outside of the 70 dBA CNEL contour. In turn, this would reduce the City's Regional Housing Needs Assessment obligations at other sites and would alleviate development pressures at incompatible sites like the Tanforan Shopping Center, where there would be significant environmental impacts under the California Environmental Quality Act and environmental justice issues if the City proceeds with adding housing. The Airport encourages the City to consider this and other compatible parcels for the highest feasible density of residential development before exploring the introduction of housing on incompatible sites.

The Airport appreciates your consideration of these comments for inclusion in the ALUC's Land Use Consistency Determination for the Proposed Project. If I can be of assistance, please do not hesitate to contact me at (650) 821-6678 or at nupur.sinha@flysfso.com.

Sincerely,

DocuSigned by:
Nupur Sinha
7D552AE8A4CE495...

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

Attachment

SFO ALUCP Airspace Protection Policies

cc: Sean Charpentier, C/CAG
Audrey Park, SFO
Chris DiPrima, SFO
Alex D. McIntyre, City of San Bruno
Darcy Smith, City of San Bruno
Matt Neuebaumer, City of San Bruno
Matt Maloney, ABAG
Mark Shorett, ABAG

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.

4.5 Airspace Protection

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>

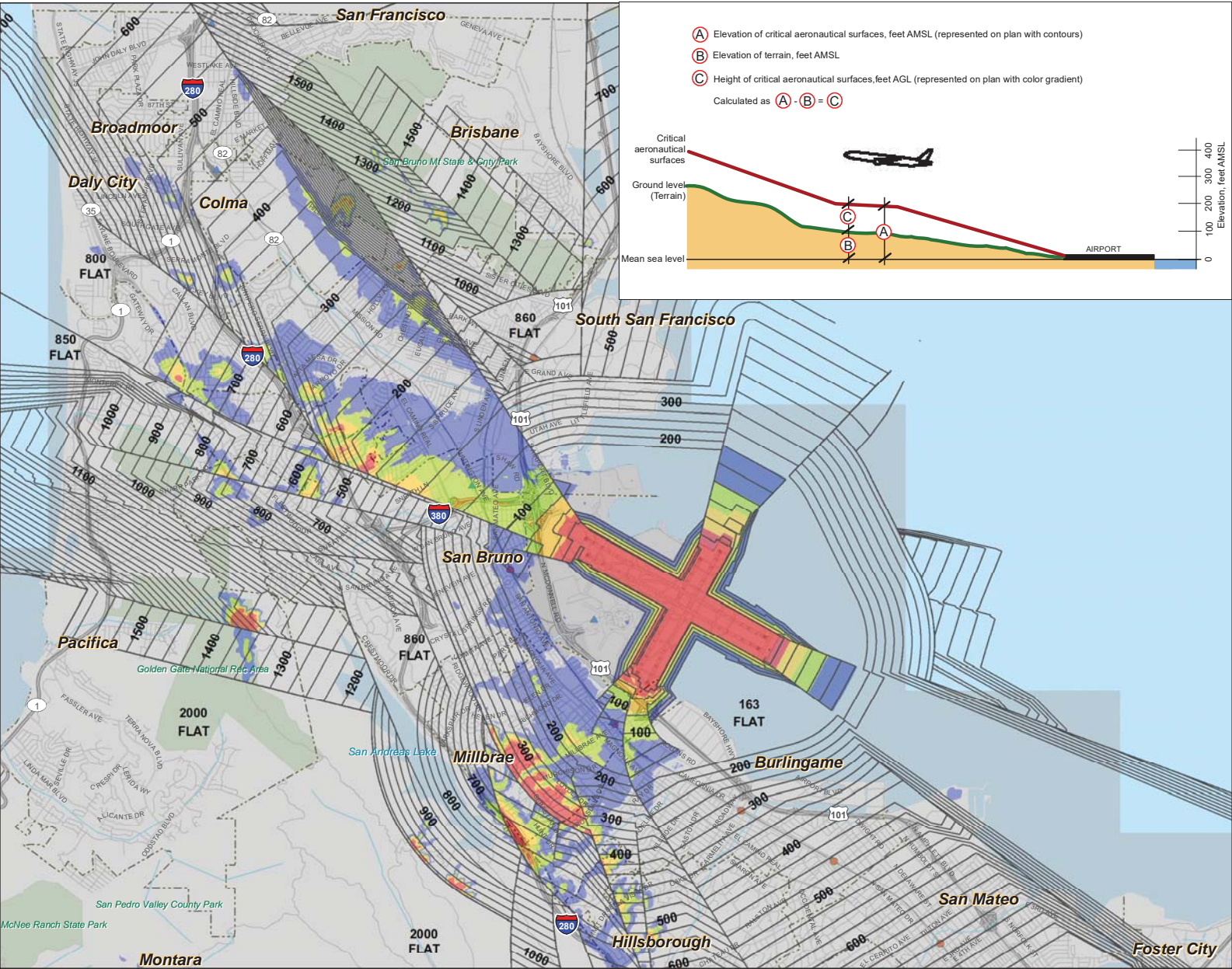
4.5.3 AIRSPACE MAPPING

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).¹⁶ 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.

¹⁶ 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:

1. 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.

2. 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.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.