Draft Environmental Assessment for the Proposed Airport Traffic Control Tower (ATCT) Replacement at Norman Y. Mineta San José International Airport (SJC), San José, California

Norman Y. Mineta San José International Airport (SJC), San José, California
June 2025

This environmental assessment becomes a Federal document when evaluated, signed, and dated by the Responsible Federal Aviation Administration (FAA) Official.

_____
Responsible FAA Official

_____
Date

For further information:
Vincent Nguyen, EIT
Environmental Engineer
ATO Technical Operations

WSA Engineering Services (AJW-2W16E)
Phone 424-405-7603
Email vincent.t.nguyen@faa.gov

Table of Contents

Tables

Figures

ACRONYMS AND ABBREVIATIONS

AAM	Annual Arithmetic Mean
ABA	Architectural Barriers Act
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
AFFF	Aqueous Film-Forming Foam
AGL	Above Ground Level
APE	Area of Potential Effects
ATCT	Airport Traffic Control Tower
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH_4	Methane
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DNL	Day Night Average Sound Level
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
ESU	Evolutionarily Significant Unit
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
FWS	U.S. Fish & Wildlife Service
GHG	Greenhouse Gas
IPaC	Information for Planning and Consultation
N_2O	Nitrous Oxide

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O3	Ozone
Pb	Lead
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
$PM_{2.5}$	Particulate Matter Equal to or Less than 2.5 Microns
PM_{10}	Particulate Matter Equal to or Less than 10 Microns
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RTR	Remote Transmitter/Receiver
RWQCB	Regional Water Quality Control Board
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJC/Airport	Norman Y. Mineta San José International Airport
SO_2	Sulfur Dioxide
SPCC	Spill Prevention Control and Countermeasures
SWPPP	Storm Water Pollution Prevention Plan
THPO	Tribal Historic Preservation Office
TRACON	Terminal Radar Approach Control
U.S.C.	United States Code
VOC	Volatile Organic Compound

Summary

Introduction

The Federal Aviation Administration (FAA) has prepared this Environmental Assessment (EA) for the proposed replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport in San José (SJC), California, pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4371) and FAA Order 1050.1F, *Environmental Impacts, Policies and Procedures* (FAA 2015).

Proposed Action

The Proposed Action is the replacement by the FAA of the existing FAA-owned ATCT and associated facilities and infrastructure at SJC with a new ATCT, administrative base building and associated facilities. Relocation of the existing remote transmitter/receiver (RTR) is also included as part of the Proposed Action. The site for the proposed ATCT, administrative base building, parking areas, and other associated structures would encompass a 3.7-acre parcel of land that is adjacent to the existing ATCT and is currently developed for use as a parking lot. The parcel is currently paved and is surrounded by paved surfaces and airport roads, hangars, the existing ATCT, and other airport-related infrastructure. The proposed ATCT would be 185 feet above ground level (AGL) and would be a concrete and steel tower with glass cab windows on a concrete footing foundation. An adjacent, single-story 13,000 square foot administrative base building and associated parking and other related structures (sidewalks, lighting, fencing) would be built within the parcel as part of the Proposed Action. Construction is anticipated to begin in June 2026 and take up to 30 months to complete followed by a 6-month commissioning process. The existing ATCT would then be demolished, and the area graded and made compatible with surrounding airport operations.

Purpose and Need

The existing ATCT, commissioned in 1994, has several design inadequacies and FAA code deficiencies including line-of-sight deficiencies. The purpose of the project is to replace the existing ATCT at SJC with a new one that meets current FAA design standards and improves the functional and operational capabilities of the services provided by the ATCT. The project is needed to improve functional efficiency at SJC by constructing a facility that meets current FAA standards and meets the current and future airport traffic control needs. The replacement of the existing ATCT would not be associated with increased aviation use or increased capacity at SJC.

Alternatives

The FAA and the City of San José, which owns and operates the airport, conducted a siting study to determine viable and preferred sites for a new ATCT at SJC. Four possible locations were initially considered and two were subsequently identified as viable sites. One of these sites – designated Site 4 – was recommended as the Proposed Action. A second site – designated as Site 1 – is located on the same parcel of land as Site 4, with the primary difference being the conceptual location of the ATCT in relation to the administrative base building and parking areas. Therefore, for analysis purposes, Site 1 and Site 4 would have the same environmental impacts and are considered the Proposed Action. In addition, a No Action Alternative, where a new ATCT would not be constructed and the existing ATCT would continue to be utilized, is considered.

Environmental Consequences and Mitigation

The Proposed Action would result in no direct, indirect, cumulative, or construction impacts on coastal resources, farmlands, Department of Transportation Act Section 4(f) properties, historical, architectural, archaeological or cultural resources, land use, natural resources and energy supply, socioeconomics, environmental justice, or children's environmental health and safety risks. There would be no impact to wetlands or any other water resources (e.g., floodplains, surface waters, groundwater, or Wild and Scenic Rivers).

Temporary and minor impacts are anticipated for some resource areas due to construction and/or operation of the new ATCT and demolition of the existing ATCT. See Table 1 for a summary of impacts and mitigations by resource area.

Table S-1. Summary of Impacts and Mitigations by Resource Area for Each Alternative

Resource	Proposed Action (Preferred Alternative) Environmental Consequences	Proposed Action (Preferred Alternative) Avoidance, Minimization, and Mitigation Measures	No Action Alternative Environmental Consequences
Air Quality	Temporary impacts during construction and demolition. None of the impacts to air quality would exceed federal *de minimis* levels for any of the criteria pollutants.	Implement Best Management Practices (BMPs) to reduce emissions during construction	No change from existing conditions
Biological Resources	Temporary effects to common wildlife species may occur during construction. No effect on any federally listed threatened or endangered species of designated critical habitat or state-listed species because they are not present in the project area, and the project area does not provide any suitable foraging or nesting habitat.	None	None
Climate	Temporary increase in GHG emissions from gasoline and diesel fuel usage associated with construction and demolition activities. The temporary increase would comprise a negligible fraction of the State of California's GHG emissions and would not represent a locally or regionally significant increase.	None	No changes to climate impacts beyond existing conditions.
Hazardous Materials, Solid Waste, and Pollution Prevention	Temporary increase in hazardous materials during construction and associated potential for release of chemicals. Generation of construction related solid waste and demolition related debris.	Implement BMPs to minimize potential impacts to hazardous materials, solid waste, and pollution. Appropriate measures	There would be no increase in the use of hazardous materials and the generation of hazardous wastes and solid wastes would not

Resource	Proposed Action (Preferred Alternative) Environmental Consequences	Proposed Action (Preferred Alternative) Avoidance, Minimization, and Mitigation Measures	No Action Alternative Environmental Consequences
		to alert workers of potential for contamination and proper guidance in the event of a spill or release. Mitigation measures identified in the Phase 2 ESA and from agency consultation would be implemented as needed.	occur. Existing conditions, including contamination identified during the Phase II Environmental Site Assessment, would continue to be present.
Historical, Architectural, Archaeological and Cultural Resources	There are no anticipated impacts to archaeologically sensitive areas or to historic properties in the APE, and the potential for buried resources is low.	Provide monitoring during ground disturbing activities and include an Inadvertent Discovery Plan requirement in the construction specifications to outline actions to be taken in the event of discovery of buried cultural resources.	None
Land Use	For the proposed improvements that would occur on off-airport property, a lease would be modified by FAA to include the land area required to contain the facility. This would result in a land use change compatible with zoning.	None	None
Natural Resources and Energy Supply	The Proposed Action would not result in use of natural resources or energy in excess of available supplies, and implementation of the Proposed Action would not result in significant direct, indirect, or cumulative impacts on natural resources or energy.	Implement BMPs to conserve water and power during construction to the extent possible and minimize construction waste by recycling construction materials when possible.	None
Noise	Temporary elevated noise levels due to construction activities. Long-term operation and maintenance of the new ATCT would not result in an increase in	Operational controls, quieter back-up alarms, and noise pathway controls. Keep the public informed and use	None

Resource	Proposed Action (Preferred Alternative) Environmental Consequences	Proposed Action (Preferred Alternative) Avoidance, Minimization, and Mitigation Measures	No Action Alternative Environmental Consequences
	noise and there are no sensitive noise receptors nearby.	complaint response procedures.	
Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks	Minor, temporary economic benefits from additional construction jobs. Overall, no direct or indirect impacts that would adversely impact environmental health and safety of children.	None	None
Visual Effects	Light intensity and color of the new tower would be similar to the old tower. The Proposed Action would not affect the nature of the visual character of the area and although the new tower would be taller it would not contrast or obstruct any visual resources. Impacts from light emissions are anticipated to be negligible because additional lighting would be in a developed industrial area.	Conduct construction activities during daylight hours to the extent possible to minimize potential construction effects.	None
Water Resources	The Proposed Action would not modify the existing floodplain or impact surface water resources. Minor alterations in the drainage pattern associated with the Proposed Action would not substantially alter the overall drainage pattern of the Airport and stormwater would continue to be managed within the Airport's storm drainage system. The Proposed Action would not result in withdrawal of groundwater, create any new wells supplying water to facilities, or cause any reduction in groundwater levels that could impact other groundwater users in surrounding locations.	Implement BMPs to further reduce potential impacts.	None

Under the No Action Alternative, a new ATCT would not be constructed and the existing ATCT would remain utilized. The ATCT would continue to not meet current FAA design standards. There would be no direct, indirect, construction, or cumulative impacts to environmental resources resulting from this alternative. Maintenance and upkeep of the existing ATCT would occur as needed. The parcel of land

being considered for the new ATCT would continue to function as a parking lot as part of airport operations.

Permits and Approvals

Required permits and approvals are listed below. All appropriate permits would be obtained by the construction contractor prior to constructing the new ATCT. Per FAA Order 1050.1F, Paragraph 6-1.a.(4), a preliminary list of potential permits required for implementation of the project may include the following:

- Federal: Approval of modification of the Airport Layout Plan, which is a connected action to the Proposed Action
- State of California: California State Water Resources Control Board: National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities
- Bay Area Air Quality Management District: Authority to Construct Permit (Air Quality)
- Santa Clara County: Earthmoving Permit/Dust Control Permit
- City of San José: Construction Permits, Updates to Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasures (SPCC).

Public Outreach

The draft EA is being made available to the public for comment during a 30-day public comment period between June 20 to July 25, 2025. Notification of the availability of the draft EA is published on the San Jose Airport website: https://www.flysanjose.com/environment and on the FAA website: https://www.faa.gov/air_traffic/atf. Additionally, a hard copy is available for review at the Dr. Martin Luther King Jr. Library, 150 E San Fernando St, San Jose, CA, 95112.

Agency Coordination

The FAA has initiated consultation under Section 106 of the National Historic Preservation Act with the California State Historic Preservation Office (SHPO). The FAA has determined that there are no historic properties within the Area of Potential Effects (APE), and the FAA has received concurrence from the SHPO that a finding of No Historic Properties Affected is appropriate.

Tribal Consultation

A list of tribes with potential knowledge of the project area was obtained from the California Native American Heritage Commission on September 30, 2024. Based on this list, tribal consultation letters were sent to the Amah Mutsun Tribal Band, the Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the Northern Valley Yokut/Ohlone Tribe, the Ohlone Indian Tribe, the Tamien Nation, and the Wutsache Indian Tribe/Eshom Valley Band. A response was received from the Tamien Nation, requesting additional information regarding the specific location, scope, and potential impacts of the project. The FAA provided the requested information to the Tamien Nation and no additional communication was received. No other responses have been received as of the date of the draft EA being published.

1 Introduction

This chapter introduces the project proposed by the FAA – hereafter referred to as the Proposed Action – and provides background information related to the proposal.

1.1 Introduction

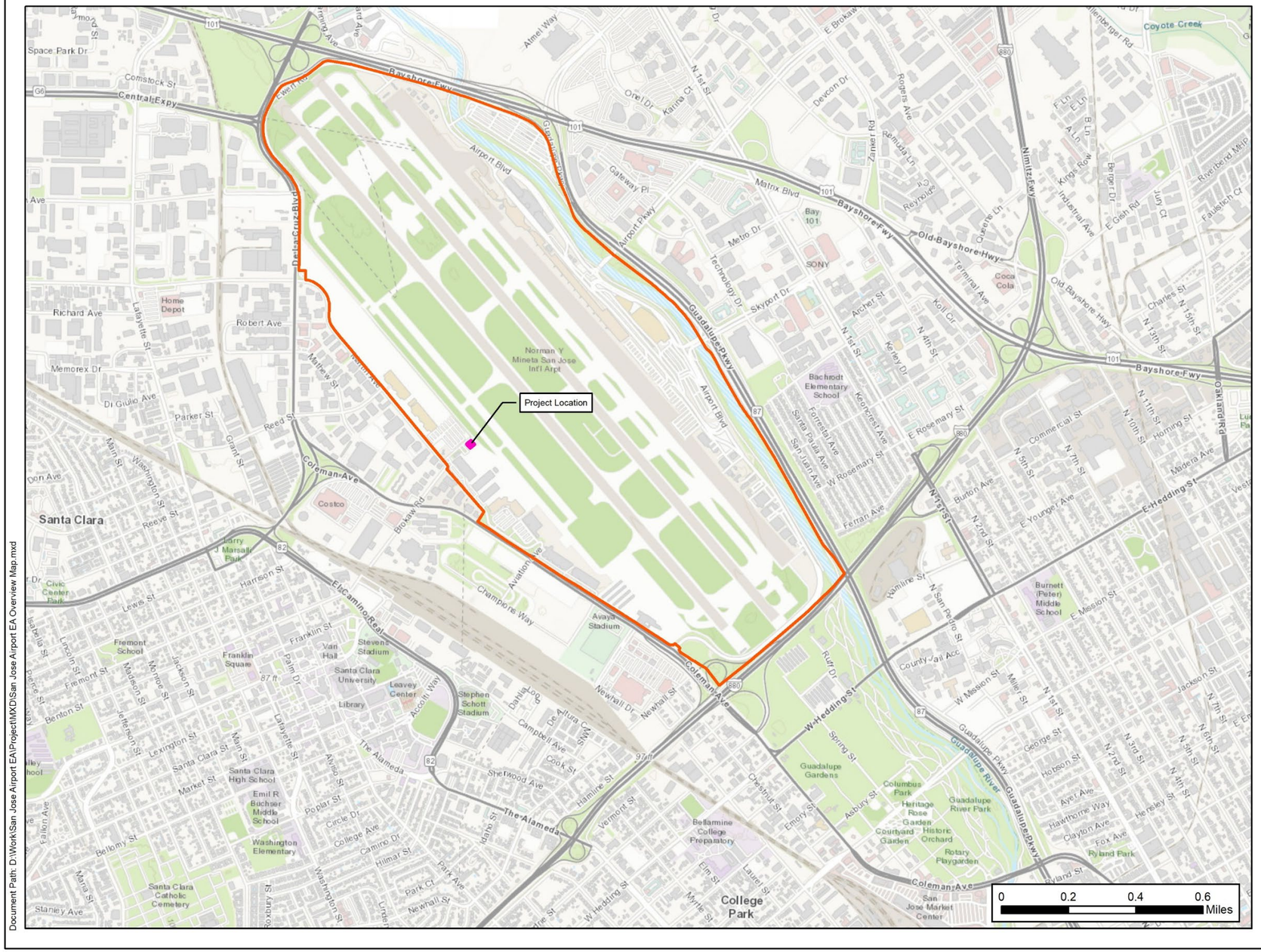
The Federal Aviation Administration (FAA) has prepared this Environmental Assessment (EA) for the FAA's proposed replacement of the FAA-owned Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC or Airport), in San José, California, pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] § 4321), FAA Order 1050.1F – Environmental Impacts: Policies and Procedures (FAA 2015), as well as applicable Executive Orders, and other federal, state, and local laws and regulations. The existing ATCT, which was commissioned in 1994, has several design inadequacies due to the location and height of the tower and line-of-sight deficiencies, which places some of the operational airport surfaces out of sight of air traffic controllers. These would be remedied by construction of a new ATCT.

1.2 Background

The SJC ATCT is a FAA-owned facility. The City of San José, California, owns and operates the Airport. The Airport is located on an approximately 1,000-acre site in Santa Clara County at the southerly end of San Francisco Bay, two miles north of downtown San José. The Airport's primary service area includes the southern end of the San Francisco Bay Area, known as Silicon Valley, and extends southward into Santa Cruz and Monterey counties, and eastward towards Fresno and Yosemite Valley. SJC is generally bounded by U.S. Highway 101 to the north, the Guadalupe River and State Route 87 to the east, Interstate 880 to the south, and Coleman Avenue and De la Cruz Boulevard to the west. The Airport layout is shown on Figure 1-1.

SJC is designated as a Medium Hub Commercial Service airport in the FAA's National Plan of Integrated Airport System that serves most commercial airlines with statewide, national, and international destinations, as well as air cargo airlines, and general aviation aircraft. It has two parallel runways and two passenger terminals.

An ATCT is an airport observation facility that visually and electronically monitors aircraft take-offs and landings and ground traffic within an airport. The purpose of an ATCT is to ensure proper separation of aircraft and enhance the safety of aircraft operations at and in the vicinity of an airport. The existing SJC ATCT design type is a Low Activity Level tower commissioned in 1994. The SJC ATCT is located across the airfield from the airport terminal buildings. The ATCT has six operational positions and operates 18 hours per day, 7 days a week. The tower cab is approximately 560 square feet with a cab eye level of 78 feet 4 inches above ground level (AGL). The existing 6,120-square-foot ATCT is a site adaptation of a standard design, with a 560-square-foot cab and a slightly larger shaft. The SJC ATCT is slightly modified from the low activity level standard upon which it is based. The ATCT has eight levels plus the cab.



Proposed Airport Traffic Control Tower Replacement at Norman Y. Mineta San Jose International Airport, Project Location Map

Legend

- Airport Boundary
- Existing Control Tower Location

N

Federal Aviation Administration
San Jose Mineta International Airport, San Jose, California 95110

PREPARED FOR THE FEDERAL AVIATION ADMINISTRATION

ENVIRONMENTAL ASSESSMENT FOR AIRPORT CONTROL TRAFFIC TOWER REPLACEMENT, SAN JOSE MINETA INTERNATIONAL AIRPORT, SAN JOSE, CALIFORINIA

SCALE:	As Shown	PROJECT NUMBER: 697DCK-24-C-00206
DATE:	1/16/2025	SOLICITATION 697DCK-24-R-00300
FILE:	Refer to left margin	

Figure 1-1. SJC Airport Layout.

The 4,370-square-foot base building is a single-story standard design intermediate-level base building without a TRACON[1], and was constructed at the same time as the ATCT. A 320-square foot, stand-alone, prefabricated wood storage trailer is located at the east corner of the site along with two additional smaller storage buildings (144 and 60 square feet).

An evaluation, dated August 21, 2017, reviewed and confirmed a significant number of line-of-sight deficiencies. Due to the line-of-sight deficiencies, the project was recommended for the Terminal Facilities Planning Investment Analysis Process and a safety analysis and siting study was initiated.

1.3 Proposed Action

The FAA proposes to replace the existing ATCT (Figure 1-2), construct a new base building adjacent to the new ATCT, and relocate the remote transmitter/receiver (RTR) (Figures 1-3 and 1-4). The new ATCT would meet current FAA design standards and improve the functional and operational capabilities of the services provided by the tower. A new ATCT would enable the installation of modern and required air traffic control equipment, provide adequate space and an enhanced work environment for FAA personnel, lower operating costs, and improve environmental performance, resulting in energy savings, water efficiency, reduced carbon emissions, and improved indoor air quality.

The proposed location of the new ATCT and associated infrastructure is on an approximately 3.7-acre previously disturbed site adjacent to the existing ATCT. The proposed site is currently paved and developed for use as an automobile parking lot. The proposed site is located north of the intersection of Martin Avenue and the access road to the existing ATCT. The site is located both inside and outside the Airport Operations Area on land that would be leased from the Airport. A lease would be modified by FAA to include the land area required to contain the new facility. Minimal changes to access would be required; access to the site would continue to be from Martin Avenue. Public utilities and water would be provided through existing lines that are currently connected to the existing facilities. Existing storm drain lines and an existing sanitary sewer line running through the proposed RTR site conflict with the proposed RTR facilities and would be relocated. Utilities would be provided to serve both existing and new facilities since they would both be operational for a period of time to allow the new occupied facility to be fit out with all new equipment.

It is anticipated that design and construction procurement would occur between July 2025 and May 2026, with construction anticipated to occur over a 30-month period beginning in June 2026. The existing ATCT structure would be demolished after commissioning the new ATCT. The construction and operation of the proposed ATCT is not anticipated to cause any increase in aircraft operations at SJC beyond that which is currently occurring.

[1] Terminal Radar Approach Control Facilities (TRACON) are air traffic control facilities that provide radar services to aircraft in terminal areas.

Figure 1-2. Existing SJC ATCT and Base Building (view from the parking lot/proposed location of the new ATCT).

Figure 1-3. View of existing RTR (from the existing ATCT, with the parking lot/proposed location of the new ATCT in the foreground).

Figure 1-4. Ground level view of the existing RTR from the parking lot/proposed location of the new ATCT.

1.4 Proposed Federal Actions

The Proposed Action is comprised of several components including the following:

1. Approval of the Airport Layout Plan change.
2. Lease acquisition for the new SJC ATCT.
3. Replacement of the existing SJC ATCT and associated infrastructure.
4. Demolition of the existing SJC ATCT and associated infrastructure.
5. Lease disposal for the existing SJC ATCT.

The FAA is coordinating with the Airport for completion of all the actions required for the project. The federal actions analyzed in this EA consist of the replacement and demolition of the ATCT and associated infrastructure.

2 Purpose and Need

This chapter presents the underlying problem being addressed and describes the purpose of the Proposed Action and why it is needed. Identification of the purpose and need for a Proposed Action provides the rationale and the foundation for identification of reasonable alternatives that can meet the purpose for the action and, therefore, address the need or problem.

2.1 Purpose

The purpose of the Proposed Action is to provide an ATCT at SJC that meets FAA design standards, addresses line of sight deficiencies, and supports safe operations at the airport.

2.2 Need

The Proposed Action is needed to provide for a modern, operationally efficient ATCT that meets all applicable FAA requirements and provides unobstructed views of all controlled airport surface areas and maximum visibility of all airborne traffic. An evaluation conducted in 2017 found several line-of-sight issues from the Cab, as well as a number of interior issues. The existing ATCT is inadequate for current airport traffic control needs due to the location and height of the tower, which places some of the operational airport surfaces out of sight of air traffic controllers. The current ATCT also has architectural, mechanical, and electrical deficiencies and does not have the ability to accommodate upgrades to the latest air traffic control technologies. Furthermore, it lacks personnel space requirements and modern amenities and is non-compliant with the Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) accessibility guidelines.

3 Alternatives

This chapter provides a summary of the alternatives analysis conducted by the FAA. Four potential alternative locations for a new ATCT were evaluated against specific screening criteria that were developed based on guidance provided in FAA Order 6480.4B, Airport Traffic Control Tower Siting Process. This process concluded with the identification of the two alternatives assessed in this EA – the No Action Alternative and the Proposed Action.

3.1 Siting Process

A siting study was completed, and a final site recommendation was developed, by following the FAA's siting process and guidance contained in FAA Order 6480.4B, *Airport Traffic Control Siting Process* (see Appendix A, *San José International Airport San José, CA Airport Traffic Control Tower Siting Report*). This Siting Report provides an overview of all potential sites considered, a detailed evaluation of the preferred site options, and the conclusions and recommendations for a potential future replacement of the ATCT. This siting study was used to inform the alternatives considered in this EA.

All sites considered were evaluated against the required siting criteria; these include 1) Terminal Instrument Procedures; 2) 14 CFR Part 77, Obstruction Evaluation/Airport Airspace Analysis requirements; 3) Impacts to Communications, Navigation and Surveillance Equipment; 4) Visibility Performance Requirements; 5) Safety Assessment; 6) Operational Requirements; 7) Economic Considerations; and 8) Environmental. These criteria are described in the *San José International Airport San José, CA Airport Traffic Control Tower Siting Report* included as Appendix A. Visibility and other impacts were assessed and documented to determine which sites were viable. Items addressed in the Siting Report pertain to safety or non-compliance with Americans with Disabilities Act and Architectural Barriers Act accessibility guidelines, as well as architectural, mechanical, and electrical deficiencies, among other things. Two sites assessed were determined to be non-viable (one was eliminated due to line-of-sight obstruction to the gates and one was eliminated due to the location outside of the allocated area for the sites), and two preferred sites (Sites 1 and 4) were selected by air traffic representatives based on team discussion and inputs on the advantages and disadvantages of each site (see Section 3.2.3 for more information).

After the Siting Report was completed, an Airway Facilities Tower Integration Laboratory[2] siting Memo of Record was developed on October 20, 2021, identifying Site 4 as the recommended site. This site was selected for providing the best overall viewing angles to the movement areas; it provides a good view of the field in front of the controllers with less movement left/right than the existing tower. Other areas of improvement over the existing ATCT included visibility of approach and departure paths, run-up pad towards the approach end runway 30L, and a better ability to distinguish whether an aircraft was on taxiway Z or taxiway Y located on the opposite side of the field. For the purposes of this EA, Site 4 is referred to as the Proposed Action.

[2] The Airway Facilities Tower Integration Laboratory is a state-of-the-art facility that can simulate potential sites in a realistic ATCT cab using visual projection of airfield siting photographs and aircraft simulations.

3.2 Alternatives Assessed in the Environmental Assessment

The two alternatives studied in detail in this EA are summarized below.

3.2.1 Proposed Action (Preferred Alternative)

The Proposed Action would entail construction and operation of a new ATCT at SJC. The current ATCT does not have the ability to accommodate upgrades to the latest air traffic control technologies, lacks personnel space requirements and modern amenities, and exhibits physical problems such as maintenance-intensive deficient mechanical appurtenances (e.g., heating and ventilation, plumbing). The proposed replacement ATCT would enable the installation of modern and required air traffic control equipment, provide adequate space and an enhanced work environment for FAA personnel, lower operating costs, and improve environmental performance, resulting in energy savings, water efficiency, reduced carbon emissions, and improved indoor air quality. The Proposed Action would provide for a modern, operationally efficient ATCT that would meet all applicable FAA requirements and would provide unobstructed views of all controlled airport surface areas and maximum visibility of all airborne traffic. The construction and operation of the proposed ATCT is not anticipated to cause any increase in aircraft operations at SJC beyond that which is currently occurring.

The Proposed Action includes replacement of the existing ATCT, constructing a new base building adjacent to the new ATCT, and relocating the RTR. The proposed location of the new ATCT and associated infrastructure is on an approximately 3.7-acre previously disturbed site adjacent to the existing ATCT (see Figure 3-1) that encompasses the existing RTR site and an Airport employee parking lot. Because of this, the RTR would be relocated before the ATCT construction occurs.

Public utilities and water are available adjacent to the site or from utilities already connected to the existing ATCT and connections from these existing lines would be made to the new facilities. The proposed site is located north of the intersection of Martin Avenue and the access road to the existing ATCT. The coordinates of the proposed ATCT location are Latitude 37° 21’ 34.23” N and Longitude 121° 55’ 58.85” W. The site is located both inside and outside the Airport Operations Area on land that would be leased from the airport. Specifically, the new RTR site would be inside the existing Airport Operations Area boundary and the remainder of the site includes the existing RTR site and adjacent surface parking lot. A lease would be modified by FAA to include the land area required to contain the new and existing facility. Access to the site would continue to be from Martin Avenue, with an entrance added into the new tower location. The electronic gate would be moved to provide access to this new location, but there would not be a change in level of security. Locations of some of the existing fencing would be moved. Signage would be used to designate nonpublic areas and procedures would be established to prevent unauthorized access. Access into critical areas would be limited to authorized personnel only.

The proposed location for the new ATCT and base building is west of the existing ATCT on a site that is currently occupied by the existing RTR site and an airport employee parking lot. The proposed location would include a parking lot, utility lines, and driveways where construction, maintenance, and usage effects would occur. The new ATCT would be approximately 185 feet at the top of the tower/antenna and would have an approximately 525-square foot cab, and an approximately 12,800-square foot single-story administrative base building. Associated parking and other related structures (sidewalks, lighting, fencing) would be built within the parcel as part of the Proposed Action. A conceptual site layout of the Proposed Action is shown in Figure 3-2.

The Proposed Action would include approximately 17 feet of excavation for basement construction, with cast-in-drilled-hole pilings up to 70 feet. This would correspond to disturbance at depths of approximately 85 to 90 feet below the existing grade. Because this represents disturbance for piling,

there would be multiple 24- to 30-inch diameter drilled holes to the aforementioned depth, as opposed to complete removal of soil to that depth.

The new RTR site would be located to the east of the new ATCT site in a location that currently covers a portion of an existing airport employee parking lot and an area inside the Airport Operations Area that currently consists of an unpaved graded area, paved vehicle service road, and paved taxiway shoulders. This area is adjacent to an approved project that includes construction of the new Taxiway V and adjacent taxi lane that is underway. Once the taxiway is removed, the new RTR site would be constructed, in part, in its place. The RTR site would support the existing ATCT and would be cutover to the new ATCT upon completion of construction of the replacement ATCT and base building. The RTR site would be updated to the latest FAA and industry standards and would include four towers as prescribed by the FAA, a precast shelter for electronics equipment, a prefabricated storage building, and a fenced storage area (see Figure 3-2).

To maintain uninterrupted air traffic control services, the existing ATCT and base building would be demolished after construction of the new ATCT and base building become operational. This would include removal and proper disposal of the existing buildings and repaving the former ATCT site. Construction of the new ATCT is expected to begin in summer 2026 and occur over an approximate 30-month period followed by a 6-month period for demolition of the existing ATCT.

Existing airport roads would be used during construction and maintenance. Staging of construction materials and equipment would be on the Airport property near the existing ATCT, most likely in the Airport parking area. Access would not be across any aircraft movement areas and public roads in the vicinity are sufficient to accommodate the minor increase in traffic that would occur during construction and demolition activities.

Figure 3-1. Site Layout of the Proposed Action.

3.2.2 No Action Alternative

Under the No Action Alternative, the existing ATCT would not be replaced and would continue to be used to electronically and visually monitor aircraft operations at SJC. The ATCT would continue to not meet current FAA design standards for ATCTs, would not provide unobstructed views of all controlled airport surface areas, and extensive building maintenance requirements and deficiencies would persist.

Although this alternative would not fulfill the purpose and need of the Proposed Action, this alternative is carried forward as required by the FAA's NEPA implementing procedures, which require consideration of a No Action Alternative to assess environmental consequences that may occur if the Proposed Action is not implemented.

3.2.3 Alternatives Considered but Not Carried Forward

Four sites were initially evaluated at the Airport Facilities Terminal Integration Laboratory in Atlantic City, New Jersey, in July 2019 (Figure 3-2). Site 1 and Site 4 were identified as preferred locations by the SJC Air Traffic controllers, and these two preferred sites were further evaluated in consideration of future airport expansion. Ultimately, Sites 1, 2, and 3 were not carried forward for the reasons discussed below.

- Site 1: This site did not provide as much flexibility to SJC in accordance with future developments in the Airport Master Plan as compared to Site 4.
- Site 2: Site 2 was eliminated due to line-of-sight obstruction to the gates; the tower controllers control push backs. It would have required excessive height to see the gate areas.
- Site 3: Site 3 was eliminated due to the location; it was outside of the allocated area for the sites and therefore infringed upon airport plans for improvements.

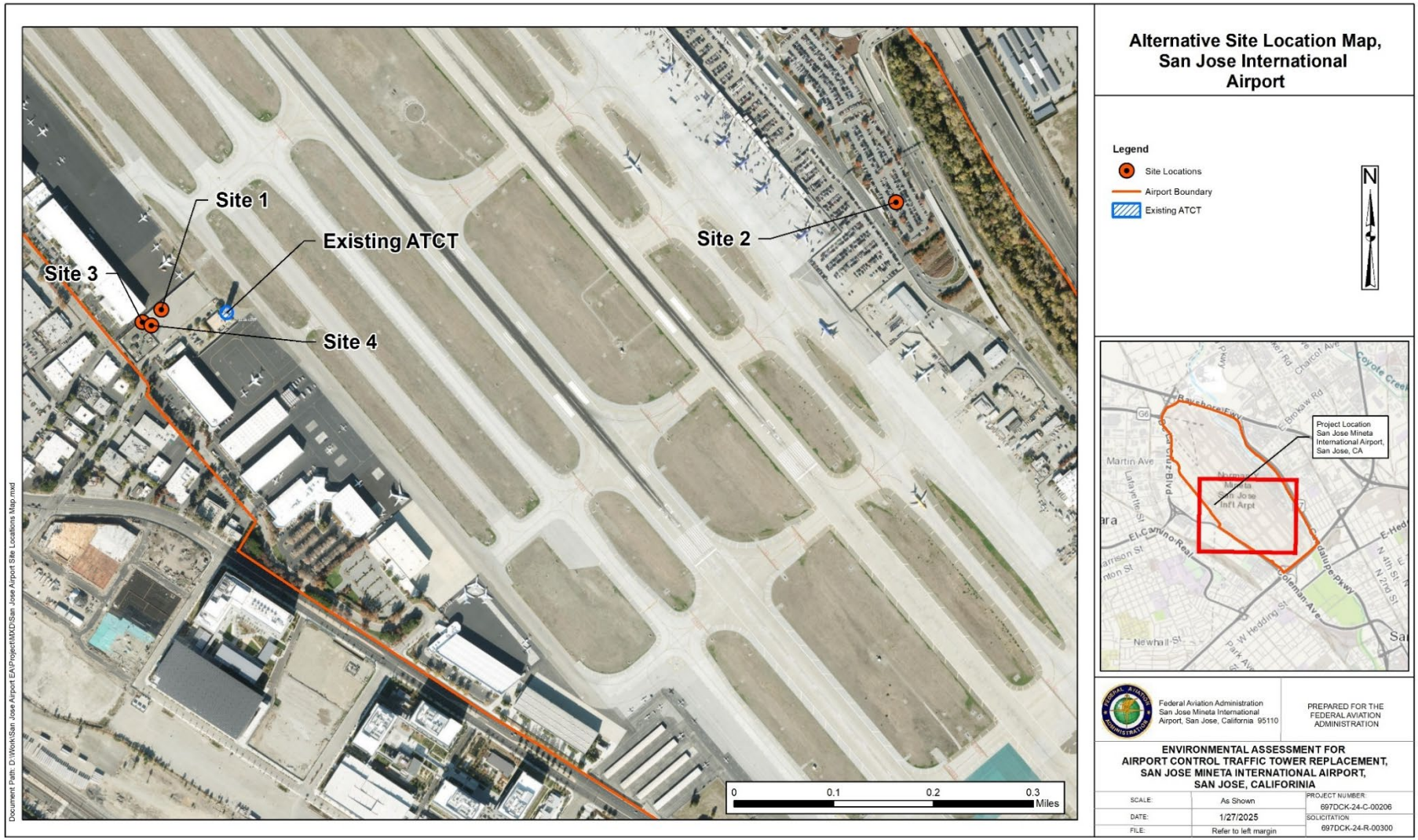


Figure 3-2. Site Locations Considered

4 Affected Environment, Environmental Consequences, and Mitigation

This chapter describes the regulatory setting and affected environment (existing conditions) of each resource. It also identifies the environmental consequences of the alternatives considered including direct and indirect temporary (construction) and permanent (operational) impacts, as well as cumulative impacts. Lastly, this chapter describes any mitigation, minimization, or best practices identified to reduce impacts, if applicable. FAA Order 1050.1F identifies the following resource categories for consideration in NEPA analysis: Air Quality; Biological Resources; Climate; Coastal Resources; Department of Transportation Act, Section 4(f); Farmlands; Hazardous Materials, Solid Waste, and Pollution Prevention; Historical, Architectural, Archeological, and Cultural Resources; Land Use; Natural Resources and Energy Supply; Noise; Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks; Visual Effects; and Water Resources. Some of those resources are not present in the project area, and therefore would not be impacted, as follows:

- Coastal resources – SJC is not located within a designated coastal zone (defined as 100 feet inland from the shoreline around San Francisco Bay and its tidally influenced tributaries) pursuant to the Coastal Zone Management Act of 1972 as defined by National Oceanic and Atmospheric Administration and delegated to California Coastal Commission's definition of the California Coastal Program. Therefore, there would be no direct, indirect, or cumulative impacts of the Proposed Action on coastal resources.
- Department of Transportation Act, Section 4(f) – The project area does not contain any DOT Section 4(f) resources; however, they are present outside the Airport boundary including a NRHP site (the De Anza Hotel) and several City parks. The closest of these is approximately 0.5 miles from the project area. There would not be any physical use of a 4(f) property. Any increase in noise during construction would only be temporary and would not constitute a constructive use. Construction-related noise impacts would be temporary and minimal since they would occur in an urbanized area that is already exposed to existing airport noise. Therefore, no use of DOT Section 4(f) resources would occur as a result of implementation of the Proposed Action that would constitute an impact to DOT Section 4(f) resources.
- Farmlands – There are no prime, unique, statewide, or locally important farmlands present in the project area defined by criteria in 7 CFR § 658.5; there would be no direct, indirect, or cumulative impacts of the Proposed Action on farmlands.
- Wetlands – There are no wetlands that meet Clean Water Act jurisdictional or Executive Order 11990 criteria present in the project area. There are no waters, wetlands, riparian, or other sensitive habitats within the project area that are regulated by federal or state laws. There would be no direct, indirect, or cumulative impacts of the Proposed Action on this resource.
- Wild and Scenic Rivers – There are no Wild and Scenic Rivers in the project area. The closest Wild and Scenic River segments to SJC are part of the Big Sur River, which is approximately 100 miles south of the Airport and the American River about 100 miles to the northeast. Therefore, there would be no potential for impacts to these resources.

4.1 Air Quality

4.1.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference describes air quality as the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations in the United States are based on concerns that high concentrations of air pollutants can harm human health, especially for children, the elderly, and people with compromised health conditions; as well as adversely affect public welfare by damage to crops, vegetation, buildings, and other property. FAA Order 1050.1F requires that potential effects of the Proposed Action are evaluated against the National Ambient Air Quality Standards (NAAQS), which are expressed in terms of pollutant concentration measured (or averaged) over a defined period of time (FAA 2015). The U.S. Environmental Protection Agency (EPA), under mandates of the Clean Air Act (CAA) Amendments of 1990, has established primary and secondary NAAQS for seven air contaminants or criteria pollutants. These contaminants are carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), lead (Pb), sulfur dioxide (SO_2), and particulate matter equal to or less than 10 microns in size (PM_{10}) and equal to or less than 2.5 microns in size ($PM_{2.5}$).

California has adopted its own set of ambient standards, California Ambient Air Quality Standards (CAAQS), that are generally more stringent than the federal standards for the criteria air pollutants. SJC is located in Santa Clara County in California within the San Francisco Bay Area Air Basin (SFBAAB or Basin). At the state level, the California Air Resources Board (CARB) manages air quality, regulates mobile emissions sources, and oversees the activities of county and regional air districts within California. The Bay Area Air Quality Management District (BAAQMD) within CARB has jurisdiction over the Basin. The BAAQMD is responsible for ensuring that federal and state air quality standards are met by monitoring ambient air pollutant levels throughout the region and implementing strategies to attain the standards.

States are required to identify those areas where the NAAQS are not being met in compliance with the federal CAA of 1970, 42 U.S.C. 7401, et seq., as amended. Areas that are not meeting NAAQS for a specific pollutant are designated as nonattainment areas by the EPA. The CAA Amendments define a "nonattainment area" as a locality where air pollution levels consistently exceed NAAQS, or that contributes to ambient air quality in a nearby area that fails to meet standards. A state with one or more nonattainment areas must prepare a State Implementation Plan (SIP) for each nonattainment area, detailing the programs and requirements that the state will implement to meet the NAAQS by the deadlines specified in the CAA (FAA 2024). If the air quality in a geographic area is equal to or better than the national standard, the EPA typically designates the region as an "attainment area." Santa Clara County is currently designated by the EPA to be in a marginal non-attainment area with respect to the 2015 8-hour O_3 standards.

4.1.2 Environmental Consequences

FAA Order 1050.1F Desk Reference (FAA 2015) defines significant air quality impacts as those where the agency project or action would result in exceedance of one or more of the NAAQS or any State or local standards for any of the time periods analyzed. Table 4-1 presents the Federal and State of California air quality standards.

Table 4-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard	Federal Standard
Ozone (O_3)	1-hour	90 ppb	—
	8-hour	70 ppb	70 ppb
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm
	8-hour	9 ppm	9 ppm
Nitrogen Dioxide (NO_2)	1-hour	180 ppb	100 ppb
	Annual	30 ppb	53 ppb
Sulfur Dioxide (SO_2)	1-hour	250 ppb	75 ppb
	24-hour	40 ppb	140 ppb
Particulate Matter (PM) ≤ 10 microns (PM_{10})	24-hour	50 µg/m^3	150 µg/m^3
	Annual	20 µg/m^3	—
Particulate Matter (PM) ≤ 2.5 microns ($PM_{2.5}$)	24-hour	—	35 µg/m^3
	Annual	12 µg/m^3	12 µg/m^3
Lead (Pb)	30-day	1.5 µg/m^3	—
	3-month	—	0.15 µg/m^3

Note: ppm = parts per million; ppb = parts per billion

The BAAQMD maintains a network of 30 air monitoring stations throughout the Bay Area. The San José – Jackson Street monitor is the closest station to SJC, located approximately one mile southeast of the Airport. Table 4-2 summarizes available ambient air quality monitoring data at this station between 2022 through 2024 (there was no PM_{10} data available for this station during this sampling period). The air monitoring data from 2022 through 2024 indicate no exceedances of federal or state standards for CO, NO_2, SO_2 in any year. The data indicates only one exceedance of federal and state ozone standards in 2022 and 2024, and minimal exceedances of the federal 24-hr $PM_{2.5}$ standard.

Table 4-2. City of San José – Jackson Street Monitoring Data

Pollutant	Averaging Time	2022	2023	2024
O_3	Maximum concentration, 1-hour (ppb)	90	87	93
	Maximum concentration, 8-hour (ppb)	74	68	69
	Number of Days Standard Exceeded			
	Federal/State, 8-hour (70 ppb)	1	0	0
	State, 1-hour (90 ppb)	0	0	1
CO	Maximum Concentration, 1-hour (ppm)	1.8	2.0	1.5
	Maximum Concentration, 8-hour (ppm)	1.2	1.3	1.0
NO_2	Maximum Concentration, 1-hour (ppb)	47	59	48
	Annual Average Concentration, AAM* (ppb)	9	9	8
SO_2	Maximum Concentration, 1-hour (ppb)	2.0	36	5
	Maximum Concentration, 24-hour (ppb)	0.2	0.1	0.2
$PM_{2.5}$**	Annual Average Concentration, AAM (µg/m^3)	10.1	8.3	8.6
	Maximum Concentration, 24-hour (µg/m^3)	104	77	90
	# Samples Exceeding Federal Standard, 24-hour	35	31	16

Note: * AAM = Annual Arithmetic Mean

** PM_{10} data was not available for this station during the sampling period

The FAA published a Notice in the Federal Register on July 30, 2007, specifying projects identified by the FAA as presumed to conform ("Federal Presumed to Conform Actions under General Conformity", FR Vol. 72, No. 145). Fifteen project categories were identified in the Notice that do not modify or increase airport capacity or change the operational environment of an airport in such a way as to increase air emissions above *de minimis* thresholds. One of these categories is the "Routine Installation and Operation of Airport Navigation Aids" which includes ATCTs. Because the Proposed Action (ATCT replacement) is covered by an applicable FAA presumed to conform category (*15. Routine Installation and Operation of Airport Navigation Aids*), the project qualifies as exempt from the CAA's General Conformity requirements pursuant to 40 CFR 93.153.

Proposed Action

Minor impacts to air quality that would result from the Proposed Action during construction and demolition activities would include temporary emissions of CO, $PM_{2.5}$, PM_{10}, volatile organic compounds (VOC) and nitrogen oxides (NOx) from dust, construction vehicle exhaust, and general construction activities (Table 4-3). The facility is being designed to meet the High Performance and Sustainable Building Guiding Principles as outlined in the 2012 A&E Project Design Manual and the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding; therefore, the design team has incorporated design strategies with the purpose of integrating long-term sustainable goals to include optimal operating efficiencies, which would reduce emissions related to operation of the facility. Therefore, the construction and operation of the proposed SJC ATCT and base building would not significantly affect air quality.

Table 4-3. Air Emission Inventory for the Construction and Operation of the SJC ATCT.

	Estimated Emissions (tons per year)					
Estimated Emissions for the Proposed Action	**CO**	**VOC**	**NO_x**	**$PM_{2.5}$**	**PM_{10}**	**SO_x**
Annual Unmitigated Construction 2026	1.17	0.22	1.60	0.11	0.12	0.00
Annual Unmitigated Construction 2027	0.58	0.19	0.73	0.05	0.05	0.00
Annual Unmitigated Facility Operation	2.73	0.31	0.72	0.03	0.51	0.00

Avoidance, Minimization, and Mitigation Measures

Although there would be no significant impacts from construction of the Proposed Action, and changes in emissions due to construction would be negligible, the following best management practices (BMPs) will be implemented to reduce emissions during construction:

- Implement the California Air Resources Board Clean Air Standards for construction equipment.
- Minimize the amount of disturbed soils at any given time during project activities.
- If needed, spray water for dust suppression and prevent fugitive dust from becoming airborne.
- Suspend or adjust intensity of project activities during periods of sustained high wind speeds (e.g., 30 miles per hour and over), as defined by the Occupational Safety and Health Administration.
- Maintain vehicles and equipment in good working condition.
- Decrease vehicle speed limits while at project site to reduce fugitive dust generation and obey posted vehicle speed limits while off-site.

- Load trucks with debris below their maximum hauling capacity.
- Use tarp covers on trucks transporting construction materials and construction debris to and from the site.

No Action

Under the No Action Alternative, the ATCT and base building would not be constructed and the existing SJC ATCT would remain in service. Air quality would remain unchanged, and no air quality impacts would be altered from the existing conditions.

4.2 Biological Resources

4.2.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F states that biological resources are valued for their intrinsic, aesthetic, economic, and recreational qualities and include fish, wildlife, plants, and their respective habitats. Typical categories of biological resources include terrestrial and aquatic plant and animal species, game and non-game species, special status species (state or federally-listed threatened or endangered species, marine mammals, or species of concern, such as species proposed for listing or migratory birds), and environmentally-sensitive or critical habitats.

FAA Order 1050.1F requires that potential effects of the Proposed Action be evaluated with regard to terrestrial and aquatic plant and animal species, game and non-game species, species status species, migratory birds, and environmentally sensitive or critical habitats. Several federal and state laws, Executive Orders, and regulations govern this action. These include the Endangered Species Act, the Sikes Act, the Fish and Wildlife Coordination Act, the Fish and Wildlife Conservation Act, the Migratory Bird Treaty Act, and Executive Order 13112, Invasive Species. FAA Advisory Circular 150/5200-33C, *Hazardous Wildlife Attractants on or Near Airports*, provides guidance on locating specific land uses that may attract wildlife to or in the vicinity of airports and provides guidance regarding the placement of new airport development pertaining to aircraft movement in the vicinity of hazardous wildlife attractants.

The entire landscape of the SJC airfield and surrounding properties has been highly modified by human activities and little native vegetation or habitat remains. The project area for biological resources encompasses the direct footprint of temporary and permanent ground disturbance resulting from proposed construction activities. This would include the 3.7-acre parcel and the immediate surrounding area. Vegetation types within the project area consist of developed and landscaped habitat that support minimal trees and other vegetation to minimize the attraction of wildlife to the airfield in compliance with FAA AC 150/5200-33C. Next to the existing base building there are a few small landscape trees and ruderal grasslands are present between the runways, taxiways, and other paved/developed areas adjacent to the project area. The ruderal grassland areas are dominated by non-native annual grasses and common non-native forbs. In accordance with the SJC Airport Certification Manual (January 11, 2021), this habitat type is managed to discourage wildlife through regular mowing, in compliance with 14 CFR Part 139 to maintain safety standards.

Developed portions of the Airport may be periodically used by common native and non-native wildlife species – such as songbirds, mice, and other small mammals – that are associated with urban areas and that are tolerant of high levels of human disturbance. The buildings within the project area may attract roosting bats and nesting birds and bats and birds may fly over this habitat foraging for insects. The area

surrounding the project area consists of roads, parking areas, hangers, and other buildings, including the existing ATCT.

A variety of sources were consulted to determine what special status species have the potential to occur in the project area. The U.S. Fish & Wildlife Service (FWS) was consulted via their Information, Planning, and Conservation online system (IPaC) for a species list on September 24, 2024 (Appendix B). Species lists were also obtained from the National Marine Fisheries Service (NMFS, 2023) and the California Natural Diversity Database on September 24, 2024. Table 4-4 includes the list of federal species that were identified as potentially occurring in the project area and Table 4-5 includes the list of state species that were identified as potentially occurring in the project area. Based on the species lists identified for the project area (FWS 2024), there are five special status species that could potentially occur within the project area, however, based on the habitat present, it is unlikely that any of these species would be present in the project area. There is no designated critical habitat or essential fish habitat within the project area. The special status species with the potential to occur within the project area are:

- Bald eagle (*Haliaeetus leucocephalus*) – State Endangered, State Fully Protected
- Burrowing owl (*Athene cunicularia*) – California Species of Special Concern
- Golden eagle *(Aquila chrysaetos*) – State Fully Protected
- Loggerhead shrike (*Lanius ludovicianus*) – California Species of Special Concern (nesting)
- Pallid bat *(Antrozous pallidus*) – California Species of Special Concern.

Bald and golden eagles are known to occur at the Airport. There is no nesting habitat present, but ruderal grasslands within the Airport infield can be used as hunting grounds. These species may occur in the project area as an occasional forager, primarily during migration and winter. Burrowing owls have inhabited grassland areas within the Airport property for decades and are present year-round, primarily nesting and roosting southwest of the runways and foraging throughout the infield grasslands. Similarly, loggerhead shrikes may be present as nonbreeding individuals foraging in low numbers in grasslands in and adjacent to the airport year-round; however, the potential to occur is low because the Airport infield is mowed regularly in order to reduce the opportunity for the hazardous movements of wildlife and resultant collisions with aircraft on and around the airport in compliance with the Wildlife Hazard Management Plan. There is no high-quality roosting habitat for Pallid bat present at the Airport and no known maternity colonies are present within or adjacent to the airfield. Individuals from colonies outside the area may be present foraging in the airfield over open habitats, but this is expected to be rare.

Table 4-4. Federally Protected Species and Potential Occurrence in the Project Area

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
California condor (*Gymnogyps californianus*)	Federal Endangered	Chaparral, coniferous forests, and oak savannah habitats in southern and central California.	**Absent.** No suitable habitat for this species.
California least tern (*Sterna antillarum browni*, also known as *Sternula antillarum*)	Federal Endangered	Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**Absent.** No suitable habitat for this species.
California red-legged frog (*Rana draytonii*)	Federally Threatened, (also California Species of Special Concern)	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**Absent.** This species has been extirpated from the project area vicinity, including the entire urbanized Santa Clara Valley floor, due to development, the alteration of hydrology of its aquatic habitats, and introduction of non-native predators such as non-native fishes and bullfrogs.
California Ridgeway's rail (*Rallus obsoletus,* formerly known as California clapper rail, *Rallus longirostris obsoletus*)	Federal Endangered	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of the San Francisco Bay.	**Absent.** No suitable habitat for this species.
California tiger salamander (*Ambystoma californiense*)	Federally Threatened (also State Threatened)	Vernal or temporary pools in annual grasslands or open woodlands.	**Absent.** Populations have been extirpated from the Santa Clara Valley floor due to habitat loss. The species is now considered absent from the majority of the valley floor, including the project area. There are no recent records of California tiger salamanders in the vicinity of the project area.[1]

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Chinook salmon – California Coast Evolutionarily Significant Unit (ESU) (*Oncorhynchus tshawytscha*)	Federally Threatened	Coastal watersheds from Redwood Creek (Humboldt County) to the Russian River (Sonoma County).	**Absent.** Outside of known range.[2]
Chinook salmon – Sacramento River Winter-Run ESU (*Oncorhynchus tshawytscha*)	Federal Endangered (also State Endangered)	Sacramento River to the Pit and McCloud rivers.	**Absent.** Outside of known range.[2]
Coho salmon – Central California Coast (CCC) ESU (*Oncorhynchus kisutch*)	Federal Endangered (also State Endangered)	Freshwater streams with a hydrologic connection to the Pacific Ocean between Punta Gorda and the San Lorenzo River.	**Absent.** No suitable habitat within the project area.
Coho salmon – Southern Oregon/Northern California ESU (*Oncorhynchus kisutch*)	Federally Threatened (also State Threatened)	West coast from the Mattole and Eel rivers is northern California to the Elk and Rogue rivers in Oregon.	**Absent.** Outside of known range.[2]
Coho salmon Essential Fish Habitat (*Oncorhynchus kisutch*)	N/A	Coho salmon Essential Fish Habitat includes all habitats currently or historically occupied within Washington, Oregon, and California.	**Absent.** No suitable aquatic habitat within the project area.
Chinook salmon Essential Fish Habitat (*Oncorhynchus tshawytshca*)	N/A	Chinook salmon Essential Fish Habitat includes all habitat currently or historically occupied within Washington, Oregon, Idaho, and California.	**Absent.** No suitable aquatic habitat within the project area.
Eulachon – Southern Distinct Population Segment (*Thaloeichthys pacificus*)	Federally Threatened	Rivers south of the Nass River in British Columbia, Canada to, and including, the Mad River in California.6	**Absent.** Outside of known range.
Foothill Yellow-legged Frog (*Rana boylii*)	Federally Threatened	Foothill and mountain streams, up to approximately 5,000 feet in elevation. Closely associated with streams and is rarely observed far from water's edge.	**Absent.** No suitable habitat.

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Green sturgeon, Southern Distinct Population Segment (*Acipenser medirostri*)	Federally Threatened	Found in the Sacramento and San Joaquin rivers and Delta; primarily spawn in the upper mainstem of the Sacramento River, although some spawning activity has recently been documented in the Feather and Yuba rivers; frequently enter large coastal bays and estuaries, including the San Francisco Bay estuary.	**Absent.** No suitable habitat.
Green sturgeon southern Distinct Population Segment Critical Habitat (*Acipenser medirostri*)	N/A	Coastal marine waters within 60 fathoms depth from Monterey Bay north to Cape Flattery; the Sacramento River, lower Feather River, and lower Yuba River; the Sacramento-San Joaquin Delta and Suisun, San Pablo, and San Francisco bays; the lower Columbia River estuary; and some coastal bays and estuaries in California (Humboldt Bay).	**Absent.** There is no critical habitat within the project area.
Monarch butterfly (*Danaus plexippus*)	Federal Candidate	Winter roost sites extend along the coast from northern Mendocino to Baja California and Mexico; roosts located in wind-protected tree groves with nectar and water sources nearby; larval host plant is milkweed (*Asclepias* sp.).	**Absent.** Ruderal grasslands and landscaped vegetation at the Airport can provide foraging habitat, but neither monarchs nor milkweed have been documented during previous Airport surveys.
Robust spineflower (*Chorizanthe robusta var. robusta*)	Federal Endangered	Lower montane coniferous forest (maritime ponderosa pine sandhills)	**Absent.** There is no suitable habitat within the project area.
Steelhead – CCC Evolutionarily Significant Unit (*Oncorhynchus mykiss irideus*)	Federally Threatened	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	**Absent.** No suitable habitat within the project area.

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Steelhead – CCC ESU Critical Habitat (*Oncorhynchus mykiss irideus*)	N/A	Critical habitat includes all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Russian River to Aptos Creek, California, and the drainages of San Francisco and San Pablo Bays.	**Absent.** No suitable habitat within the project area.
Steelhead – California Central Valley ESU (*Oncorhynchus mykiss irideus*)	Federally Threatened	Sacramento and San Joaquin rivers and their tributaries.	**Absent.** Outside of known range.[3]
Steelhead – Northern California ESU (*Oncorhynchus mykiss irideus*)	Federally Threatened	California coastal creeks and rivers from Gualala River north to Redwood Creek.	**Absent.** Outside of known range.[4]
Steelhead – South-CCC ESU (*Oncorhynchus mykiss irideus*)	Federally Threatened	California coastal rivers and creeks from Arroyo Grande Creek north to the Pajaro River.	**Absent.** Outside of known range.[5]
Steelhead – Southern California ESU (*Oncorhynchus mykiss irideus*)	Federal Endangered	From the Cuyama and Sisquoc River near Santa Maria, south to the U.S. border with Mexico.	**Absent.** Outside of known range.[6]

Primary Source: H.T. Harvey & Associates. 2019. Norman Y. Mineta San José International Airport 2019 Master Plan Amendment Biological Resources Report.

[1] California Department of Fish and Wildlife (CDFW) California Natural Diversity Database, RareFind 5.0, https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx, 2022 (accessed September 30, 2024).

[2] NMFS, California Coastal Chinook Salmon Evolutionarily Significant Unit, 2013, https://media.fisheries.noaa.gov/dam-migration/ckcac_2013.pdf (accessed September 30, 2024).

[3] NMFS, Critical Habitat for the Southern Distinct Population Segment of the Eulachon, Final Biological Report, 2011, https://repository.library.noaa.gov/view/noaa/18679 (accessed September 30, 2024).

[4] NMFS, California Central Valley Steelhead Distinct Population Segment, 2013, https://media.fisheries.noaa.gov/dam-migration/stccv_2013.pdf (accessed September 30, 2024).

[5] NMFS, Northern California Steelhead Distinct Population Segment, 2013, https://media.fisheries.noaa.gov/dam-migration/stnca_2013.pdf. (accessed September 30, 2024).

[6] NMFS, South-Central California Steelhead Distinct Population Segment, 2013, https://media.fisheries.noaa.gov/dam-migration/stscc_2013.pdf, (accessed September 30, 2024).

Table 4-5. State Protected Species and Potential Occurrence in the Project Area

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Bald eagle (*Haliaeetus leucocephalus*)	State Endangered, State Fully Protected	Occurs mainly along seacoasts, rivers, and lakes; nests in tall trees or in cliffs, occasionally on electrical towers; feeds mostly on fish.	**Absent as Breeder, Present as a Forager.** Bald eagles are known to occur at the Airport. The ruderal grasslands within the Airport infield function as hunting grounds. No nesting habitat is present within the project area. This species may occur in the project area as an occasional forager, primarily during migration and winter.
Burrowing owl (*Athene cunicularia*)	California Species of Special Concern	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels.	**Unlikely Breeder, Present as a Forager.** Burrowing owls have been known to nest, roost, and forage within the grassland portions of the airfield for decades,[1] and they continue to be present year-round.
Chinook salmon - Central Valley fall-run ESU (*Oncorhynchus tshawytscha*)	California Species of Special Concern	Cool rivers and large streams that reach the ocean and that have shallow, partly shaded pools, riffles, and runs.	**Absent.** No suitable habitat within the project area.
Crotch bumble bee (*Bombus crotchii*)	Candidate State Endangered	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	**Absent.** Food plants are not present within the project area.

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Foothill yellow-legged frog (*Rana boylii*)	State Endangered	Partially shaded shallow streams and riffles with a rocky substrate. Occurs in a variety of habitats in coast ranges.	**Absent.** The Guadalupe River adjacent to the Airport is secondary habitat for foothill yellow-legged frog[2] However, this species has been extirpated from Valley floor areas of Santa Clara County, and is no longer known to occur along the county's streams below major reservoirs, including Calero and Almaden Reservoirs, which are upstream of the airport. Yellow-legged frogs are absent from the project area as well as adjacent areas.
Golden eagle (*Aquila chrysaetos*)	State Fully Protected	Breeds on cliffs or in large trees (rarely on electrical towers); forages in open areas.	**Absent as Breeder, Present as a Forager.** Golden eagles are known to occur at the Airport. There is no nesting habitat present within the project area, but ruderal grasslands within the Airport infield can be used as hunting grounds. Golden eagles may occur in the project area as an occasional forager, primarily during migration and winter.
Loggerhead shrike (*Lanius ludovicianus*)	California Species of Special Concern (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats.	**Absent as Breeder, Potentially Present as a Forager.** The airport infield includes grasslands, but regular mowing ensures there are no scattered brush, chaparral, or trees to provide perches and nesting sites.[2] Nonbreeding individuals may forage in low numbers in grasslands in and adjacent to the airport year-round, but potential to occur as a forager is low because the airport infield is regularly mowed.

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Pallid bat (*Antrozous pallidus*)	California Species of Special Concern	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**Absent as Breeder, Potentially Present as a Forager.** Pallid bat has been extirpated as a breeder from urban areas close to the San Francisco Bay. There are no known maternity colonies of this species present within or adjacent to the airfield and no high-quality roosting habitat is present in the Airport. Individuals from colonies outside the area could potentially forage in the airfield over open habitats on rare occasions.
Purple martin (*Progne subis*)	California Species of Special Concern	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine.	**Absent.** No suitable habitat for this species in the project area.
Swainson's hawk (*Buteo swainsoni*)	State Threatened	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees; requires adjacent suitable foraging areas, such as grasslands, alfalfa, or grain fields supporting rodent populations.	**Absent.** There are grasslands around the project area, but ground squirrel control, mowing, and bird deterrents within the Airport infield make the habitat unsuitable for this species.
Townsend's big-eared bat (*Corynorhinus townsendii*)	California Species of Special Concern	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees, such as redwoods or in abandoned buildings; found in a variety of habitats.	**Absent.** No known extant populations of the Townsend's big-eared bat occur on the Santa Clara Valley floor. Suitable breeding habitat is not present in the project area, and no colonies are known from the site vicinity.

Name	Listing Status	Habitat	Potential for Occurrence in the Project Area
Western bumble bee (*Bombus occidentalis*)	Candidate State Endangered	Meadows and grasslands with abundant floral resources.	**Absent.** Western bumble bees are largely confined to high elevation sites and there are only a small number of records on the northern California coast.[3] Grasslands are present and could provide suitable habitat, but Western bumble bees are unlikely to occur within the project area.
Western pond turtle (*Actinemys marmorata*, also known as *Emys marmorata marmorata*)	California Species of Special Concern	Permanent or nearly permanent water in a variety of habitats.	**Absent.** No suitable habitat for this species in the project area.
Yellow rail (*Coturnicops noveboracensis*)	California Species of Special Concern	Freshwater marshlands.	**Absent.** No suitable habitat for this species in the project area.
Yellow warbler (*Setophaga petechia*)	California Species of Special Concern (nesting)	Nests in riparian woodlands.	**Absent.** No suitable habitat for this species in the project area.

Primary Source: H.T. Harvey & Associates, Norman Y. Mineta San José International Airport 2019 Master Plan Amendment Biological Resources Report, 2019.
[1] Albion Environmental, Inc. 1997. Burrowing Owl Management Plan – San José International Airport. Final Report.
[2] CDFW California Natural Diversity Database, RareFind 5.0, https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx, 2022 (accessed September 30, 2024).
[3] CDFW, "A petition to the state of California Fish and Game Commission to list: The Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and Western bumble bee (*Bombus occidentalis occidentalis*) as endangered under the California Endangered Species Act," 2018, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline (accessed September 30, 2024).

4.2.2 Environmental Consequences

FAA Order 1050.1F defines significant impacts to federally listed species as when the FWS or NMFS determines that the Proposed Action would be likely to jeopardize the continued existence of fish, wildlife, and plants in question, or result in a destruction or adverse modification to Federally or state-designated critical habitats in the project area. Impacts to non-listed species are associated with factors affecting population dynamics and sustainability (e.g., reproductive success rates, natural mortality rates, non-natural mortality) and minimum population levels required for population maintenance.

The FAA has not established a significance threshold for non-listed species. Effects to special status species and sensitive habitats were analyzed based on the potential for the species, their habitat, or the natural community in question to be disturbed or enhanced following project implementation.

Proposed Action

No federal or state listed species are known to occur within the project area and none are expected to occur due to a lack of suitable habitat and because of the high level of activity around the parcel from airport traffic and operations. No designated critical habitat is present in the project site or the study area in general. In addition, the proposed ATCT site is paved with asphalt and the immediate surrounding areas are previously disturbed and do not provide any natural habitat. Furthermore, existing traffic and other human activity within this area of the Airport decrease the suitability of any potential habitat. Based on these considerations, the project would have no direct or indirect effects on federally listed species or their designated critical habitats. The common wildlife species found at the Airport are tolerant of high levels of human disturbance. Bald and golden eagles, burrowing owls, loggerhead shrike, and pallid bat that may occur as occasional foragers may be temporarily disturbed during construction.

The FAA has determined that the Proposed Action would have no effect on any federally listed threatened or endangered species or designated critical habitat.

No Action

Under the No Action Alternative, the replacement ATCT, base building, and associated infrastructure would not be constructed and the existing ATCT would remain in service. Therefore, there would be no impact to the 3.7-acre parcel of land and any vegetation, wildlife, or habitat in the project area.

4.3 Climate

4.3.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F states that climate change is a global phenomenon that can have local impacts. Scientific measurements show that earth's climate is warming, with concurrent impacts including warmer air temperatures, increased sea level rise, increased storm activity, and an increased intensity in precipitation events. Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions (IEA 2016). GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Increasing concentrations of GHGs in the atmosphere affect climate change and GHG emissions from anthropogenic sources include the combustion of fossil fuels, including fuel from aircraft and other vehicles such as construction equipment. GHG emissions are reported in metric tonnes of carbon dioxide equivalent (CO_2e) (FAA 2023a; FAA 2024). The FAA Order 1050.1F recommends consideration of: 1) the potential effects of a proposed action or its alternatives on climate change as indicated by its GHG emissions; and

2) the implications of climate change for the environmental effects of a proposed action or alternatives (FAA 2023a). The increase in GHG emissions is primarily from human activity in five economic sectors, including transportation, electric power, industry, commercial and residential, and agriculture (FAA 2023b). Of the five major sectors nationwide, transportation accounts for the highest percent of GHG emissions (approximately 28 percent), followed by electricity (approximately 25 percent), and by industry (approximately 23 percent) (EPA 2024a).

For the Proposed Action, construction-related emissions are primarily associated with the exhaust from heavy equipment (e.g., backhoes, bulldozers, graders, etc.), delivery trucks (e.g., dump trucks, etc.), and construction worker vehicles getting to and from the Airport construction site. These emissions are temporary in nature and generally confined to the construction site and the access/egress roadways. GHG emissions of concern from construction include CO_2, CH_4, N_2O, and CO_2e.

4.3.2 Environmental Consequences

The FAA has not established a significance threshold for climate. As noted in the FAA Order 1050.1F, the FAA has not identified specific factors to consider in making a significance determination for GHG emissions (FAA 2015). Given the ongoing scientific research being undertaken to improve the understanding of climate change, FAA's guidance notes that significance determination criteria "will evolve as the science matures or if new Federal requirements are established" (FAA 2015).

Proposed Action

Implementation of the Proposed Action would not result in a change in the type of aircraft, number of flights, or number of airport users beyond those currently occurring; therefore, no direct impacts to climate would occur as a result of operation of the replacement ATCT under the Proposed Action.

Construction and demolition activity as well as transportation of materials would temporarily increase GHG emissions associated with the equipment used for these activities (e.g., excavators, trucks, cranes). Because there is a direct relationship between the amounts of GHG emitted and fuel consumption, there would be a temporary increase in GHG emissions from gasoline and diesel fuel usage associated with construction and demolition activities. Typical expected quantities of GHG emissions from these types of activities can be determined using available data for similar construction and demolition projects to help assess potential climate change effects (see Section 4.1, Air Quality). The temporary increase in GHG emissions from this project would comprise a negligible fraction of the State of California's GHG emissions and would not represent a locally or regionally significant increase.

Additionally, the replacement ATCT and base building would be designed to meet the energy and sustainability requirements of FAA's Terminal Facilities Design Standard while adhering to the CEQ's Guiding Principles for Sustainable Federal Buildings and Associated Instructions and as a result it would be more efficient than the existing ATCT. Because this facility would include energy conservation equipment and fixtures, operation of the new facility would have reduced emissions relative to the existing building. Overall due to the sustainability features and energy efficient design of new buildings, operation of the Proposed Action would not represent an increase in GHG emissions and impacts to climate.

No Action

Under the No Action Alternative, the replacement ATCT and base building would not be constructed and the existing ATCT would remain in service. Therefore, there would be no changes to climate impacts beyond existing conditions.

4.4 Hazardous Materials, Solid Waste, and Pollution Prevention

4.4.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference states that hazardous materials, solid waste, and pollution prevention as an impact category includes an evaluation of the following:

- Waste streams that would be generated by a project, potential for the wastes to impact environmental resources, and the impacts on waste handling and disposal facilities that would likely receive the waste;
- Potential hazardous materials that could be used during construction and operation of a project, and applicable pollution prevention procedures;
- Potential to encounter existing hazardous materials at contaminated sites during construction, operation, and decommissioning of a project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at the proposed action site or in the immediate vicinity of a project site.

Federal agencies are directed by Executive Order 12088, *Federal Compliance with Pollution Control Standards*, as amended, to comply with "applicable pollution control standards," in the prevention, control, and abatement of environmental pollution; and consult with the EPA, state, interstate, and local agencies concerning the best techniques and methods available for the prevention, control, and abatement of environmental pollution. For the Proposed Action the most relevant statutes for complying with this standard are the Resource Conservation and Recovery Act (RCRA) (as amended by the Federal Facilities Compliance Act of 1992) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (Superfund) and the Community Environmental Response Facilitation Act of 1992. RCRA governs the generation, treatment, storage, and disposal of hazardous wastes. CERCLA provides for consultation with natural resource trustees and cleanup of releases of a hazardous substance (excluding petroleum) into the environment.

At the state level, the state's hazardous waste management rules are administered and enforced by the California Department of Toxic Substances Control. The state has received RCRA authorization from the EPA. Jurisdiction related to groundwater contamination is by the San Francisco Bay Regional Water Quality Control Board (RWQCB). SJC manages the use, transport, and storage of hazardous and non-hazardous materials as well as the generation of hazardous waste, including debris for Airport owned and controlled operations that is construction related.

There are no hazardous waste sites within the project area that are on or proposed for listing on the National Priorities List (NPL; EPA 2024b). Additionally, according to the EPA's EnviroMapper database, there are no Superfund sites in the immediate vicinity of SJC (EPA 2024c).

In 2019 a Hazardous Materials Assessment was conducted at the Airport to document hazardous materials. The assessment included an evaluation of hazardous waste generation as well as the existing uses and storage of hazardous materials at SJC (Cornerstone Earth Group 2019). The report also describes contaminated locations on SJC property and the status of remediation efforts.

In 2019, the FAA requested that a Phase I Environmental Site Assessment (ESA) be prepared for Sites 1 and 4 that were being considered for the new ATCT. The Phase I ESA was conducted (Rincon 2020) and three Recognized Environmental Conditions (RECs) were identified:

- Former agricultural use of the site.
- Past release of VOCs at 282 Brokaw Road (hydrologically upgradient of the site).
- California Water Code Section 13267 Order requiring soil and groundwater samples be collected at the Mineta San José International Airport which is considered to be a potential source of per- and polyfluoroalkyl substances (PFAS).

The existing ATCT building was also inspected for asbestos containing material and lead containing material. These materials were not discovered in the existing ATCT building during the investigation.

Also in 2019, a PFAS Preliminary Investigation Workplan was prepared for the entire airport (Woodard & Curran, 2019). It included several investigation areas including two in the vicinity of the proposed ATCT site: 1) the Signature Flight Support Hangars located northwest of the project area includes a fire suppression system connected to tanks containing PFAS-related foam; and 2) the adjacent property to the southeast is a former fire training area. Arsenic, organochlorine pesticides, VOCs, and PFAS were identified as constituents of potential concern from these facilities and other uses of the area.

On June 14, 2022, the Airport submitted a PFAS Phase Two Site Investigation Report (Phase 2 Report) to the San Francisco Bay Regional Water Quality Control Board (Regional Water Board; Woodard & Curran, 2022a). This PFAS Phase Two investigation addressed five locations at the Airport where Aqueous Film-Forming Foam (AFFF), a material that contains PFAS, was stored, used, and/or released by the Airport. AFFF is used for the suppression of fuel fires and is essential for the protection of life and property at airport facilities. In a letter to the Airport dated September 21, 2022, the Regional Water Board approved the Phase Two Report and requested the submittal of an additional site investigation work plan (i.e., Phase Three Work Plan) to assess the potential discharge of PFAS from stormwater and groundwater to the Guadalupe River and further delineation of PFAS in groundwater at the Airport.

Based on the results of the Phase I ESA as well as the results of the PFAS Phase Two Report that identified PFAS in proximity to the proposed ATCT site, the FAA requested that a Phase II ESA be prepared for Sites 1 and 4 (Rincon 2023). Soil and groundwater samples were collected from five soil borings for analysis of PFAS (and other constituents). Soil samples were collected at depths of 1.0, 2.5, and 5.0 feet below ground surface (bgs). Groundwater samples were collected at 15 to 20 feet bgs. PFAS constituents were detected in soil samples at concentrations less than 5 nanograms per gram (ng/g) with one exception. PFOS was detected in one 5-foot sample at 190 ng/g. PFOS was detected more frequently than other PFAS constituents. A total of 12 PFAS constituents were detected in groundwater samples ranging in concentration from 4 nanograms per liter (ng/L) to 1,600 ng/L. Concentrations of perfluorooctanoic acid (PFOA) in groundwater ranged from 6 to 91 ng/L, well below the freshwater aquatic habitat Environmental Screening Level (ESL) of 4,400 ng/L. In four of five samples, concentrations of PFOS ranged from 19 to 65 ng/L, below the freshwater aquatic habitat ESL of 75 ng/L. However, PFOS was detected in one sample at 91 ng/L. The Phase II ESA report concluded that the concentrations of PFAS detected in the soil throughout the site could pose a risk to groundwater.

A Phase Three PFAS Investigation Report was presented to the Regional Water Board on June 28, 2024. The Phase II ESA Report (Rincon, 2023) prepared for the planned new ATCT was also reviewed as part of the Phase Three investigation. The overall goal of the Phase Three investigation was to assess the potential discharge of PFAS from stormwater and groundwater at several locations across the Airport to the Guadalupe River. Stormwater samples were collected in March and April 2024 at three locations. Groundwater samples were collected at two locations and porewater samples were collected at seven

locations in April 2024. Constituents of PFOA and PFOS in stormwater samples were detected at concentrations ranging from 4.0 to 240 ng/L. For comparison with the freshwater aquatic habitat ESLs, concentrations of PFOA ranged from 6.5 to 56 ng/L, significantly below the ESL of 4,400 ng/L. Concentrations of PFOS ranged from 6.0 to 22 ng/L, well below the ESL of 75 ng/L. Similarly, concentrations of PFOA and PFOS in groundwater samples were significantly below the ESLs. PFOS in pore water samples was detected in concentrations above the ESL, but none of these were in the vicinity of the proposed ATCT location. The report stated that the groundwater flow direction in the area of the new ATCT location was northerly under runways 12L/30R and 12R/30L, far upgradient of the Guadalupe River. Therefore, the Phase Three report concluded that additional soil or groundwater sampling in this area was not warranted. Nevertheless, as concluded in the Phase II ESA Report, because of the presence of PFAS in the area, remediation and/or mitigation requirements should continue to be evaluated with input from the Regional Water Board.

The Federal Pollution Prevention Act of 1990 encourages pollution prevention through source reduction, recycling, treatment, and disposal. As part of their operations, SJC encourages good waste reduction practices and strives to reduce waste through recycling and recovery practices. SJC has an education program for staff and tenants related to waste reduction and they consistently work with the City, the Airport tenants, and the Airport waste hauler to prevent and divert waste (SJC 2020a).

Santa Clara County's Integrated Waste Management Plan is used for management of solid waste from SJC. The County has adequate disposal capacity and expects to continue extending that capacity through diversion programs. SJC has a recycling program and is currently diverting 85% of waste from landfill trash as part of the City's off-site sorting at the Materials Recovery Facility. Nonhazardous waste from the Airport, such as that generated during construction projects, is typically sent to one of the following: the Dumbarton Quarry (approximately 20 miles from SJC); Ox Mountain Landfill (approximately 40 miles from SJC); or Keller Canyon Landfill (approximately 60 miles from SJC) in Contra Costa County.

4.4.2 Environmental Consequences

Significant impacts for hazardous materials, pollution prevention and solid waste are defined by FAA Order 1050.1F as those actions which involve property listed (or potentially listed) on the NPL. Also constituting a significant impact are actions that would have difficulty meeting applicable local, state, or Federal laws and regulations on hazardous materials or actions affecting sites known or suspected to be contaminated. Although the FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention, they have identified factors to consider when evaluating impacts. These include assessing whether a project has the potential to violate applicable Federal, state, tribal or local laws or regulations regarding hazardous materials and/or solid waste management; produce an appreciably different quantity or type of hazardous waste; generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; involve a contaminated site (including, but not limited to, a site listed on the NPL);or adversely affect human health and the environment.

Proposed Action

The Proposed Action would result in a short-term and temporary increase in the amount of hazardous materials primarily associated with the use of fuels, lubricants, and fluids for trucks and other construction site vehicles such as graders, bulldozers, and refueling trucks. During construction operations there is a potential for release of petroleum, hydraulic fluids, engine oil, and associated

chemicals. BMPs will be implemented to contain any spills as a matter of practice and contractual obligation.

Construction-related solid waste would be generated during construction activities. Demolition of the existing ATCT would generate concrete, asphalt, and various metal and nonmetal debris in addition to excavated soil. All appropriate permits would be obtained by the contractor prior to commencement of demolition of the ATCT. These include a California State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities and a Santa Clara County Earthmoving Permit/Dust Control Permit along with others that may be identified throughout the process. The construction debris generated by the Proposed Action would be recycled or disposed of according to State and local regulations. Construction-related waste would temporarily increase on-site and would be transported to acceptable recycling or fill locations off-site.

The Airport would ensure compliance with applicable, state, or Federal laws and regulations on hazardous materials. The recommended mitigations contained in the Phase II ESA report would be implemented as needed to address PFAS and benzene contaminated soils at the project site. There would be no significant impact of hazardous materials, pollution prevention, and solid waste as a result of implementing the Proposed Action.

Avoidance, Minimization, and Mitigation Measures

The following measures and BMPs will be implemented to minimize potential impacts to hazardous materials, solid waste, and pollution:

- Develop a hazardous materials response plan and/or a spill prevention, control, and countermeasure plan to identify those precautions, training requirements, and response measures that would be taken to prevent and contain releases of hazardous materials.
- Develop a soil and groundwater management plan prior to the commencement of construction activities to delineate methods and procedures for the handling, management, and disposal of impacted soil in a manner that is protective of human and environmental health.
- Remedial excavations or soil encapsulation may be used to minimize soil impacts.
- Employ source reduction strategies such as recovering, recycling, or composting waste materials.
- Find markets for recovered, recycled, or composted products, or other wastes that are usable for producing energy or other activities.
- Recycle construction debris associated with the action.
- Conduct a Hazardous Materials Survey prior to demolition activities and conduct abatement activities, as necessary.
- Develop detailed plans for site-specific protocols on the handling, storage, and management of hazardous materials at the construction site and for transportation to and from the construction area.

In addition to those measures identified above, appropriate measures would be required during project execution to alert workers of the potential for contamination and to provide guidance for proper notification if a spill or release occurs. In the event of a spill or release, the site would cease operations until protective measures are implemented, and the appropriate regulatory authorities are consulted. A

Hazardous Material Inventory would be completed by the FAA following all demolition activities and prior to property transfer to the Airport.

No Action

Under the No Action Alternative, the ATCT and base building would not be constructed and the existing ATCT would remain in service. Therefore, there would be no increase in the use of hazardous materials and the generation of hazardous wastes and solid wastes would not occur. Existing conditions, including contamination identified during the Phase II Environmental Site Assessment, would continue to be present.

4.5 Historical, Architectural, Archaeological and Cultural Resources

4.5.1 Regulatory Setting and Affected Environment

According to the FAA Order 1050.1F, historical, architectural, archeological, and cultural resources encompass a range of sites, properties, and physical resources relating to human activities, society, and cultural institutions. Such resources include past and present expressions of human culture and history in the physical environment, such as prehistoric and historic archaeological sites, structures, objects, districts, which are considered important to a culture or community. Historical, architectural, archeological, and cultural resources also include aspects of the physical environment, namely natural features and biota, which are a part of traditional ways of life and practices and are associated with community values and institutions.

Historic and cultural resources are protected by multiple federal regulations. Federal agencies are required to consider the effects of actions on historic and cultural resources; definitions of historic and cultural resources under NEPA are broad and can include resources not eligible for the NRHP (ACHP 2013).

The National Historic Preservation Act of 1966 (NHPA) (P.L. 89–665, as amended by P.L. 96-515, 54 U.S.C. § 300101 et seq.) directs the federal government to consider the effects of its actions on historic properties listed or eligible for listing in the NRHP under Section 106 through a compliance process, set forth in the law's implementing regulations, 36 CFR Part 800. Conducting the Section 106 process in coordination with NEPA review of a federal action is an effective way to gather the information needed to assess broad impacts on historical, architectural, archeological, and cultural resources. Steps of the Section 106 compliance process include the following:

1) Establish whether the Proposed Action constitutes an undertaking. Per 36 CFR Part 800.16, an undertaking is an action funded in whole or in part under the direct or indirect jurisdiction of a federal agency. If the Proposed Action is an undertaking with the potential to affect historic properties, the appropriate State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) and other consulting parties (stakeholders), such as relevant Tribes, are identified and consulted with on the project in good faith.

2) Identify NRHP-listed or eligible properties. Eligible historic properties in the geographic area of the Proposed Action (also known as the area of potential effects [APE]) are identified and evaluated for significance, including properties potentially eligible or listed with the NRHP that may be affected by the Proposed Action. If historic properties are not present, the federal agency seeks concurrence of the SHPO/THPO in a 30-day review period and makes information available to other consulting parties.

3) Assess effects of the Proposed Action on eligible historic properties. If the assessment determines no historic properties or no adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are informed and given a 30-day review period. If the assessment determines actual or potential adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are notified for further consultation.

4) Resolve adverse effects to eligible historic properties through consultation with the SHPO/THPO, Advisory Council on Historic Preservation (ACHP), and other consulting parties, as necessary.

FAA Order 1050.1F does not provide a significance threshold for this impact category; however, the FAA has identified a factor to consider when evaluating the context and intensity of potential environmental impacts for historical, architectural, archeological, and cultural resources (see Exhibit 4-1 of FAA Order 1050.1F). This factor includes, but is not limited to, situations in which the proposed action or alternative(s) would result in a finding of Adverse Effect through the Section 106 process (FAA 2015).

Under 36 CFR Part 800, it is the agency's responsibility to define the APE on historic properties in consultation with the SHPO and seek the SHPO's concurrence (36 CFR § 800.4(a)). The APE is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." The agency, in consultation with consulting parties, must identify within the APE historic properties that are either in, or eligible for listing in, the NRHP (36 CFR § 800.4(b)). The Proposed Action would take place within areas that have been previously impacted by development. The APE for this undertaking is defined as the construction areas as depicted on Figure 4-1. The FAA used the boundaries of the area that would have physical disturbance and construction staging to delineate the Direct APE, which encompasses approximately 4.7 acres. The Proposed Action would include approximately 17 feet of excavation for basement construction, with cast-in-drilled-hole pilings up to 70 feet, corresponding to disturbance at depths of approximately 85 to 90 feet below the existing grade. Because this represents disturbance for piling, there would be multiple 24- to 30-inch diameter drilled holes to the aforementioned depth, as opposed to complete removal of soil to that depth. Therefore, within the Direct APE, a depth of disturbance of approximately 90 feet below ground surface is estimated for the vertical APE. Construction staging would occur on previously disturbed areas where there would be no subsurface disturbance. The Indirect APE includes a 100-foot buffer around the Direct APE and encompasses approximately 5.5 acres. The buffer is an estimated distance for any potential indirect construction effects such as, noise, vibration, visual intrusions, etc.

Information about the APE was sent to Tribes and the SHPO. No comments about the APE were received from Tribes. Correspondence with the SHPO about the APE is included in Appendix C.

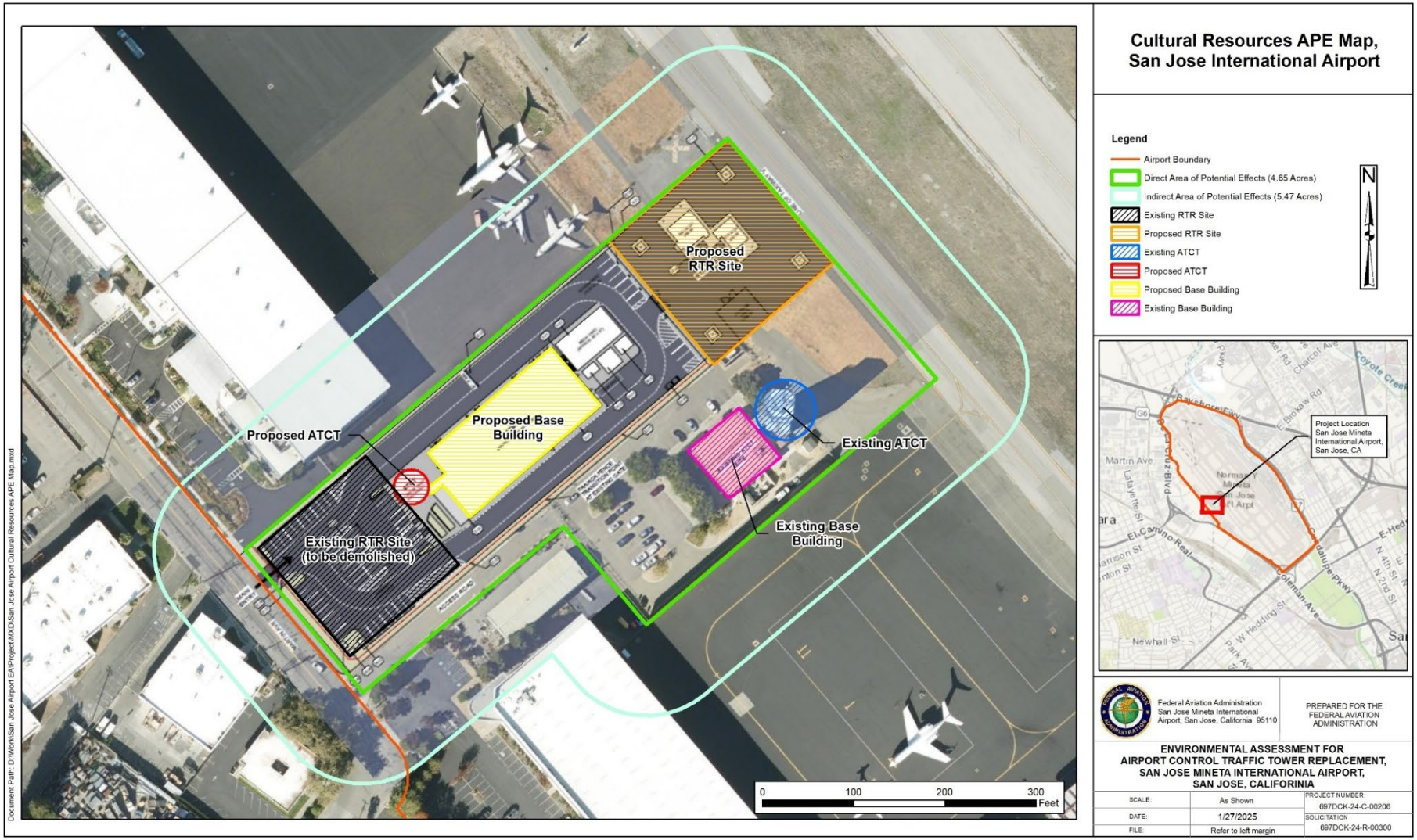


Figure 4-1. Area of Potential Effects.

In 2020, as part of another proposed Airport project, the Airport was evaluated as a district for its potential for listing on the NRHP. The evaluation in that Cultural Resource Report[3] resulted in a recommendation that SJC is not eligible for listing as a district under Criteria A, B, C, or D. Additionally, no individual buildings within the district evaluated are considered individually eligible due to loss of integrity of setting, materials, workmanship, and design.

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the project. The results were negative for any resources in the project area (NAHC 2024). Similarly, previous records searches did not reveal any previously recorded archaeological sites within the APE. The *Archaeological Evaluation of the San José Municipal Airport* (Cartier and Detlefs 1980) and the 1999 San José International Airport Master Plan Update Improvements: Final Environmental Impact Statement (EIS) prepared for SJC notes the occurrence of two previously recorded archaeological sites along with the establishment of five archaeologically sensitive areas within the Airport property. One of the archaeologically sensitive areas (ASA 4) partially overlaps the current RTR facility and one of the previously recorded sites (CA-SCL-430) includes much of the current ATCT, parking areas, and adjacent taxiways. Both ASA 4 and CA-SCL-430 are in areas that have been previously disturbed and the potential for buried resources is considered low. Site CA-SCL-430 is not listed on either the NRHP or the California Register of Historical Resources.

4.5.2 Environmental Consequences

In general, actions that have the potential to affect historic and cultural resources are those that involve modifications to land or buildings and structures, including construction, grading, excavation, maintenance, rehabilitation, and renovation, or the sale or lease of a historic property. Any project that would involve construction, ground disturbance, or modification of the exterior of a historic property, or a property in the viewshed of a historic property or district, may require consultation with the relevant SHPO/THPO and other consulting parties, as appropriate. Other effects to consider include noise, vibration, lighting, and increased traffic. The FAA has not established a significance threshold for historical, architectural, archeological, and cultural resources. FAA Order 1050.1F provides a factor to consider when evaluating potential impacts that is, the action would result in a finding of adverse effect through the Section 106 process.

Proposed Action

The APE is within the built environment of the Airport and has been extensively disturbed through past airport construction activities. The FAA has evaluated the potential for historic properties based on a previously completed studies and determined that the only historic property present in the APE is the previously recorded CA-SCL-430, which was large 300-acre site first recorded in 1980 that included prehistoric lithics and possible ground stone. All of the finds were isolates found on the surface. No prehistoric material was recovered in 237 backhoe test trenches. Additional monitoring by Basin Research Associates over the past 20 years within and adjacent to the mapped resource boundary for various Airport improvements has failed to expose any significant Hispanic or American era cultural

[3] Proposed Terminal B South Concourse Improvements at Norman Y. Mineta San Jose International Airport Cultural Resource Evaluation Report, dated June 2022.

materials. Based on these factors, the FAA finds that the potential for buried resources is low and that the proposed undertaking will not affect any properties listed or eligible for listing on the NRHP. Consultation with the California SHPO occurred as part of the Proposed Action and the FAA has received concurrence from SHPO with the finding of "No Historic Properties Affected" for the undertaking. Correspondence with SHPO is included in Appendix C.

Avoidance, Minimization, and Mitigation Measures

The following measure would be implemented to reduce the potential effects of construction on unidentified archaeological resources:

- FAA would require archaeological monitoring as a condition for ground disturbing work undertaken within the boundary of CA-SCL-430.
- An Inadvertent Discovery Plan would be developed prior to beginning project construction work to outline actions to be taken if cultural resources are discovered during project construction activities. Development of this plan would be included in the construction specifications. If an inadvertent discovery of previously unidentified prehistoric or historic archaeological resources is made, work would stop immediately within a 100-foot radius of the find and SJC will secure services of a qualified archaeologist to evaluate the resource, and the FAA will be notified for coordination with the SHPO. A report evaluating the finding and identifying mitigation for impacts would be prepared by the archaeologist and submitted to the FAA; the City's Director of Planning, Building, and Code Enforcement; and the Airport Director.

No Action

Under the No Action Alternative, a new ATCT would not be constructed and there would be no ground disturbing activities; therefore, there would be no potential for impacts to historical, architectural, archaeological, or cultural resources.

4.6 Land Use

4.6.1 Regulatory Setting and Affected Environment

Impacts to land use generally result from acquisition of property, conversion of land to a different use, or noise impacts associated with airport operations. Potential impacts of FAA actions may also affect land use compatibility (e.g., disruption of communities, relocation, induced socioeconomic impacts, land uses protected under Section 4(f) of the U.S. Department of Transportation Act). The impacts on land use, if any, should be analyzed and described under the appropriate impact category with any necessary cross references to the land use section. FAA Order 1050.1F states that the FAA has not established a significance threshold for land use, and the FAA has not provided specific factors to consider in making a significance determination for land use. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories. For example, Section 11.3.1 of the Desk Reference provides guidance on land use impacts in relation to aircraft noise. The Desk Reference states that if the proposal would result in other impacts that have land use ramifications, for example, disruption of communities, relocation, and induced socioeconomic impacts, the impacts on land use should be analyzed in these contexts and described accordingly under the appropriate impact category (FAA 2023a).

SJC is located within the City of San José in Santa Clara County. A Comprehensive Land Use Plan for SJC was adopted by the Santa Clara County Airport Land Use Commission in May 2011; the plan was amended in November 2016. Comprehensive Land Use Plan implementation is intended to prevent

future incompatible development from encroaching on SJC and allow for its development in accordance with the current Airport Master Plan. San José Municipal Code, Title 25, regulates Airport developments and operations and relates to the Airport Master Plan. The City of San José and the City of Santa Clara both have general plans that include the Airport. The City of San José adopted its Envision San José 2040 General Plan (San José General Plan) in November 2011 to help guide and regulate future growth and development in the City including SJC and land use south and east of the Airport property. The City of Santa Clara adopted its 2010-2035 General Plan (Santa Clara General Plan) in November 2010 to help guide and regulate land uses around SJC within the City of Santa Clara to the north and west.

SJC and surrounding areas are predominantly urban in character because of the proximity to San José's downtown. The San José General Plan and the Santa Clara General Plan, identify land use in the vicinity of the Airport. Within the City of San José, SJC is bounded on the east by the Guadalupe River and State Route 87, on the south by Interstate 880, on the west by Coleman Avenue, and on the north by U.S. Highway 101. The primary land uses east and northeast of SJC are commercial and residential. Areas to the south of SJC are comprised of a mix of residential, industrial, and public land uses. There are multiple sports parks and other outdoor venues, including ones at Santa Clara University, that are south of the project area; all of these are located at least 0.5 miles from the project area. SJC is bordered to the north and west by the City of Santa Clara and consists of primarily industrial land use. The project area includes both on and off Airport property and consists of aeronautical and non-aeronautical land use as delineated on the Future Land Use Plan of the Airport Layout Plan.

SJC, including the project area, is zoned Heavy Industrial (City of San José 2024). Adjacent land uses are consistent with land use designations detailed in the General Plans and Zoning Ordinance. The areas north and west of SJC in the City of Santa Clara are zoned as Light and Heavy Industrial. South and west of the Airport in San José there are a combination of Industrial, Commercial, and Planned Development zoning. Areas to the east are zoned as commercial and residential uses.

4.6.2 Environmental Consequences

The FAA has not established a significance threshold for land use, nor has the FAA provided specific factors to consider in making a significance determination for land use. The determination that significant impacts exist in the land use impact category is normally dependent on the significance of other impact categories (FAA 2015).

Proposed Action

The proposed ATCT replacement is planned both inside and outside the Airport Operations Area. For the proposed improvements that would occur on off-airport property, a lease would be modified by FAA to include the land area required to contain the facility. This would result in a land use change in that area. This change would be compatible with zoning for that area and adjacent land uses are expected to be compatible with noise and proximity to the Airport. No change in zoning would be required.

No Action

Under the No Action Alternative, the ATCT would not be replaced and there would be no impacts to land uses.

4.7 Natural Resources and Energy Supply

4.7.1 Regulatory Setting and Affected Environment

FAA Order 1050.1F describes the natural resources and energy supply impact category as related to a project's consumption of natural resources (such as water, asphalt, aggregate, wood, etc.) and use of energy supplies (such as coal for electricity; natural gas for heating; and fuel for aircraft, commercial space launch vehicles, or other ground vehicles). Consumption of natural resources and use of energy supplies may result from construction, operation, and/or maintenance of a proposed action. The Desk Reference identifies the following related to natural resources and energy supply: Energy Independence and Security Act (42 U.S.C. 17001 et seq.); Energy Policy Act (42 U.S.C. 15801 et seq.); and Executive Order 13834, *Efficient Federal Operations*, 83 Federal Register 23771. The Order states "It is the policy of the FAA… consistent with NEPA . . . to encourage the development of FAA facilities that exemplify the highest standards of design including sustainability principles. All elements of the transportation system should be designed with a view to conservation of energy and other resources, pollution prevention, harmonization with the community environment, and sensitivity to the concerns of the traveling public" (FAA 2023a). Energy in the form of electricity, natural gas, aviation fuel, diesel fuel, and gasoline is required for the operation of aircraft and airport facilities. Additionally, new facility construction requires consumption of energy and natural resources.

There are no known natural resources or mineral or energy resources located within the project area. The urban area surrounding the airport has ample natural resources to support SJC, including materials and water sources needed for construction and operations at the Airport.

Water utilities, provided by South Bay Water Recycling, are used for airport related activities, landscaping, and potable water use. The Airport uses recycled water for toilet flushing and landscaping to reduce water use. South Bay Water Recycling recycles and treats the water provided.

An Energy Technical Report completed in 2019 analyzed the energy consumption from planned SJC Master Plan projects and determined that proposed Master Plan projects would not require additional generation capacity beyond more general state-wide expansion" (Ramboll US Corporation 2019). Utility power for the Airport is derived from San José Clean Energy and is transmitted and delivered by Pacific Gas & Electric Co. power networks. Approximately 85% of the electricity is currently sourced from carbon free sources, including 39% which is sourced from renewable resources.

4.7.2 Environmental Consequences

The FAA has not established a significance threshold for natural resources and energy supply. The factor to consider is if "the action would have the potential to cause demand to exceed available or future supplies of these resources"[4] (FAA 2015).

Proposed Action

The consumption of natural resources and energy supply would be required by the Proposed Action during both construction and operation. Energy in the form of electricity, gasoline, and diesel fuel would

[4] FAA Order 1050.1F, Exhibit 4-1, p. 4-8

be consumed during construction, and, once operational, the Proposed Action would require additional energy use to provide water, heating, air conditioning, lighting, electricity, and telecommunications to the new ATCT and associated infrastructure. Existing nearby utility connections would be used and extensive underground utility work would not be necessary to connect to existing utilities.

There is sufficient energy and resources to supply utilities to the facilities during construction and for operation. Because the size of the ATCT would be increased, including a larger base building (12,800 ft^2), there would be an increase in energy consumption related to operation of the new ATCT. However, the increase would not exceed the available supply of natural resources or energy available either locally or regionally. The anticipated increase in additional resources and energy consumption required by the Proposed Action would not represent a significant additional demand on local utilities. Design of the facility, which would incorporate strategies for energy and water conservation, would reduce energy demand.

Construction of the Proposed Action would require typical construction materials and the use of energy and water for construction activities. The municipal systems have adequate supply of these resources and needed construction materials are readily available in the region. The Proposed Action would not involve the use of any unusual or scarce resources nor cause a demand for the use of any unusual or scarce resources in short supply. BMPs will be implemented to conserve water and power during construction to the extent possible and construction waste will be minimized by recycling construction materials when possible. As the Proposed Action would not result in use of natural resources or energy in excess of available supplies, implementation of the Proposed Action would not result in significant direct, indirect, or cumulative impacts on natural resources or energy.

No Action

Under the No Action Alternative, there would be no construction or change in operations of the ATCT. The existing ATCT and associated facilities would remain in place and would be assumed to result in similar demands for water, generation of waste, and electricity demand. Thus, there would be no changes to this resource.

4.8 Noise

4.8.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F states that noise is considered unwanted sound that can disturb routine activities (e.g., sleep, conversation, student learning) and can cause annoyance (FAA 2023a). Noise associated with aircraft and airport operations can adversely impact surrounding land uses that are noise sensitive. According to FAA Order 1050.1F, a noise sensitive area is “an area where noise interferes with normal activities associated with its use. Normally noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites” (FAA 2015).

A Title 14 CFR Part 150, Airport Noise Compatibility Study was completed by SJC in 1985-1986. The study set forth Noise Control Program measures to ensure lands adjacent to SJC are compatible with aviation noise (SJC 2024). The area around SJC that is closest to the project area is primarily industrial and there are commercial and other facilities in the area; these are not considered noise sensitive.

Typical existing noise conditions within the area are dominated by transportation facilities; areas at and around the Airport are primarily influenced by aircraft operations (takeoffs and landings). Roadway

noise is generated by vehicles traveling on major and minor roads surrounding the airport, including but not limited to Coleman Avenue, Martin Avenue, and Brokaw Road that are nearest to the project area. There are no residences adjacent to the project area; the closest residences are approximately 0.5 mile away.

4.8.2 Environmental Consequences

FAA Order 1050.1F provides the FAA's significance threshold for noise as an action that would increase noise by Day Night Average Sound Level (DNL; CNEL in California) 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the CNEL 65 dB noise exposure level, or that will be exposed at or above the CNEL 65 dB level due to a CNEL 1.5 dB or greater increase, when compared to the No Action Alternative for the same timeframe. The CNEL is a community noise equivalent level, which is a cumulative metric with a 5-dB penalty applied to evening aircraft events (7:00 pm – 9:59 pm) and 10-dB penalty applied to nighttime aircraft events (10:00 pm – 6:59 am). There would be no increase in aircraft operations at SJC related to the construction and operation of the proposed ATCT, beyond that which is currently occurring. Therefore, these noise levels related to aircraft events are not applicable to the Proposed Action. To consider impacts from construction and demolition, a list of typical equipment that would be used during construction and demolition activities was developed, and the typical noise levels associated with the equipment was identified. No significance threshold has been established by the FAA for construction equipment noise.

Proposed Action

The Proposed Action would not change the type of aircraft, increase aircraft operations, or number of airport users at the airport. Because the Proposed Action would not increase the number of existing or forecasted aircraft operations, there would be no aircraft-related changes to noise under the Proposed Action; the analysis instead focused on the potential for construction-related noise impacts. Construction-related noise is a function of the types of equipment being used, the distance to potential receptors, and the duration of construction activities. When noise levels from a point source (such as a construction site) are referenced, they typically include a specified distance from the source, because the intensity of noise decreases over distance from the source. The standard reduction for point source noise is estimated at 6 dBA per doubling of distance from the source.

Construction of the Proposed Action would result in temporary elevated noise levels from activities such as on-site construction equipment, personal vehicles used by construction employees to access parking areas, and delivery/haul trucks used for equipment and material delivery and haul trips. Coleman Avenue, Martin Avenue, and Brokaw Road, along with other area roads, would be used for hauling. Surrounding roadways would experience an increase in traffic and consequently traffic noise related to these activities, but traffic is not predicted to double in volume, and any increases in traffic noise is not anticipated to be noticeable to average human hearing. Increases in traffic would be temporary in nature and would not result in significant impacts to noise receptors adjacent to the haul routes or surrounding roadways.

Construction of the Proposed Action would generate increased noise during construction activities such as demolition, excavation, grading, and structural work, but would be generally localized at the vicinity of the construction site. Localized increases in noise from construction equipment and vehicles would be temporary and would not disrupt normal airport operations or activities. There are no sensitive noise

facilities (e.g., residences and schools) located within 500 feet of the project. The closest residences are approximately 0.5 mile west of any construction activities.

Levels of noise generated from construction of the Proposed Action would vary based on the construction intensity and distance to a given receptor. Estimated typical maximum sound levels from various types of construction equipment that are likely to be used during construction of the Proposed Action and their respective noise levels at varying distances are shown in Table 4-6.

Table 4-6. Typical Construction Equipment Noise

Equipment Type	Typical Maximum Sound Level in dB(A) at 50 feet	Typical Maximum Sound Level in dB(A) at 450 feet
Dump Truck	87	69
Grader	84	66
Jackhammer	88	70
Dozer	86	68
Loader	78	60
Generator	77	59
Compressor	80	62
Backhoe	84	66

Source: Federal Highway Administration, Construction Noise Handbook, 9.0 Construction Equipment Noise Levels and Ranges (2006). Available at https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm

Noise from construction and demolition equipment would attenuate to less than CNEL 70 dB at the closest residence (Table 4-6). In addition, noise from these sources would be temporary and intermittent depending on the type of construction equipment needed. Therefore, given the distance from the construction and demolition activities at the Airport and the existing background noise associated with multiple roads and a railway between the closest residences and the Airport, there would not be a significant impact.

Additionally, the contractor would comply with the City's Municipal Code; the code specifies allowable types of construction noise, days and hours of construction, and limits unnecessary idling, among other conditions. The construction phase of this project is expected to create a temporary and negligible increase in noise in the vicinity of the project area. The increased noise would last for the duration of construction activities during authorized hours of operation. Therefore, the Proposed Action would not have a significant noise or noise-compatible land use impact.

Avoidance, Minimization, and Mitigation Measures

Although there would be no significant noise impacts from construction of the Proposed Action, the following measures would be implemented to reduce the potential effects of construction noise:

- Use operational controls, such as limiting vehicle engine idling on-site and time-of-day restrictions for certain activities.
- Use quieter or ambient-sensitive back-up alarms on construction equipment whenever practical.
- Use noise pathway controls, including noise barriers and enclosures free from gaps and holes, placed as close as possible to construction areas.
- Keep the public informed about construction activities and efforts to minimize noise in the community.

- Use complaint response procedures.

No Action

Under the No Action Alternative, a new ATCT would not be constructed; therefore, there would be no noise impacts.

4.9 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

4.9.1 Regulatory Setting and Affected Environment

4.9.1.1.1 Socioeconomics

The FAA Order 1050.1F describes socioeconomics as an umbrella term used to describe aspects of a project that are either social or economic in nature, or a combination of the two. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by a proposed action. According to FAA Order 1050.1F, a significance threshold for socioeconomics has not been established by the FAA; however, factors have been identified to consider when evaluating potential environmental impacts for socioeconomics including situations in which the action has a potential to result in the following: 1) Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area); 2) Disrupt or divide the physical arrangement of an established community; 3) Cause extensive relocation when sufficient replacement housing is unavailable; 4) Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities; 5) Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; and 6) Produce a substantial change in the community tax base (FAA 2015).

4.9.1.1.2 Environmental Justice

In accordance with Executive Order 14173, *Ending Illegal Discrimination and Restoring Merit-Based Opportunity*, the Environmental Justice analysis in FAA Order 1050.1F was not implemented.

4.9.1.1.3 Children's Environmental Health and Safety Risks

Pursuant to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, 62 Federal Register 19885, (April 21, 1997), federal agencies are directed, as appropriate and consistent with the agency's mission, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The FAA is encouraged to identify and assess environmental health risks and safety risks that the agency has reason to believe could disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to. No significance threshold for impacts to children's environmental health and safety has been established by the FAA; however, whether or not an action would have the potential to lead to a disproportionate health or safety risk to children following has been identified for consideration (FAA 2023a).

4.9.2 Environmental Consequences

The FAA has not established significance thresholds for socioeconomics, environmental justice, and children's environmental health and safety; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts for socioeconomics. environmental justice, and children's environmental health and safety (see Exhibit 4-1 of FAA Order 1050.1F). The determination that significant impacts exist in the socioeconomic impact category is normally dependent on whether the potential socioeconomic impact(s) are interrelated with or inseparable from a physical or natural environmental effect. Note these factors are not intended to be thresholds. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors considering context and intensity to determine if there are significant impacts (FAA 2015).

Proposed Action

The proposed action area is contained entirely within the airport boundary. No businesses, residences, or other properties are located within the immediate project area. No land acquisition or relocation is required, access to services would be maintained, and roads surrounding the airport would not be substantially affected. There would be minor, temporary economic benefits from additional construction jobs, but no substantial or significant economic growth in the area would occur as a result of the Proposed Action.

The Proposed Action would not change the type of aircraft, number of flights, or number of airport users at the airport; therefore, operation of the Proposed Action would not result in release in environmental contaminants, an increase in air pollutant emissions, or an increase in noise. The Proposed Action would not involve land acquisition, relocation of any children or other individuals, or result in the disruption of any existing communities. The Proposed Action would be located entirely on airport property and would not disrupt or divide the community. The project is not expected to significantly affect environmental resources of the airport or create any substances that could be harmful to children if ingested or encountered. Overall, the Proposed Action would not have any direct or indirect impacts that would adversely impact environmental health and safety of children.

No Action

Under the No Action Alternative, a new ATCT would not be constructed, and there would be no effect on socioeconomic issues. The No Action Alternative would not result in any changes and thus would not affect the environmental health and safety of children.

4.10 Visual Effects

4.10.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F states that visually protected resources can be located within or near a project area and could be affected by light emissions and/or changes to visual resources and the visual character. The Desk Reference states that visual effects deal broadly with the extent to which a proposed action would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Light emissions include any light that emanates from a light source into the surrounding environment, such as airfield lighting, navigational aids, terminal lighting, parking facility lighting, and roadway lighting. Glare is a type of light emission that occurs when light is reflected off a surface (e.g., window glass, solar panels, or reflective building surfaces). All Airport lighting, including

that for vehicle parking areas, roadways, ramps, and buildings, is shielded or adjusted to avoid interference with air traffic control or aircraft operations. No light sensitive areas are located within the project area. Nighttime lighting at the Airport does not impact nearby residential or commercial areas because of the Airport's proximity to urbanized areas including downtown San José.

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. Visual character refers to the overall visual makeup of the existing environment where a proposed action would be located. For example, areas in close proximity to densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, or deserts, etc. (FAA 2023a).

The Airport is not located in the viewshed of a designated scenic vista or state scenic highway; it is located in an urbanized area of San José and is typical of this type of environment. The ATCT is the most notable visual feature within the project area, but it fits with the visual character of the surroundings that includes a mix of low- to mid-rise commercial, industrial, and public use buildings and surface parking areas. Urban features that are highly visible near SJC include State Route 87, U.S. Interstate 101, PayPal Park, and several multi-story buildings on adjacent roadways.

4.10.2 Environmental Consequences

The FAA has not established a significance threshold for visual effects in the FAA Order 1050.1F; however, the following factors have been identified for consideration when evaluating potential environmental impacts for visual effects: 1) Light Emissions Effects – The degree to which the action would have the potential to create annoyance or interfere with normal activities from light emissions; and the degree to which the action would have the potential to affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources; and 2) Visual Resources and Visual Character Effects – The degree to which the action would have the potential to affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; the degree to which the action would have the potential to contrast with the visual resources and/or visual character in the study area; and the degree to which the action would have the potential to block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Proposed Action

The Proposed Action would replace the existing ATCT which has a height of approximately 158 feet AGL with a new ATCT which has a height of 185 feet AGL. The Proposed Action would construct the new ATCT and associated structures approximately 400 feet west of the existing ATCT. The new tower would be taller but would operate in the same manner and serve in the same capacity. The light intensity and color of the new tower would be similar to the old tower. The Proposed Action would not affect the nature of the visual character of the area and although the new tower would be taller it would not contrast or obstruct any visual resources.

Construction activities are not anticipated to cause impacts from light emissions or to visual resources and/or visual character of the area surrounding the Airport. Construction activities would occur primarily during daylight hours and any nighttime lighting would be negligible and temporary. Additional

lighting would be added for the new parking lot and administrative base building, but because this additional light would be in a developed industrial area, impacts from light emissions are anticipated to be negligible.

Avoidance, Minimization, and Mitigation Measures

Although there would be no direct or indirect impacts from light emissions or to visual resources and visual character, construction activities would be conducted during daylight hours to the extent possible to minimize potential construction effects.

No Action

Under the No Action Alternative, the new ATCT would not be constructed. There would be no impacts from light emissions or to visual resources and visual character.

4.11 Water Resources

4.11.1 Regulatory Setting and Affected Environment

The FAA Order 1050.1F Desk Reference describes water resources as surface waters and groundwater that are important in providing drinking water and in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, and floodplains do not function as separate and isolated components of the watershed, but rather as a single, integrated natural system. Because of the close and integrated relationship of these resources, their analysis is conducted under the all-encompassing water resources impact category. The overall hydrology of the site is highly modified due to construction and operation of the SJC airport, surrounding airport facilities, and the airport's stormwater system underlaying the site.

Floodplains

Floodplains are lowland areas adjoining inland and coastal waters that are periodically inundated by flood waters (FAA 2023a). Floodplain data was retrieved from the Federal Emergency Management Agency (FEMA) Flood Map Service Center. FEMA Flood Insurance Rate Map Panel 06085C0231H (effective May 18, 2009) indicates portions of Airport property are located within the 100-year floodplain (FEMA 2020). FAA Order 1050.1F states that floodplain impacts would be significant if: The action would cause notable adverse impacts on natural and beneficial floodplain values. Natural and beneficial floodplain values are defined in Paragraph 4.k of DOT Order 5650.2, Floodplain Management and Protection. The project area consists mainly of areas that are impervious. The existing ATCT is in a Zone D area that has an undetermined flood hazard. The adjacent area, including the area where the proposed ATCT would be constructed is in a Zone X area with a reduced flood risk due to levee.

Surface Water

Surface waters include streams, rivers, lakes, ponds, estuaries, and oceans. The existing surface water information for the project area was compiled from previously prepared reports for the SJC property. FAA Order 1050.1F Desk Reference states that a significant impact exists if the action would: 1) Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or 2) Contaminate public drinking water supply such that public health may be adversely affected.

The Airport lies within the larger San Francisco Bay watershed (HUC 6-180500). There are no surface waters within the project area. The Guadalupe River, which is approximately 0.7 mile northeast of the project area, is the nearest surface water to the project area, and is separated by runways, the terminal, the Guadalupe River Trail, and Airport Boulevard.

The City of San José operates under Municipal Regional Stormwater NPDES Permit No. CAS612008 for the discharge of stormwater runoff from Municipal Separate Storm Sewer System administered by the San Francisco Bay RWQCB (California RWQCB 2015). SJC operates under its own industrial NPDES permit (CAS000001) that requires SJC to maintain BMPs and to conduct periodic testing of stormwater to identify pollutant levels that may exceed established permit thresholds. In order to comply with their NPDES permit, SJC maintains a Storm Water Pollution Prevention Plan (SWPPP) that details locations of potential pollutant sources and describes minimum BMP requirements related to various activities and facilities at the Airport (SJC 2020b).

As part of the SWPPP, SJC and its tenants are required to implement and maintain both non-structural and structural BMPs. Structural BMPs implemented at the Airport include drains; oil/water separators; treatment systems; retention pond; secondary containment structures; and erosion and sediment controls. Non-structural BMPs include good housekeeping; preventative maintenance; proper storage, handling, and disposal of wastes; and spill and leak protection response, among other things. Surface-stormwater runoff at SJC and within the project area is collected in the Clean Water Act NPDES permitted Airport storm drain system which ultimately discharges through outfalls into the Guadalupe River. USEPA is responsible for the enforcement of Spill Prevention Control and Countermeasures Plan requirements, which are intended to prevent oil spills from reaching navigable waters.

Groundwater

Groundwater is water that does not evaporate, run off, or transpire, and filters through the soil and subsurface. FAA Order 1050.1F states that a significant impact to groundwater exists if the action would: 1) Exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or 2) Contaminate an aquifer used for public water supply such that public health may be adversely affected. The project area for groundwater includes all areas where the ground could be disturbed by construction of the Proposed Action, where impervious surfaces could change rates of groundwater infiltration, where construction vehicles and other equipment could potentially impact groundwater, and where airport operations could increase spills or leaks.

The depth to first groundwater at the Airport is typically less than 10 feet below ground surface (Valley Water 2024). While there are no active water production wells on Airport property, active wells are present within ¼-mile of and to the west of the Airport property (Santa Clara Valley Water 2024). SJC is not located over an EPA designated sole source aquifer. The closest sole source aquifer – the Santa Margarita Aquifer, Scotts Valley – is located approximately 16 miles south of SJC.

4.11.2 Environmental Consequences

FAA Order 1050.1F provides the FAA's significance threshold for floodplains, surface water, and groundwater. For floodplains, a significant impact would occur when the action would "cause notable adverse impacts on natural and beneficial floodplain values," as defined in Paragraph 4.k of DOT Order 5650.2, Floodplain Management and Protection (FAA 2015). For surface water, a significant impact would occur when the action would "exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate public drinking water supply such that public health may be adversely affected" (FAA 2015). For groundwater, a significant impact would occur when the action would "exceed groundwater quality standards established by federal, state, local, and tribal regulatory agencies; or contaminate an aquifer used for public water supply such that public health may be adversely affected" (FAA 2015).

Proposed Action

The Proposed Action would not modify the existing floodplain and there would be no notable adverse impacts to natural and beneficial floodplain values. No surface water resources would be directly or indirectly impacted to construct the new ATCT. The Proposed Action is located on existing impervious areas included in the existing drainage system. A storm drainage study will be performed to determine the expected runoff from the site. The design will comply with State and local agencies direction and recommendations. While collection point and pipe alignment modifications would be necessary to ensure proper stormwater collection into the system, no changes to stormwater collection at the Airport would occur. Therefore, the existing storm drain system would continue to support the Proposed Action and there would be no significant impact to downstream surface waters due to the Proposed Action. In compliance with the NPDES permit, stormwater runoff would continue to be managed through the storm drain system and stormwater management would be designed to control runoff associated with the Proposed Action. The SJC SWPPP would be updated to reflect the Proposed Action. The minor alterations in the drainage pattern associated with the Proposed Action would not substantially alter the overall drainage pattern of the Airport and stormwater would continue to be managed within the Airport's storm drainage system. The project will comply with all Provision C.3. requirements of the Municipal Regional Permit for this project related to stormwater treatment. SJC would continue to operate in accordance with its Clean Water Act permits, including utilizing BMPs and maintaining a SWPPP.

Construction activities would include ground disturbance for the ATCT and base building and potential utility trenching with the use of construction equipment, which would increase the potential for sediments and other pollutants to be present in stormwater runoff. Due to the depth to first groundwater being less than 10 feet, it is possible that excavations required for the proposed building foundation would intercept and be flooded with groundwater. Dewatering activities would adhere to the requirements in the City Municipal Separate Storm Sewer System Permit, the SJC Industrial Permit, as well as the SJC SWPPP to reduce potential impacts. Construction activities would comply with the NPDES General Permit for Storm Water Discharges Associated with Construction Activities. As part of the General Permit requirements, a construction SWPPP would be developed to identify BMPs to minimize erosion and sedimentation impacts. The Proposed Action would not result in withdrawal of groundwater, create any new wells supplying water to facilities, or cause any reduction in groundwater levels that could impact other groundwater users in surrounding locations. The Proposed Action would not have a significant impact on groundwater.

Avoidance, Minimization, and Mitigation Measures

There are no significant impacts anticipated to floodplains, surface waters, or groundwater; however, minimization and avoidance measures in the form of BMPs will be implemented to further reduce potential impacts from the Proposed Action. Some of these are summarized below:

- In accordance with the construction general permit and the SWPPP, include provisions for the management of construction-related dewatering activities, if required.
- Construct post-construction stormwater controls to reduce stormwater runoff and pollutant loads in compliance with Clean Water Act NPDES permits. Stormwater design will be considered and design will comply with FAA AC 150/5200 33C related to hazardous wildlife attractants.
- The Airport will continue to implement the SWPPP and include updates to the SWPPP in the form of non-structural and structural BMPs as new projects are constructed.

- Require construction General Permits for stormwater discharges during construction activities.
- Include an erosion and sediment control plan with BMPs for reducing impacts to surface runoff and the drainage system during construction. Control measures will include soil stabilization practices, sediment control practices, wind erosion control practices, sediment tracking control practices, and waste management and disposal control practices.

No Action

Under the No Action Alternative, the new ATCT would not be constructed and there would be no impacts to floodplains, surface waters, and groundwater.

4.12 Cumulative Impacts

This section describes the cumulative impacts of the Proposed Action to those resources where potential impacts have been identified – namely air quality; biological resources; and hazardous materials, solid waste, and pollution prevention – as described above. Cumulative impacts to environmental resources result from incremental effects of the Proposed Action when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals. In accordance with NEPA, a discussion of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or planned for implementation in the near future is required. The No Action Alternative serves as the reference point for which cumulative impacts are measured.

The Proposed Action would result in minor impacts to air quality, biological resources, and hazardous materials, solid waste, and pollution prevention, and these resources were analyzed with other projects occurring within the past (five years), present, and reasonably foreseeable future (five years) to determine whether the cumulative effects would cause any significant environmental effect.

FAA Order 1050.1F provides guidance for determining significance under NEPA. An EA is required to discuss the potential direct, indirect, and cumulative effects of a proposed action and their significance and determine whether a Proposed Action would cause a cumulative impact when assessed in conjunction with other projects within defined temporal and geographic boundaries. In determining the significance of the cumulative effects, the same thresholds of significance used in identifying individual project-related impacts apply. The incremental direct and indirect impacts associated with the Proposed Action were considered with the direct and indirect effects of other projects to determine whether they would cause additive or synergistic effects.

A number of construction, reconstruction, and demolition projects have occurred at the Airport over the last five years and several more are planned in the near future. All of these construction projects have similar effects as described by the Proposed Action and no cumulative impacts is anticipated. The list of past, present, and reasonably foreseeable future actions is derived from the recently completed Environmental Assessment for the Terminal B South Concourse Improvements at the Norman Y. Mineta San José International Airport (FAA 2023c), which considered projects within a 1 mile buffer of that project area, and represents a sample of the projects on- and off-Airport with the potential to affect the same resources considered in this analysis.

Past and Present Actions

- Construction of Coleman Highline – Hotel (off Airport).

- Short-term Parking Garage Construction.
- ARFF Facility Construction.
- Taxiway V Closing and Replacement.

Reasonably Foreseeable Actions

- Mitigate direct aircraft access from west side apron to Taxiways B, C, & D.
- Construct 7 New Taxiway Connectors (V1-V6) between West Apron & Taxiway V.
- General Aviation Facilities Expanded.
- West General Aviation Apron Expansion.
- Stormwater Bioretention Cell east of Airport Boulevard.
- Gateway Crossing (off Airport).
- Coleman Highline – Parking Garage (off Airport).

Air Quality

The Proposed Action would produce some occasional dust in the air and vehicle emissions during construction and demolition phases. Planned construction and demolition projects in the SJC vicinity would also produce similar effects on air quality from dust and vehicle emissions. The cumulative effects of all construction activity in the vicinity of SJC would depend on the timing of the various projects.

All construction projects would be required to obtain any required construction permits and adhere to any permit stipulations intended to minimize effects to air quality. The incremental increase in emissions from the Proposed Action when added to other past, present, and reasonably foreseeable emission sources in the vicinity would not produce a cumulative impact on air quality.

Biological Resources

The Proposed Action is not anticipated to contribute to significant cumulative impacts to biological resources when considered in combination with other past, present, and reasonably foreseeable projects. During construction of the Proposed Action, ground disturbance would occur and would convert 3.7 acres of parking lot to buildings and other impervious surfaces. Permanent habitat impacts have already occurred at the Proposed Action location. There are no federal listed species present in the study area and state listed species would not be further impacted by the Proposed Action. In summary, no cumulative impacts would occur to protected species or to habitat critical to the survival of protected species as the Airport and surrounding area is not suitable habitat for listed species. Burrowing owls would continue to occupy ruderal grassland habitat at the Airport.

Hazardous Materials, Solid Waste, and Pollution Prevention

The Proposed Action would replace an existing ATCT and base building and not result in a significantly increased infrastructure. Hazardous materials would be generated during demolition of the ATCT and would be disposed of according to State and local regulation. It is likely that contaminated media would be generated based on the results of the Phase II ESA. Additional hazardous materials would be associated with equipment required for construction and maintenance of the proposed facility, including a fuel storage tank for the emergency generator at the new ATCT. Planned maintenance and construction projects at the Airport and within the City of San José would also introduce hazardous materials associated with construction activities to the area, but adherence to Federal and State hazardous materials regulations coupled with BMPs to reduce pollution and solid waste would prevent any significant cumulative effects from occurring.

5 List of Agencies and Persons Consulted

This chapter summarizes the public outreach, agency coordination, and tribal consultation that occurred for this project.

5.1 Public Outreach

The FAA announced the availability of, and invited public comments on, the draft EA for the proposed project in compliance with NEPA and the NHPA on June 20, 2025. The announcement and copy of the EA for review was posted on the San Jose Airport website at https://www.flysanjose.com/environment and on the FAA website at https://www.faa.gov/air_traffic/atf. Additionally, a hard copy was made available for review at the Dr. Martin Luther King Jr. Library, 150 E San Fernando St, San Jose, CA, 95112. The draft EA was made available to the public for a minimum 30-day public review and comment period from June 20 to July 25, 2025. Written comments regarding this environmental action should be submitted no later than July 25, 2025. Comments may be sent via email to vincent.t.nguyen@faa.gov. The FAA will address comments received on the draft EA in the final EA.

5.2 Agency Coordination

The FAA initiated consultation under Section 106 of the National Historic Preservation Act with the California State Historic Preservation Office (SHPO) on December 11, 2024. The FAA determined that there are no historic properties within the Area of Potential Effects (APE), therefore the FAA is seeking concurrence from the SHPO that a finding of No Historic Properties Affected is appropriate. The SHPO responded on January 13, 2025, with a request for additional information. The FAA responded to the SHPO request on March 13, 2025, and the SHPO responded on April 14, 2025, with a concurrence of "No Historic Properties Affected" for the undertaking.

5.3 Tribal Consultation

In order to fulfill requirements of 36 CFR Part 800, the FAA initiated government-to-government consultation as described in Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, and FAA Order 1210.20, *American Indian and Alaska Native Tribal Consultation Policy and Procedures*, to ensure that Federally recognized tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect tribes.

A list of tribes with potential knowledge of the project area was obtained from the California Native American Heritage Commission on September 30, 2024. Based on this list, tribal consultation letters were sent to the Amah Mutsun Tribal Band, the Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the Northern Valley Yokut/Ohlone Tribe, the Ohlone Indian Tribe, the Tamien Nation, and the Wutsache Indian Tribe/Eshom Valley Band. A response was received from the Tamien Nation on December 18, 2024, requesting additional information regarding the specific location, scope, and potential impacts of the project. The FAA has complied with their request for information by submitting all relevant project documents. However, the Tamien Nation has not responded to the FAA's request for consultation on multiple occasions. No other responses have been received as of the date of the draft EA being published.

6 List of Preparers

This EA was prepared by an interdisciplinary team of staff from the FAA, with assistance from North Wind Site Services (North Wind). A list of the names and roles and responsibilities of the preparers is provided in Table 6-1.

Table 6-1. List of Preparers

Name	Role or Responsibility
Vincent Nguyen	FAA Air Traffic Operations - Technical Operations, WSA Engineering Services (AJW-2W16E), Environmental Engineer
Patrick Walsh	FAA AJW-2W16E – EOSH Support Center, General Engineer
Nani Jacobson	FAA San Francisco Airports District Office
North Wind	NEPA document development

7 References

Advisory Council on Historic Preservation (ACHP). 2013. *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106.* https://www.achp.gov/sites/default/files/2017-02/NEPA_NHPA_Section_106_Handbook_Mar2013_0.pdf

California Regional Water Quality Control Board (California RWQCB). 2015. California Regional Water Quality Control Board, San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2_2015_0049_amended.pdf, November 19, 2015. Accessed September 22, 2024.

City of San José. 2024. City of San José, Land Use Zoning. https://experience.arcgis.com/experience/c23301b236d041d5a5358a5dce1e989d

Cornerstone Earth Group. 2019. Hazardous Materials Assessment: San José International Airport, October 2019.

Environmental Protection Agency (EPA). 2024a. Sources of Greenhouse Gas Emissions by Economic Sector in 2022. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

EPA. 2024b. United State Environmental Protection Agency, Superfund National Priority List (NPL) Sites – by State, https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#CA. Accessed October 14, 2024.

EPA. 2024c. EnviroMapper database. https://geopub.epa.gov/myem/efmap/index.html?ve=12,37.36189000000007,-121.92884999999995&pText=San%20Jos%C3%A9%20International%20Airport&miny=37.33189&minx=-121.95885&maxy=37.39189&maxx=-121.89885.

EPA. 2024d. EJSCREEN: Environmental Justice Screening and Mapping Tool. https://www.epa.gov/ejscreen.

Federal Aviation Administration (FAA). 1999. San José International Airport Master Plan Update Improvements: Final Environmental Impact Statement, Volume 3. San Jose, CA: FAA, October 1999.

FAA. 2015. FAA Order 1050.1F - Environmental Impacts: Policies and Procedures. https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf.

FAA. 2023a. Order 1050.1F Desk Reference – Federal Aviation Administration Office of Environment and Energy (Version 3). https://www.faa.gov/media/31111.

FAA. 2023b. Bipartisan Infrastructure Law (BIL) Airport Traffic Control Tower (ATCT) Replacement Program Programmatic Environmental Assessment. September 2023.

FAA. 2023c. Final Environmental Assessment, Terminal B South Concourse Improvements, Norman Y. Mineta San José International Airport.

FAA. 2024. Aviation Emissions and Air Quality Handbook Version 4. July 2024.

Federal Emergency Management Agency (FEMA). 2020. Flood Map Service Center, updated October 2020. Panel 06085C0231H (effective May 18, 2009).

Federal Highway Administration. 2006. Federal Highway Administration, Construction Noise Handbook, 9.0 Construction Equipment Noise Levels and Ranges (2006). Available at https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm

Fish and Wildlife Service (FWS). 2024. IPaC Information for Planning and Consultation. https://ipac.ecosphere.fws.gov/. Accessed September 24, 2024.

International Energy Agency (IEA). 2016. CO2 Emissions from Fuel Combustion. https://www.oecd.org/content/dam/oecd/en/publications/reports/2016/10/co2-emissions-from-fuel-combustion-2016_g1g6980e/co2_fuel-2016-en.pdf

National Marine Fisheries Service (NMFS). 2023. Protected Resources App (v1.0). https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9.

Native American Heritage Commission (NAHC). 2024. Native American HERITAGE COMMISSION Sacred Lands File search. September 30, 2024.

Ramboll US Corporation. 2019. Mineta San José International Airport Energy Final Technical Report, August 2019, p. 28

Rincon Consultants, Inc. (Rincon). 2020. Phase I Environmental Site Assessment, New ATCT Facility, Site 1 and Site 4, Portion of Mineta San José International Airport, San José, California. April 10, 2020.

Rincon. 2023. Phase II Environmental Site Assessment, New ATCT Facility, Site 1 and Site 4, Portion of Mineta San José International Airport. June 5, 2023.

San José International Airport (SJC). 2020a. SJC Sustainability Management Plan. https://www.flysanjose.com/sites/default/files/commission/2020_0121_Final%20SMP.PDF.

SJC. 2020b. Norman Y. Mineta San José International Airport Stormwater Pollution Prevention Plan, updated February 19, 2020.

SJC. 2024. SJC Airport website, Frequently Asked Questions. Noise Office Frequently Asked Questions. https://www.flysanjose.com/faq?type=4.

Santa Clara Valley Water. 2024. Well Information App, https://gis.valleywater.org/wellinfo/, accessed September 19, 2024.

Woodard & Curran. 2019. PFAS Preliminary Investigation Work Plan, Norman Y. Mineta San José International Airport, 1701 Airport Blvd, San José, California. June 13, 2019.

Woodard & Curran. 2022a. SJC Fuel Terminal PFAS Investigation Report, Norman Y. Mineta San José International Airport. June 14, 2022.

Woodard & Curran. 2022b. Phase 3 PFAS Site Investigation Work Plan, Norman Y. Mineta San José International Airport. December 22, 2022.

Woodard & Curran. 2024. Phase 3 PFAS Investigation Report, Norman Y. Mineta San José International Airport. June 28, 2024.

Appendix A: San José International Airport, San José, CA, Airport Traffic Control Tower Siting Report

Federal Aviation Administration

San José International Airport
San José, CA

Airport Traffic Control Tower
Siting Report

Engineering Services
Terminal Engineering Center

Developed by:
Chanh Huynh

Effective Date: July 6, 2023

EXECUTIVE SUMMARY

The Norman Y. Mineta San José International Airport (SJC) Airport Traffic Control Tower (ATCT) is a Federal Aviation Administration (FAA) owned facility. The existing SJC tower is a Low Activity Level Leo A. Daly/HNTB Corporation tower commissioned in 1994. The existing cab size is 560 square feet with a cab eye level of 78 feet 4 inches Above Ground Level (AGL). The SJC ATCT is a Tier 2, Level 7 facility with six operational positions. A Quick Look (QL) evaluation, dated August 21, 2017, reviewed and confirmed a significant number of Line-of-Sight (LOS) deficiencies, and a siting study and safety analysis was initiated. This siting report provides an overview of all potential sites considered, a detailed evaluation of the preferred site options, and the conclusions and recommendations for a potential future replacement of the ATCT.

The first visit to the Airport Facilities Terminal Integration Laboratory (AFTIL) in Atlantic City, New Jersey, conducted in July 2019, evaluated four initial sites. Site 2 and Site 3 were eliminated due to location and tower height. Site 1 and Site 4 were identified as preferred locations by the SJC Air Traffic controllers. The preferred sites were further evaluated during the AFTIL-2 and in consideration of future airport expansion.

Recommended Action/Location

Site 4 is the final recommended site; it is located adjacent to the existing tower. The tower will have a 12-sided 525 square foot cab with mullions and slat-wall, with a total of seven operational positions. The proposed Base Building is estimated at 12,817 square feet. The proposed tower, at an eye height of 155 feet AGL, provides unobstructed views of all controlled airport surface areas and maximum visibility of all airborne traffic. Site 4 also provides maximum flexibility to SJC in accordance with future developments in the Airport Master Plan. The recommended site provides the best possible Air Traffic Control Specialist (ATCS) visibility of air traffic operations.

The final site recommendation comes as a result of following the FAA's siting process, which follows guidance contained in FAA Order 6480.4B, Airport Traffic Control Siting Process. The cost estimates and building sizes presented in this report are for planning and site selection purposes only.

Impacts

Site 4 does not have any Terminal Instrument Procedures (TERPS) impacts. The structure at Site 4 will obstruct the Radio Frequency (RF) Transmissions from the SJC/A/B/C RTR/ECS located southeast of the proposed location. The structure must be marked and/or lighted in accordance with Advisory Circular 70/7460-1M, Obstruction Marking and Lighting. There are no other known impacts in terms of safety, LOS, future airport development, or local weather phenomena with the potential to impair visibility. Refer to Paragraph 1.4.3, Siting Criteria Evaluation, for impacts from the proposed construction of this ATCT at Site 4.

APPROVAL AUTHORITIES

DANIEL N PUTERBAUGH

Digitally signed by DANIEL N PUTERBAUGH
Date: 2023.10.24 07:09:42 -07'00'

Director of Air Traffic Services, Western Service Area

THOMAS K WALDRON

Digitally signed by THOMAS K WALDRON
Date: 2023.10.25 09:42:45 -07'00'

Director of Technical Operations, Western Service Area

RANDALL D BURKE

Digitally signed by RANDALL D BURKE
Date: 2023.11.16 16:15:32 -05'00'

Director of Air Traffic Control Facilities, FAA Headquarters

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 PREFERRED SITES

All pre-sites were evaluated against the required siting criteria. Visibility and impacts were assessed and documented to determine which sites were viable sites. Air Traffic representatives selected the following preferred sites based on team discussion and inputs on the advantages and disadvantages of each site: Site 1 and Site 4.

Though a particular site may be preferable in terms of safety, operations, cost, constructability, or other criteria, it is understood that any of the preferred sites would be acceptable as the recommended site should the identified recommended site be eliminated for any reason.

1.1 Preferred Sites Aerial View

Figure 1. Preferred Sites Aerial View

1.2 Site Comparison Chart

Item Description	Site 1			Site 4		
Recommended Site				Recommended		
Latitude	37°21′35.09″N			37°21′34.23″N		
Longitude	121°55′58.20″W			121°55′58.85″W		
Airport Quadrant	SW			SW		
Cab Floor Level (AGL)	148′			150′		
Cab Floor Level (AMSL)	197′			200′		
Eye-Level (AGL)	153′			155′		
Eye-Level (AMSL)	202′			205′		
Top of Tower (AGL)	183′			185′		
Top of Tower (AMSL)	232′			235′		
Estimated Ground Level (AMSL)	49′			50′		
Maximum Distance (to farthest point on all runways and taxi ways)	5,948′			6,010′		
2-Point Lateral Discrimination (Deg)	Pass			Pass		
Object Discrimination (Pass/Fail) Front View (Dodge Caravan)	Pass			Pass		
Object Discrimination (Pass/Fail) Front View (C-172)	Pass			Pass		
Line of Sight Angle of Incidence	Pass			Pass		
Cab Size	525 sq ft			525 sq ft		
Cab Orientation	NNE			NNE		
Columns/Mullions	Mullions			Mullions		
Console Type (traditional, slat wall)	Slat-Wall			Slat-Wall		
Land Area	2.46 acres			2.46 acres		
Access to ATCT Site (Yes or No)	Yes			Yes		
TERPS Impacts	Yes			None		
14 CFR Part 77 Impacts	None			None		
Environmental Issues	Yes			Yes		
ATCT Potential Impacts to Future & Existing Navaids	Yes			Yes		
Comparative Cost Estimate* ($100K per vertical foot)	$14.8M			$13.8M		
Safety Assessment Initial Risk Ranking	**L**	**M**	**H**	**L**	**M**	**H**
	0	0	0	0	0	0
Safety Assessment Predicted Residual Risk Ranking	**L**	**M**	**H**	**L**	**M**	**H**
	0	0	0	0	0	0

* The comparative cost estimate is not for budgetary purposes; it is for site comparison purposes only.

1.3 Site 1

1.3.1 Description

Site 1 is located on the west side of runway 12R-30L, in front of the FAA Remote Transmitter/ Receiver (RTR) site.

1.3.2 Site Reference Data

A. Latitude/Longitude: 37° 21′ 35.09″ N, 121° 55′ 58.20″ W

B. Eye Level: 153′ AGL

C. Top of Tower: 183′ AGL

D. Site Elevation: 49′ AMSL

1.3.3 Siting Criteria Evaluation

A. Terminal Instrument Procedures (TERPS)

The structure will have an In Flight Rules (IFR) impact on existing operating procedures at the airport; amendment of Instrument Flight Procedures will be required. The following procedures are affected: ILS or LOC Rwy 30L - S-ILS 30L# increase DA to 307. ILS Rwy 30L (SA CAT I-II). A 1A accuracy code and maximum height of 185 feet AGL is suggested to mitigate the IFR effect to the ILS 30L. Refer to Appendix F for details.

B. 14 CFR Part 77, Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) requirements

The structure must be marked and/or lighted in accordance with Advisory Circular 70/7460-1M. Refer to Appendix F for additional information.

C. Impacts to Communications, Navigation and Surveillance Equipment

Per 2022-AWP-697-NRA, 2022-AWP-698-NRA and 2022-AWP-699-NRA, the potential ATCT Site 1 will obstruct the RF Transmissions from the SJC/A/B/C RTR/ECS located 20 feet to the southeast of the proposed location. Tech Ops recommends that the current Engineering Services project's scope be expanded to include a Remote Communications Facility (RCF) siting study report to relocate the SJC/A/B/C RTR/ECS per JO 6580.6A, Remote Communications Facilities Siting Process, to accommodate ATCT Site 1, or alternatively, a separate Engineering Services project be created to work with the current project with the scope of relocating the RTR/ECS. Refer to Appendix F for additional information.

D. Visibility Performance Requirements

There are no obstructed views. Observation capability requirements for detection and recognition were met. The LOS angle of incidence met the minimum of 0.8 degrees above

the horizontal. The two-point lateral discrimination is met at Site 1. Refer to Appendix H for details.

E. Safety Assessment

Site 1 has no hazards. Safety Risk Management (SRM) Panel attendees agreed that operations will not introduce risk into the National Airspace (NAS) for both existing and proposed structures depicted in the SJC Future Airport Layout Plan Update, dated October 2018. Refer to Appendix K for the full report.

F. Operational Requirements

1. ATCT Orientation: North Northeast (NNE); SJC ATC determined cab orientation to Local Control (LC) position (i.e., to the left of a mullion which faces northeast and perpendicular to the parallel runways).
2. Weather: Ceilings and visibility did not impact the determination of the ATCT height.
3. Look-Down Angle: The look-down angle at Site 1 is adequate to see all movement areas of the airport.
4. Look-Up Angle: No issues were identified.
5. Look Across LOS: Look Across LOS in the cab is adequate to see all movement areas.
6. Cab Mullion/Column Orientation: Mullions are selected.
7. Access: Site 1 is accessible.
8. Construction: During construction of Site 1, a portion of the downwind to runway 12R/30L would be blocked from the current tower. A very small portion of small Visual Flight Rules (VFR) traffic would be affected by this blockage. Due to the amount of time of blockage (a few seconds), the amount of traffic affected and additional procedures to mitigate this blockage, this issue was considered a minor issue.
9. Non-Movement Areas: No issues were identified.
10. Cab Size Evaluation: A physical space study was conducted in a 525 square foot cab. No issues were identified.
11. Rotating Beacon: The airport rotating beacon may have to be shielded due to the height of this site. Once construction is complete and the view from the cab can be confirmed, the rotating beacon may need to be shielded.

G. Economic Considerations

Consideration was given to economic factors when evaluating ATCT sites. Refer to Appendix B for a detailed cost estimate.

H. Environmental

Based on the results of the Phase I ESA and the siting study, a Phase II ESA was prepared for the 3.71 acre parcel which includes Site 1 and Site 4. Based on the constituents of concern (soil, groundwater, and soil vapor), engineering controls should be considered during design and construction to mitigate the risks. Based on the circumstances of the site, it is recommended to engage a regulatory agency and the SJC Airport Authority for oversight of mitigation measures and implementation during the design and construction processes. Refer to Appendix G for details.

1.4 Site 4

1.4.1 Description

Site 4 is located on the west side of runway 12R-30L, in front of the FAA RTR site, approximately 120 feet behind Site 1.

1.4.2 Site Reference Data

A. Latitude/Longitude: 37° 21′ 34.23″ N, 121° 55′ 58.85″ W

B. Eye Level: 155′ AGL

C. Top of Tower: 185′ AGL

D. Site Elevation: 50′ AMSL

1.4.3 Siting Criteria Evaluation

A. TERPS

No negative impacts to existing or planned precision approach TERPS surfaces were identified at Site 4. Refer to Appendix F for additional information.

B. 14 CFR Part 77, Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) requirements

The structure must be marked and/or lighted in accordance with Advisory Circular 70/7460-1M. Refer to Appendix F for additional information.

C. Impacts to Communications, Navigation and Surveillance Equipment

This site will obstruct the RF Transmissions from the SJC/A/B/C RTR/ECS located southeast of the proposed location. Tech Ops recommends that the current Engineering Services project's scope be expanded to include an RCF siting study report to relocate the

SJC/A/B/C RTR/ECS per JO 6580.6A to accommodate this site, or alternatively, a separate Engineering Services project need to be created to evaluate alternative locations for SJC/A/B/C RTR/ECS per JO 6580.6A to accommodate this site. Refer to Appendix F for additional information.

D. Visibility Performance Requirements

There are no obstructed views. Observation capability requirements for detection and recognition were met. The LOS angle of incidence met the minimum of 0.8 degrees above the horizontal. The two-point lateral discrimination is met at Site 4. Refer to Appendix H for details.

E. Safety Assessment

Site 4 has no hazards. SRM Panel attendees agreed that operations will not introduce risk into the NAS for both existing and proposed structures depicted in the SJC Future Airport Layout Plan Update, dated October 2018. Refer to Appendix K for the full report.

F. Operational Requirements

1. ATCT Orientation: NNE; SJC ATC determined cab orientation to the LC position (i.e., to the left of a mullion which faces northeast and perpendicular to the parallel runways).
2. Weather: Ceilings and visibility did not impact the determination of the ATCT height.
3. Look-Down Angle: The look-down angle at Site 4 is adequate to see all movement areas of the airport.
4. Look-Up Angle: No issues were identified.
5. Look Across LOS: Look Across LOS in the cab is adequate to see all movement areas.
6. Cab Mullion/Column Orientation: Mullions are selected.
7. Construction: During construction of Site 4, a portion of the downwind to runway 12R/30L would be blocked from the current tower. A very small portion of small VFR traffic would be affected by this blockage. Due to the amount of time of blockage (a few seconds), the amount of traffic affected and additional procedures to mitigate this blockage, this issue was considered a minor issue.
8. Access: Site 4 is accessible.
9. Non-Movement Areas: No issues were identified.
10. Cab Size Evaluation: A physical space study was conducted in a 525 square foot cab. No issues were identified.

11. Rotating Beacon: The airport rotating beacon may have to be shielded due to the height of this site. Once construction is complete and the view from the cab can be confirmed, the rotating beacon may need to be shielded.

G. Economic Considerations

Consideration was given to economic factors when evaluating ATCT sites. Refer to Appendix B for a detailed cost estimate.

H. Environmental

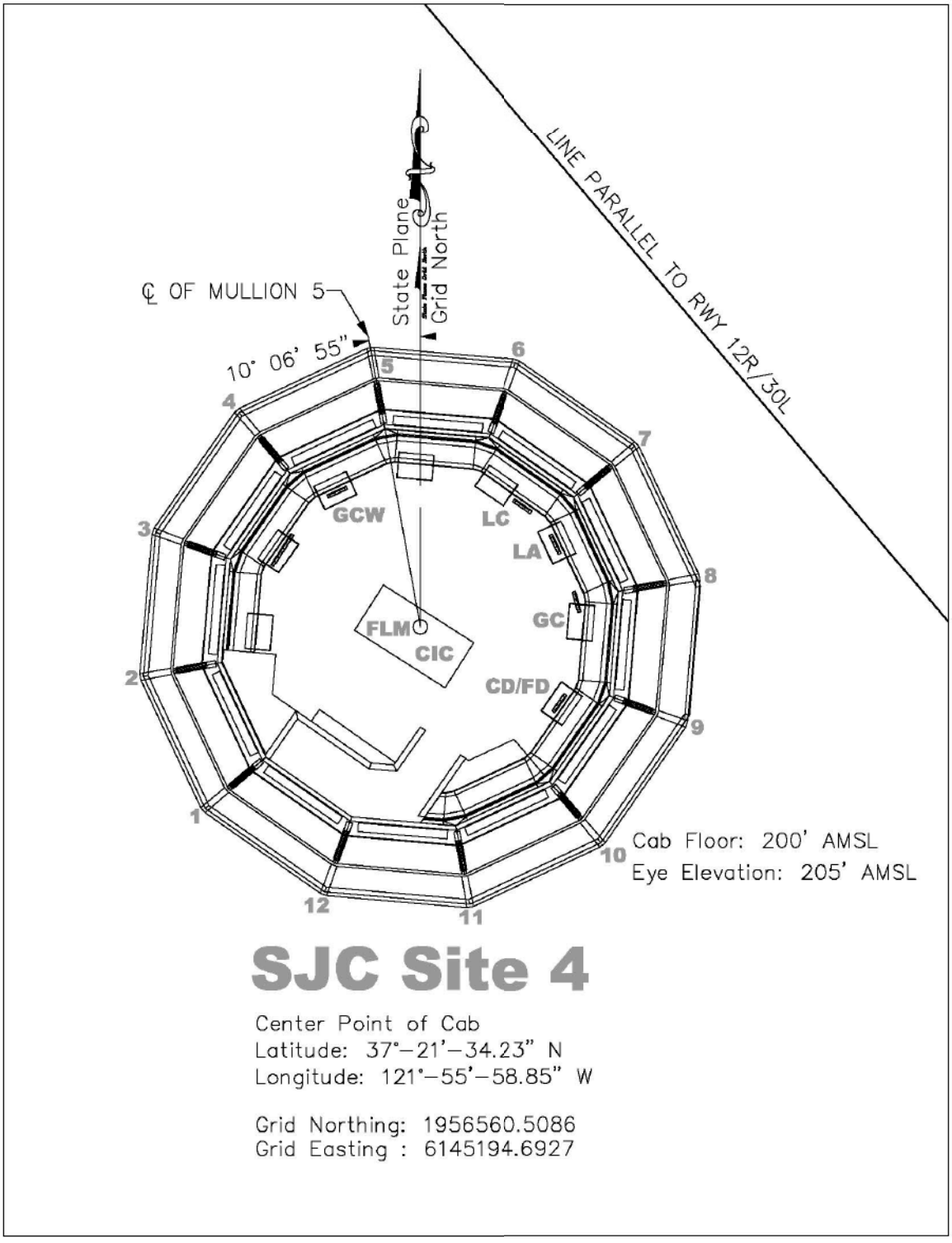
Based on the results of the Phase I ESA and the siting study, a Phase II ESA was prepared for the 3.71 acre parcel which includes Site 1 and Site 4. Based on the constituents of concern (soil, groundwater, and soil vapor), engineering controls should be considered during design and construction to mitigate the risks. Based on the circumstances of the site, it is recommended to engage a regulatory agency and the SJC Airport Authority for oversight of mitigation measures and implementation during the design and construction processes. Refer to Appendix G for details.

2.0 FINAL SITE RECOMMENDATION

Site 4 was selected by the siting team as the recommended site. This site provides the best overall viewing angles to the movement areas. The base building is estimated to be 12,817 square feet and will house technical operations personnel and equipment. The airport sponsor has agreed to 3.71 acres for the tower and base building construction. The actual size and occupants will be a future consideration for the lead engineer. Site 4 provides a good view of the field in front of the controllers with less movement left/right than the existing tower. Other areas of improvement over the existing ATCT included visibility of approach and departure paths, run-up pad towards the approach end runway 30L and a better ability to distinguish whether an aircraft was on taxiway Z or taxiway Y located on the opposite side of the field.

3.0 CAB SIZE AND ORIENTATION

The ATCT will have a 12-sided cab 525 square feet in size with mullions and slat-wall, and will be oriented NNE.



4.0 SUPPLEMENTAL INFORMATION

Appendix A – Airport Concurrence Letter

Appendix B – Cost Estimate

Appendix C – All Sites Evaluated

Appendix D – Panoramic Views

Appendix E – Drawings (Cab Layout, Airport Layout Plan, Cab Structures, Airport Cable Drawings)

Appendix F – Obstruction Evaluations/Airport Airspace Analysis (OE/AAA)

Appendix G – Environmental Documentation

Appendix H – Human Factors Analysis

Appendix I – Servicing Security Element

Appendix J – Meeting Minutes and Other Pertinent Information

Appendix K – Safety Risk Management Document

Appendix L – Siting Report Amendments

Appendix A – Airport Concurrence Letter

Refer to the Knowledge Sharing Network (KSN) for the airport concurrence letter.

Appendix B – Cost Estimate

Refer to the KSN for Site 1 and Site 4 cost estimates.

Appendix C – All Sites Evaluated

A. Initial Sites Assessed – Preferred

1. Site 1

Reference Site Location: Front of RTR Site

Site Orientation: North Northeast

Minimum Eye Level: 93 feet AMSL

Eye Level AMSL: 202 feet

TOT AMSL: 232 feet

TOT AGL: 183 feet

Eye Level AGL: 153 feet

Ground Level: 49 feet

Advantages:

- Mitigates all Quick Look issues.
- Provides better overall LOS to movement areas, especially the gates.
- Lower height and cost than Site 4.
- Airport and ATC favorite site.
- There are no hazards; however, there are potential issues that are captured below for possible mitigation in the future:
    - The airport rotating beacon may have to be shielded due to the height of this site; the beacon light may flash into the tower cab.
    - The scoreboard lights for the San Francisco 49s (SFO) football team may cause glare in the higher new tower cab; it is visible at the threshold of Runway 30. This situation will require coordination with SFO management.

Disadvantages:

- The land acreage discussed during the AFTIL-1 was 2.46 acres; with that acreage, it would be difficult for construction requirements (i.e., approximately a 10,000 square feet base building, Tower, staging area, cranes, etc.). The airport subsequently agreed to 3.71 acres.

- May need to remove the RTR site; this could cost up to $5 million.
- There are serious sun glare issues that will be addressed in the safety assessment.

Site 1 provides a good view of the field in front of the controllers with less movement left/right than the existing tower. Other areas of improvement over the existing ATCT include visibility of approach and departure paths, run-up pad towards the approach end runway 30L and a better ability to distinguish whether an aircraft was on taxiway Z or Y located on the opposite side of the field.

2. Site 4

Reference Site Location: Front of RTR Site

Site Orientation: North Northeast

Eye Level AMSL: 208 feet

Eye Level AGL: 158 feet

TOT AMSL: 238 feet

TOT AGL: 188 feet

Ground Level: 50 feet

Site 4, at a Top of Tower height of 188 feet AGL (238 feet AMSL), penetrated the ILS missed approach obstacle surface by 2.13 feet. In order to have an SA CAT I or an SA CAT II ILS, the standard ILS must be clear of all penetrations on final and in the missed approach. Lowering the Site 4 height by 3 feet resolves these issues. The AFTIL will revise the model to present Site 4 at this height.

Advantages:

- Mitigates all Quick Look issues, but Site 1 mitigates the parallax issues at runway 30L more than this Site 3.
- There are no hazards; however, there are potential issues that are captured below for possible mitigation in the future:
    - The airport rotating beacon may have to be shielded due to the height of this site; the beacon light may flash into the tower cab.

Disadvantages:

- Land acreage: With 2.46 acres; it will be difficult for construction requirements (i.e., approximately a 10,000 square feet base building, Tower, staging area, cranes, etc.)

- May need to remove the RTR site; this could cost up to $5 million.
- Does not mitigate the Runway 30L parallax as well as Site 1.
- The score board lights for the San Francisco 49s (SFO) football team may cause glare in the higher new tower cab; it is visible at the threshold of Runway 30. This situation will require coordination with SFO management.
- There is serious sun glare issues that will be addressed in the safety assessment.

Site 4 provides a good view of the field in front of the controllers with less movement left/right than the existing tower. Other areas of improvement over the existing ATCT included visibility of approach and departure paths, run-up pad towards the approach end runway 30L and a better ability to distinguish whether an aircraft was on taxiway Z or Y located on the opposite side of the field.

B. Initial Sites Assessed – Non-Viable

1. Site 2: Site 2 was eliminated due to LOS obstruction to the gates; the tower controllers control push backs. It would require excessive height to see the gate areas.

2. Site 3: Site 3 was eliminated due to the location; it was outside of the allocated area for the sites and therefore infringed upon airport plans for improvements.

Appendix D – Panoramic Views

Refer to the KSN for panoramic views of Site 1 and Site 4.

Appendix E – Drawings (Cab Layout, Airport Layout Plan, Cab Structures, Airport Cable Drawings)

Refer to the KSN for relevant drawings.

Appendix F – Obstruction Evaluations/Airport Airspace Analysis (OE/AAA)

Refer to the KSN for the Site 1 and Site 4 final determination letters.

Appendix G – Environmental Documentation

Based on the results of the Phase I ESA (refer to the KSN) and siting study, a Phase II ESA (refer to the KSN) was prepared for the 3.71 acre parcel which includes Site 1 and Site 4. Five sampling locations were selected throughout the parcel, and a total of 15 soil samples were collected (3 for each site). The samples were tested for arsenic, organochlorine pesticides (OCPs), and Per- and Polyfluorinated Substances (PFAS). Additionally, five groundwater samples were collected and analyzed for volatile organic compounds (VOC) and PFAS, and six soil vapor samples were collected and analyzed for VOCs and fixed gases with helium.

Laboratory analysis of the soil samples revealed that arsenic and OCP concentrations did not exceed the commercial/industrial or construction worker Environmental Screening levels (ESL), however, Dieldrin levels above the commercial/industrial ESL was detected in one sample in the northeasterly portion of the site. PFAS at concentrations above the commercial/industrial ESL was detected throughout the site, indicating evidence there may have been an onsite release. Groundwater sample analysis also revealed PFAS contamination, but no VOCs. Soil vapor testing detected benzene levels above the commercial/industrial ESL in several locations throughout the site.

Table G-1. Constituents of Concern

Medium	Analytes and Method
Soil	Dieldrin, PFOS, PFOA
Groundwater	PFOS, PFOA
Soil Vapor	Benzene

PFOA – perfluorooctanoic acid
PFOS – perfluorooctanesulfonic acid

Based on the constituents of concern, engineering controls should be considered during design and construction to mitigate the risks. Engineering controls for benzene vapor intrusion may include a vapor barrier, an air conditioning system with high air exchange rates, or creating positive pressure within the facility relative to the sub slab environment. Construction may disturb the soil areas contaminated by Dieldrin, so a soil and groundwater management plan (SGMP) is highly recommended prior to the commencement of construction activities. PFAS is an emerging contaminant without clear requirements for cleanup or mitigation from the regulatory agencies. Based on the circumstances of the site, it is recommended to engage a regulatory agency and the SJC Airport Authority for oversight of mitigation measures and implementation during the design and construction processes

Refer to the KSN for the complete Phase I and Phase II ESAs.

Appendix H – Human Factors Analysis

Refer to the KSN for the human factors analysis of Site 1 and Site 4.

Appendix I – Servicing Security Element

Refer to the KSN for the security siting and structural protective measures required for SJC based on Facility Security Level (FSL) 2 Critical Infrastructure (CI) requirements.

Appendix J – Meeting Minutes and Other Pertinent Information

Refer to the KSN for meeting minutes and other pertinent information.

Appendix K – Safety Risk Management Document

Refer to the KSN for the complete report.

Appendix L – Siting Report Amendments

Not applicable.

Appendix B: USFWS Information, Planning, and Conservation Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 09/24/2024 19:27:01 UTC
Project Code: 2024-0148735
Project Name: San Jose Airport Tower Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2024-0148735
Project Name: San Jose Airport Tower Replacement
Project Type: Airport - Maintenance/Modification
Project Description: Proposed action involves new tower and base building, moving some transmitters, and then demo of the old tower and base building.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.359762599999996,-121.93218192687462,14z

Counties: Santa Clara County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern *Sternula antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
California Ridgway"s Rail *Rallus obsoletus obsoletus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: Central Coast Distinct Population Segment (Central Coast DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Robust Spineflower *Chorizanthe robusta var. robusta*	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/9287

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: North Wind Resource
Consulting Name: Scott Webster
Address: 1425 Higham
St City: Idaho Falls
State: ID
Zip: 83402
Email swebster@northwindgrp.com
Phone: 2085577839

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Aviation Administration

Appendix C: SHPO and Tribal Consultation

U.S. Department
of Transportation

**Federal Aviation
Administration**

Air Traffic Organization
Engineering Services
777 Aviation Boulevard,
El Segundo, CA 90245

December 10, 2024

[redacted]

Section 106 Consultation for the Proposed Replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California

Dear Chairperson:

The Federal Aviation Administration (FAA), in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA) and implementing regulations 36 CFR Part 800, would like to invite the [redacted] to participate in consultation for the aforementioned project. We are also initiating government-to-government consultation in accordance with Executive Order 13175, Consultation and Coordination with Indian and Tribal Governments, and FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation, Policy, and Procedures. The FAA is interested in knowing if your Tribe attaches religious or cultural significance to the location shown in the attachments so we may appropriately consider your interests. The proposed action is summarized below.

Description of the Undertaking
The FAA is proposing to build and operate a new Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California. The proposed action includes replacement of the ATCT, constructing a new base building adjacent to the new ATCT, and relocating the remote transmitter/receiver (RTR). The proposed location of the new ATCT and associated infrastructure is on an approximately 3.7-acre previously disturbed site adjacent to the existing ATCT. The proposed site is located north of the intersection of Martin Avenue and the access road to the existing ATCT. The coordinates of the proposed ATCT location are Latitude 37° 21' 34.23" N and Longitude 121° 55' 58.85" W (see Attachment A). The site is located both inside and outside the Airport Operations Area (AOA) on land that would be leased from the airport (specifically, the new RTR site would be inside the existing AOA boundary and the remainder of the site includes the existing RTR site and adjacent surface parking lot). A lease would be modified by FAA to include the land area required to contain the new and existing facility. Access to the site would be from Martin Avenue and the access road towards the existing tower.

The purpose of the proposed action is to address a number of line-of-sight deficiencies that have been identified for the existing SJC ATCT. The existing ATCT was commissioned in 1994 and is beyond its useful design life and has reached its operational and functional capability. A siting study and safety analysis has been completed and the final site recommendation was developed by following the FAA's siting process and guidance contained in FAA Order 6480.4B, Airport Traffic Control Siting Process. The current ATCT does not have the ability to accommodate upgrades to the latest air traffic control technologies, lacks personnel space requirements and modern amenities, and exhibits physical problems such as maintenance-intensive deficient mechanical appurtenances (e.g., heating and ventilation, plumbing). The proposed ATCT would enable the installation of modern and required air traffic control equipment, provide adequate space and an enhanced work environment for FAA personnel, lower operating costs, and improve environmental performance, resulting in energy savings, water efficiency, reduced carbon emissions, and improved indoor air quality. The proposed action would provide for a modern,

operationally efficient ATCT that would meet all applicable FAA requirements and would provide unobstructed views of all controlled airport surface areas and maximum visibility of all airborne traffic.

The proposed location for the new ATCT and base building is west of the existing ATCT on a site that is currently occupied by the existing RTR site and an airport employee parking lot, and would include a parking lot, utility lines, and driveways where construction, maintenance, and usage effects would occur (see Attachment A). The new ATCT would be approximately 185 feet tall at the top of the tower/antenna and would have an approximately 550-square foot cab, and an approximately 12,800-square foot single-story administrative base building. Existing airport roads would be used during construction and maintenance. Staging areas would be on airport property near the existing ATCT.

For uninterrupted air traffic control services, the current ATCT would be demolished after construction of the new ATCT is completed. Upon removal of the structure, the location would be matched to the surrounding impervious surfaces. The new RTR site would be updated to the latest FAA and industry standards. It would be connected to the old ATCT throughout the duration of construction of the new ATCT and cut over to the new ATCT upon construction completion.

Area of Potential Effects
The Area of Potential Effects (APE), as defined at 36 CFR 800.16(d), is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties. The proposed action would take place within areas of airport property that have been impacted by previous development. The project site is a highly disturbed area that has long been, and is currently being, used for airport purposes.

The APE for the proposed action includes an approximately 4-acre area around the existing ATCT and proposed ATCT and associated infrastructure, where construction, demolition, maintenance, and usage effects may occur. New utilities would be placed from existing lines within the APE. Existing airport perimeter and maintenance roads and public access roads would be used for construction and maintenance traffic. The proposed ATCT would be visible from much of the surrounding area, which is comprised primarily of airport hangers and industrial/commercial warehouses and offices.

Historic Property Identification,
A reconnaissance level survey of historic-age buildings (45 years or older) on SJC property was conducted in 2020 and the airport was evaluated as a district for its potential for listing on the National Register of Historic Places (NRHP). Cultural resources professionals reviewed available information, including the NRHP listings; historic aerial imagery; and information derived from online research at various other sources. SJC was evaluated as a district for NRHP eligibility and was determined not eligible under any of the National Register criteria that are applied to determine a property's NRHP listing eligibility under the NHPA 36 CFR § 60.4. Recent records searches for other airport projects have identified previously recorded archaeological sites and archaeologically sensitive areas within the airport property; none of these are inside the APE. The APE has been previously disturbed, and no historic or cultural resources have been located.

Assessment of Effects
Construction of the proposed ATCT would occur within the developed airport property. The location of the new ATCT consists of flat ground that is paved for use as a parking lot. Demolition of the existing ATCT would also occur within the developed area of the airport and material hauled to an appropriate landfill. The existing ATCT, which was commissioned in 1994, is not listed or eligible for listing in the NRHP. Any historic properties at the airport are outside of the APE and, thus, would not be affected by the proposed action.

The proposed undertaking would result in ground disturbance from construction and demolition activities. Construction of the proposed ATCT and demolition of the existing ATCT would occur on previously disturbed areas within the developed airport, therefore it is unlikely that undisturbed cultural resources remain within the APE. If, however, during construction, demolition, or maintenance activities, any cultural resources are discovered, activity will cease in the area of the resource and the appropriate state, federal, and tribal officials will be notified and given the opportunity to review, determine its significance, and implement any necessary mitigation measures.

Section 106 Consultation
In accordance with 36 CFR 800.3, the FAA has identified other parties to participate as Section 106 consulting parties. The FAA has identified and will separately initiate consultation with federally recognized Tribes with known interests in the area. Invited parties will have 30 days to respond and provide comment.

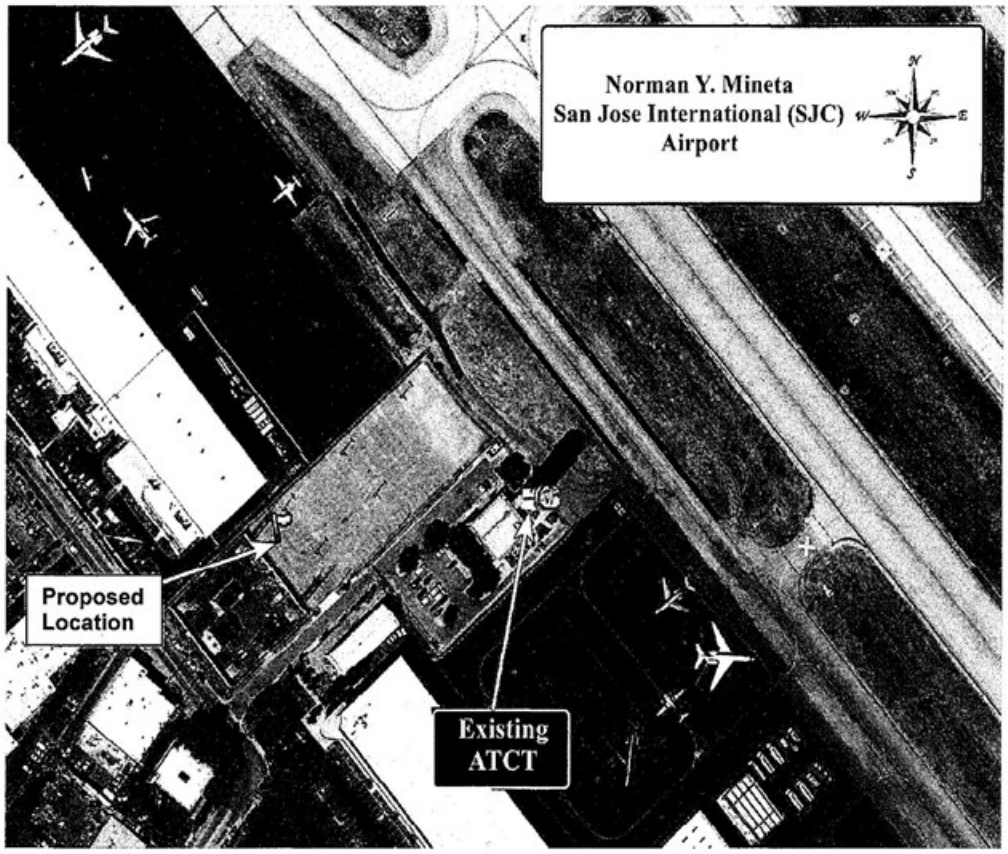
Again, the purpose of this letter is to determine whether your tribe attaches religious or cultural significance to the locations within the APE so that we may appropriately consider your interests.

We request that you review the information and respond within 30 days of receiving this letter. If you should need any further information or wish to discuss the project, please contact me at (206) 304-2372 or vincent.t.nguyen@faa.gov.

Sincerely,

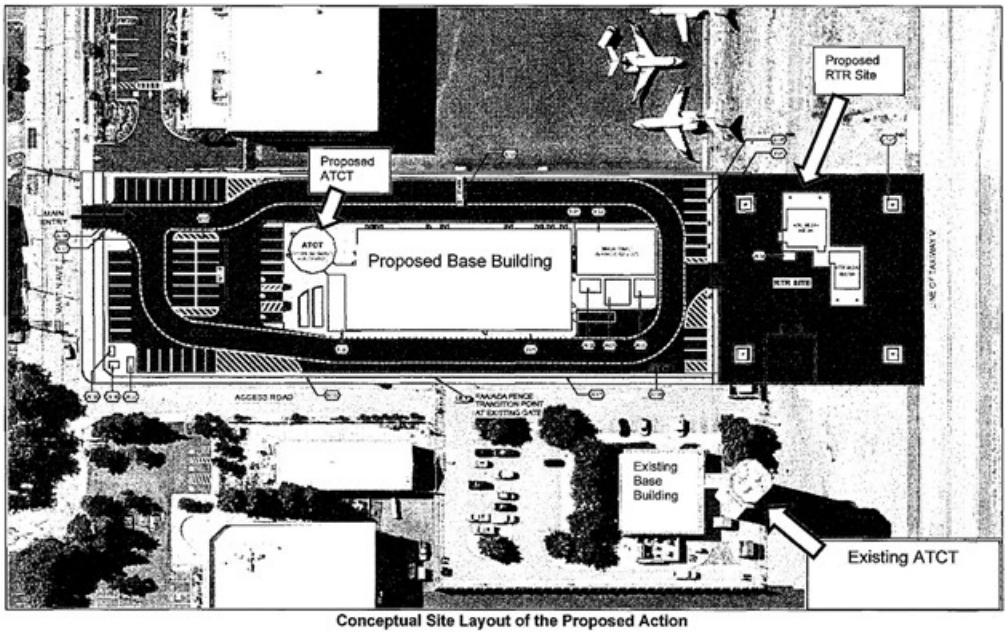
Vincent Nguyen, EIT
Environmental Engineer
ATO Technical Operations
WSA Engineering Services (AJW-2W16E)
Phone 206-304-2372
Email vincent.t.nguyen@faa.gov

Attachment A

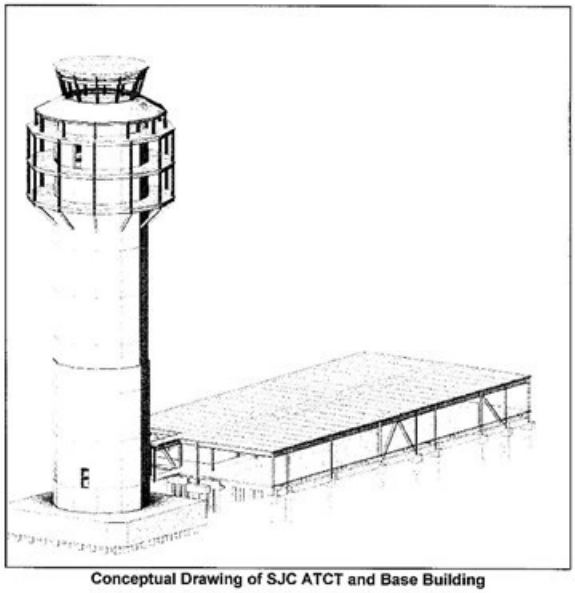


Location of Current and Proposed SJC ATCT

Existing SJC ATCT and Base Building



Conceptual Site Layout of the Proposed Action



Conceptual Drawing of SJC ATCT and Base Building

U.S. Department
of Transportation

**Federal Aviation
Administration**

Air Traffic Organization
Engineering Services
777 Aviation Boulevard,
El Segundo, CA 90245

December 10, 2024

Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

Subject: National Historic Preservation Act, Section 106 Consultation – Proposed Replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California

Dear Ms. Polanco:

The Federal Aviation Administration (FAA) is initiating National Historic Preservation Act, Section 106 consultation with you regarding a proposed replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California. The FAA is seeking your concurrence with the Area of Potential Effect (APE), expedited consultation pursuant to 36 CFR § 800.3(g), and concurrence with the FAA's finding of "No Historic Properties Affected." The proposed action is summarized below.

Proposed Action Description

The FAA is proposing to build and operate a new Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California. The proposed action includes replacement of the ATCT, constructing a new base building adjacent to the new ATCT, and relocating the remote transmitter/receiver (RTR). The proposed location of the new ATCT and associated infrastructure is on an approximately 3.7-acre previously disturbed site adjacent to the existing ATCT. The proposed site is located north of the intersection of Martin Avenue and the access road to the existing ATCT. The coordinates of the proposed ATCT location are Latitude 37° 21′ 34.23″ N and Longitude 121° 55′ 58.85″ W (see Attachment). The site is located both inside and outside the Airport Operations Area (AOA) on land that would be leased from the airport (specifically, the new RTR site would be inside the existing AOA boundary and the remainder of the site includes the existing RTR site and adjacent surface parking lot). A lease would be modified by FAA to include the land area required to contain the new and existing facility. Access to the site would be from Martin Avenue and the access road towards the existing tower.

The purpose of the proposed action is to address a number of line-of-sight deficiencies that have been identified for the existing SJC ATCT. The existing ATCT was commissioned in 1994 and is beyond its useful design life and has reached its operational and functional capability. A siting study and safety analysis has been completed and the final site recommendation was developed by following the FAA's siting process and guidance contained in FAA Order 6480.4B, Airport Traffic Control Siting Process. The current ATCT does not have the ability to accommodate upgrades to the latest air traffic control technologies, lacks personnel space requirements and modern amenities, and exhibits physical problems such as maintenance-intensive deficient mechanical appurtenances (e.g., heating and ventilation, plumbing). The proposed ATCT would enable the installation of modern and required air traffic control equipment, provide adequate space and an enhanced work environment for FAA personnel, lower operating costs, and improve environmental performance, resulting in energy savings, water efficiency, reduced carbon emissions, and improved indoor air quality. The proposed action would provide for a modern, operationally efficient ATCT that would meet all applicable FAA requirements and would provide unobstructed views of all controlled airport surface areas and maximum visibility of all airborne traffic.

The proposed location for the new ATCT and base building is west of the existing ATCT on a site that is currently occupied by the existing RTR site and an airport employee parking lot, and would include a parking lot, utility lines, and driveways where construction, maintenance, and usage effects would occur (see Attachment). The new ATCT would be approximately 185 feet tall at the top of the tower/antenna and would have an approximately 550-square foot cab, and an approximately 12,800-square foot single-story administrative base building. Existing airport roads would be used during construction and maintenance. Staging areas would be on airport property near the existing ATCT.

For uninterrupted air traffic control services, the current ATCT would be demolished after construction of the new ATCT is completed. Upon removal of the structure, the location would be matched to the surrounding impervious surfaces. The new RTR site would be updated to the latest FAA and industry standards. It would be connected to the old ATCT throughout the duration of construction of the new ATCT and cut over to the new ATCT upon construction completion.

Area of Potential Effects

The APE, as defined at 36 CFR 800.16(d), is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties. The proposed action would take place within areas of airport property that have been impacted by previous development. The project site is a highly disturbed area that has long been, and is currently being, used for airport purposes.

The APE for the proposed action includes an approximately 4-acre area around the existing ATCT and proposed ATCT and associated infrastructure, where construction, demolition, maintenance, and usage effects may occur. New utilities would be placed from existing lines within the APE. Existing airport perimeter and maintenance roads and public access roads would be used for construction and maintenance traffic. The proposed ATCT would be visible from much of the surrounding area, which is comprised primarily of airport hangers and industrial/commercial warehouses and offices.

Historic Property Identification

A reconnaissance level survey of historic-age buildings (45 years or older) on SJC property was conducted in 2020 and the airport was evaluated as a district for its potential for listing on the National Register of

Historic Places (NRHP). Cultural resources professionals reviewed available information, including the NRHP listings; historic aerial imagery; and information derived from online research at various other sources. SJC was evaluated as a district for NRHP eligibility and was determined not eligible under any of the National Register criteria that are applied to determine a property's NRHP listing eligibility under the NHPA 36 CFR § 60.4. Recent records searches for other airport projects have identified previously recorded archaeological sites and archaeologically sensitive areas within the airport property; none of these are inside the APE. The APE has been previously disturbed, and no historic or cultural resources have been located.

Native American Consultation

A record search of the Native American Heritage Commission Sacred Lands File was completed for the project. The results were negative for any resources in the project area. The FAA initiated consultation with the Amah Mutsun Tribal Band, the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the North Valley Yokuts Tribe, the Ohlone Indian Tribe, the Wutsache Indian Tribe/Eshorm Valley Band, and the Tamien Nation on (*insert date*). (*Summarize any responses received.*)

Assessment of Effects

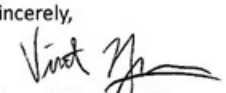
Construction of the proposed ATCT would occur within the developed airport property. The location of the new ATCT consists of flat ground that is paved for use as a parking lot. Demolition of the existing ATCT would also occur within the developed area of the airport and material hauled to an appropriate landfill. The existing ATCT, which was commissioned in 1994, is not listed or eligible for listing in the NRHP. Any historic properties at the airport are outside of the APE and, thus, would not be affected by the proposed action.

The proposed undertaking would result in ground disturbance from construction and demolition activities. Construction of the proposed ATCT and demolition of the existing ATCT would occur on previously disturbed areas within the developed airport, therefore it is unlikely that undisturbed cultural resources remain within the APE. If, however, during construction, demolition, or maintenance activities, any cultural resources are discovered, activity will cease in the area of the resource and the appropriate state, federal, and tribal officials will be notified and given the opportunity to review, determine its significance, and implement any necessary mitigation measures.

Finding of Effect and Concurrence Request

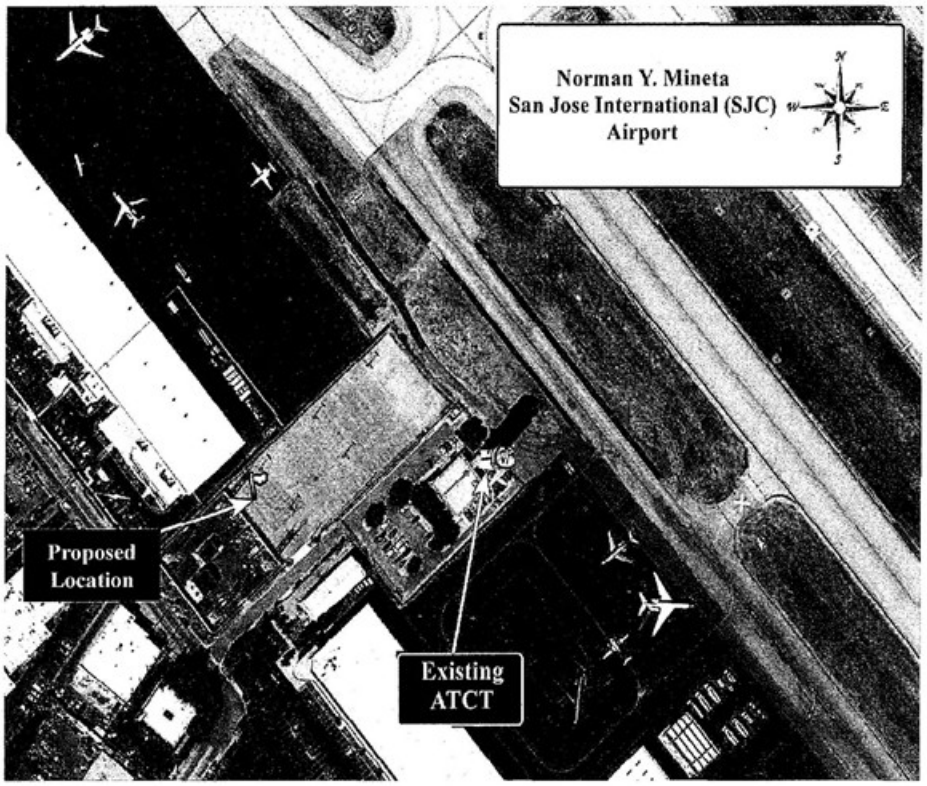
Based upon the evaluation of existing reports and findings, the FAA determined that there are no historic properties within the APE, therefore a finding of No Historic Properties Affected, is appropriate.

Sincerely,

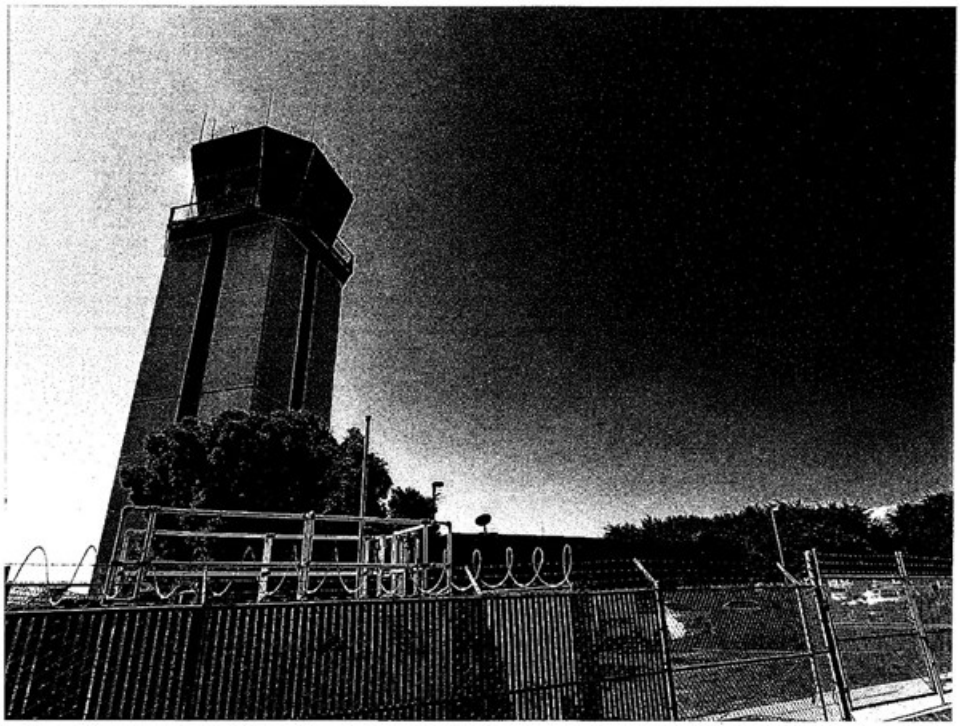


Vincent Nguyen, EIT
Environmental Engineer
ATO Technical Operations
WSA Engineering Services (AJW-2W16E)
Phone 206-304-2372
Email vincent.t.nguyen@faa.gov

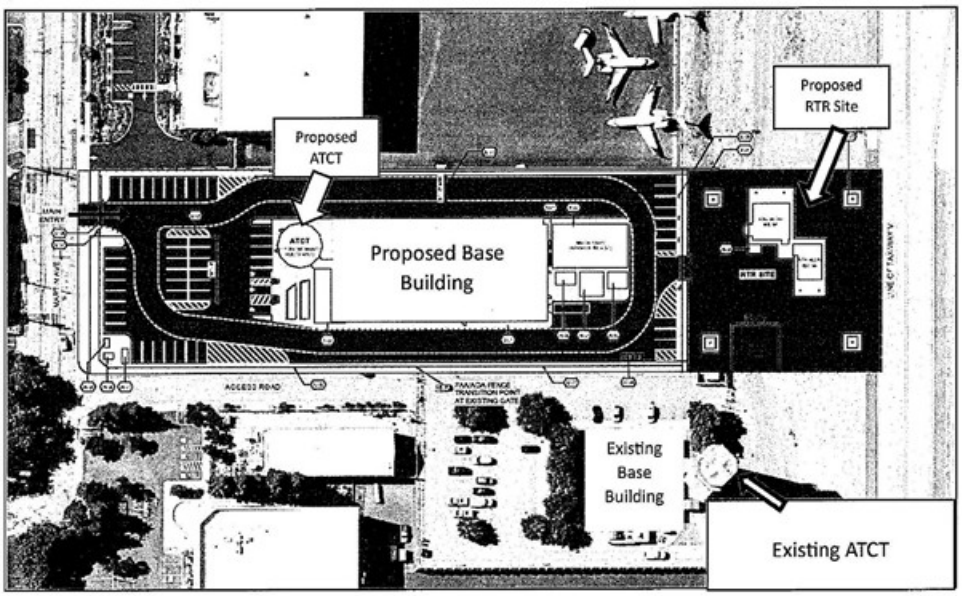
Attachments



Location of Current and Proposed SJC ATCT



Existing SJC ATCT and Base Building



Conceptual Site Layout of the Proposed Action

TN- 20241213-01

TAMIEN NATION
P.O. Box 8053, San Jose,California 95155
(707) 295-4011| tamien@tamien.org

December 18, 2024

Vicent Nguyen, EIT Environmental Engineer

Air Traffic Organization Engineering Services

777 S. Aviation Blvd Ste 105, El Segundo, CA 90245

Sent Via Email: vicent.t.nguyen@faa.gov

Re: Request for Tribal Consultation under Section 106 of the National Historic Preservation Act (NHPA) – ATCT at Norman Y. Mineta San Jose, CA

Project: ATCT at Norman Y. Mineta San Jose, CA

Dear Vicent Nguyen,

On behalf of Tamien Nation, we sincerely appreciate your time and effort in reaching out to us. We received notification for this project on December 13, 2024 This letter serves as a formal request for tribal consultation for the purposed ATCT at Norman Y. Mineta under Section 106 of the National Historic Preservation Act (NHPA).Tamien Nation is grateful for the opportunity to contribute insights on the potential impacts of the project on our tribal cultural resources.

As the proposed project is within the ancestral lands of the Tamien Nation, we have a significant interest in ensuring that any potential effects on our cultural heritage, sacred sites, and historic properties are thoroughly considered and appropriately mitigated. Our tribe holds deep ties to the land, and we are committed to preserving the integrity of our cultural resources for future generations.

We would like to request additional information regarding the specific location, scope, and potential impacts of the project, including any surveys or assessments that have been conducted related to cultural and historic resources. Please provide this requested information at least 10 business days before the scheduled consultation. This information will allow us to more fully evaluate the project's potential effects and provide informed input during the consultation process.

TN- 20241213-01

In accordance with Section 106 of the National Historic Preservation Act, Tamien Nation requests that should any previously unidentified cultural resources or artifacts be discovered during the course of the project, all ground-disturbing activities in the immediate vicinity cease immediately. Tamien Nation representatives and authorities must be notified to assess the findings and determine the necessary protective measures to avoid any adverse effects on these significant cultural resources, and we expect consultation to be ongoing in such cases.

Tamien Nation looks forward to the opportunity to meet with you and your team to collaborate on measures that will protect our cultural resources. To streamline the process, kindly provide us the documentation requested above at least ten (10) business days before our initial consultation meeting. You can view our availability and schedule a consultation meeting with us here: https://calendly.com/tamien/ab-52sec106-consultation.

It is crucial to adhere to this guideline in order to ensure the effective preservation of tribal cultural resources. If you have any questions or require further clarification on this matter, please do not hesitate to reach out.

Tamien Nation lead contact for consultation is:

Quirina Geary, Chairwoman

PO Box 8053
San Jose, CA 95155
(707) 295-4011
qgeary@tamien.org

Tamien Nation anticipates to begin consultation within 30 days of your receipt of this letter.
Please refer to identification number TN- 20241213-01 in any correspondence for this project.

Sincerely,

Quirina Geary
Chairwoman
Tamien Nation

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

January 13, 2025 Reply in Reference To: FAA_2024_1216_001

Submitted Via Electronic Mail

Vincent Nguyen, EIT
Environmental Engineer
Federal Aviation Administration
Air Traffic Organization
Engineering Services
777 Aviation Boulevard
El Segundo, CA 90245

Re: Proposed Replacement of the Airport Traffic Control Tower at Norman Y Mineta San Jose International Airport, San Jose, Santa Clara County, California

Dear Mr. Nguyen:

The Federal Aviation Administration (FAA) is initiating consultation with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. The FAA is requesting SHPO concurrence with a No Historic Properties Affected finding for the above-referenced undertaking.

The FAA is proposing to build and operate a new Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San Jose International Airport (undertaking). Project components include replacement of the ATCT, construction of a new base building adjacent to the new ATCT, and relocation of the remote transmitter/receiver. The proposed location of the new ATCT and associated infrastructure is on a 3.7-acre site adjacent described as being "previously disturbed." The current ATCT will be demolished after construction of the new ATCT is completed.

The Area of Potential Effects (APE) for the undertaking is defined an approximately 4-acre area around the existing ATCT where construction, demolition, maintenance, and usage effects may occur.

In an effort to identify historic properties in the APE, a reconnaissance-level survey of buildings age 45 years or over was conducted in 2020. The airport was evaluated as

district that may be eligible for listing on the National Register of Historic Places (NRHP). Cultural resources professionals reviewed available information, including the NRHP listings, historic aerial imagery, and information derived from online research at various other sources. SJC was evaluated and was determined to be ineligible for listing on the NRHP. Recent records searches for other airport projects have identified previously recorded archaeological sites and archaeologically sensitive areas within the airport property; none of these are inside the APE. The APE has been previously disturbed, and no historic or cultural resources have been located.

A record search of the Native American Heritage Commission Sacred Lands File was completed for the project. The results were negative for any resources in the project area. The FAA initiated consultation with the Amah Mutsun Tribal Band, the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the North Valley Yokuts Tribe, the Ohlone Indian Tribe, the Wutsache Indian Tribe/Eshorm Valley Band, and the Tamien Nation on December 10th, 2024.

Based upon the evaluation of existing reports and findings, the FAA have determined that there are no historic properties within the APE, therefore a finding of No Historic Properties Affected, is appropriate.

Having reviewed your submittal, SHPO cannot at present comment on your finding of effect as the FAA's identification efforts appear incomplete. Please consider the following comments:

1. In your letter, you reference a 2020 NRHP evaluation of the airport. It is unclear if the evaluation was made in consultation with SHPO. If the FAA did not consult with SHPO on the eligibility determinations, please provide a copy of the evaluation for review and comment.

2. You state that the APE has been previously disturbed. However, your submittal does not include a description of the depth of prior ground disturbance or the extent of ground disturbance associated with the undertaking. Please provide this information.

3. Please provide a map showing the location of the APE in relation to the location of the archaeologically sensitive areas within the airport property.

4. You note that you have initiated consultation with Native American tribes identified by the California Native American Heritage Commission as potentially having additional cultural knowledge of the project area. To date, has the FAA received any responses?

If you have any questions or comments, please contact staff historian Tristan Tozer at (916) 894-5499 or Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

U.S. Department
of Transportation

**Federal Aviation
Administration**

Air Traffic Organization
Engineering Services
777 Aviation Boulevard,
El Segundo, CA 90245

March 13, 2025

Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

Transmitted via electronic mail to: *tristan.tozer@parks.ca.gov*

Subject: National Historic Preservation Act, Section 106 Consultation – Proposed Replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California

Dear Ms. Polanco:

The Federal Aviation Administration (FAA) is providing this information in response to your letter dated January 13, 2025, regarding FAA's initiation of National Historic Preservation Act, Section 106 consultation related to proposed replacement of the Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San José International Airport (SJC), San José, California (FAA_2024_1216_001). Below are your comments and the FAA's responses:

1. **SHPO Comment:** In your letter, you reference a 2020 NRHP evaluation of the airport. It is unclear if the evaluation was made in consultation with SHPO. If the FAA did not consult with SHPO on the eligibility determinations, please provide a copy of the evaluation for review and comment.

   FAA Response: The FAA consulted with the SHPO regarding National Historic Preservation Act, Section 106 Consultation – Proposed Terminal B South Concourse Improvements for Norman Y. Mineta San Jose International Airport, San Jose, California in a letter dated June 2, 2022. (This letter is attached along with the Proposed Terminal B South Concourse Improvements at Norman Y. Mineta San Jose International Airport Cultural Resource Evaluation Report, dated June 2022 [Cultural Resource Report], that was provided with the letter.) The Cultural Resource Report for that project stated, "In 2020, a reconnaissance level survey was conducted of historic-age buildings (45 years or older) on SJC property, and the Airport was evaluated as a district for its potential for listing on the NRHP." The Cultural Resource Report indicated the following finding, "SJC was evaluated as a district for NRHP eligibility and was determined not eligible under Criteria A, B, C, or D." The Report further stated that the Direct and Indirect APEs for that project are highly disturbed areas within the airport boundary that have long been, and are currently being, utilized for airport purposes, "The APE locations have been previously

disturbed, and no historic or cultural resources have been located. Additionally, the overall sensitivity of the sites with respect to buried resources is low." The evaluation of the airport as a district was included with the Cultural Resource Report.

2. **SHPO Comment:** You state that the APE has been previously disturbed. However, your submittal does not include a description of the depth of prior ground disturbance or the extent of ground disturbance associated with the undertaking. Please provide this information.

   FAA Response: Previous disturbance in the project area was primarily related to construction of a parking lot with light poles. The disturbance was approximately 8 feet at maximum for the light poles and about 2-5 feet for the construction of the parking lot. For the FAA's current RTR location, which is also part of the area to be disturbed for the construction of the new tower, the foundations go down approximately 10 feet.

   The APE for this undertaking is defined as the construction areas as depicted on the attached map. The FAA used the boundaries of the area that would have physical disturbance and construction staging to delineate the Direct APE, which encompasses approximately 4.7 acres. The Proposed Action would include approximately 17 feet of excavation for basement construction, with cast-in-drilled-hole pilings up to 70 feet, corresponding to disturbance at depths of approximately 85 to 90 feet below the existing grade. Because this represents disturbance for piling, there would be multiple 24- to 30-inch diameter drilled holes to the aforementioned depth, as opposed to complete removal of soil to that depth. Therefore, within the Direct APE, a depth of disturbance of approximately 90 feet below ground surface is estimated for the vertical APE. Construction staging would occur on previously disturbed areas where there would be no subsurface disturbance. The Indirect APE includes a 100-foot buffer around the Direct APE and encompasses approximately 5.5 acres.

3. **SHPO Comment:** Please provide a map showing the location of the APE in relation to the location of the archaeologically sensitive areas within the airport property.

   FAA Response: Please see attached map showing the location of the archaeologically sensitive areas (ASA) within the airport property relative to the project APE. The map shows the location of ASA 4 and site CA-SCL-430.

   The 1999 San José International Airport Master Plan Update Improvements: Final Environmental Impact Statement (EIS) references a cultural resources study conducted by Cartier and Detlefs (1980) entitled, Archaeological Evaluation of the San José Municipal Airport, which was undertaken as part of an Environmental Impact Report (EIR) for the 1980 Airport Master Plan. This investigation involved surface reconnaissance and the excavation of 327 exploratory test trenches that resulted in the designation of five ASAs. Past literature searches have revealed that there are 141 archaeological and historical reports within a 500-foot radius of the Airport. Within the Airport boundary, CA-SCL-430/H (P-43-000433 – Old Mission Santa Clara Site) is the closest to the project area. CA-SCL-430/H covers a 300-acre site mapped within the west side of the Airport that encompasses a portion of the project area. The 1980 site form (Cartier 1980) as well as the Archeological Evaluation of the San Jose Municipal Airport (Cartier and Detlefs 1980) provides the majority of information related to this multi-component prehistoric and historic archaeological site. The site is not listed on either the National Register of Historic Places or the California Register of Historical Resources.

   Prehistoric cultural material present at CA-SCI-430/H consists of surface finds that included "projectile points, three chipped lithics, about six pieces of fire-cracked rock, lithic debitage, fire-

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

April 14, 2025 Reply in Reference To: FAA_2024_1216_001

Submitted Via Electronic Mail

Vincent Nguyen, EIT
Environmental Engineer
Federal Aviation Administration
Air Traffic Organization
Engineering Services
777 Aviation Boulevard
El Segundo, CA 90245

Re: Second Round of Consultation, Proposed Replacement of the Airport Traffic Control Tower at Norman Y Mineta San Jose International Airport, San Jose, Santa Clara County, California

Dear Mr. Nguyen:

The Federal Aviation Administration (FAA) is continuing consultation with the State Historic Preservation Officer (SHPO) in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, and its implementing regulations at 36 CFR Part 800. The FAA is requesting SHPO concurrence with a No Historic Properties Affected finding for the above-referenced undertaking.

The FAA is proposing to build and operate a new Airport Traffic Control Tower (ATCT) at Norman Y. Mineta San Jose International Airport (undertaking). In prior consultation SHPO asked the FAA for clarification regarding the National Register of Historic Places (NRHP) eligibility of the airport property, a description of the depth of prior ground disturbance and the extent of ground disturbance associated with the undertaking, a map showing the location of the APE in relation to the location of the archaeologically sensitive areas within the airport property, and the status of Native American consultation undertaken with tribes in December of 2024. The FAA has provided this information.

Having reviewed your submittal, SHPO offers the following comments:

affected rock, and two pieces of possible groundstone in 300 ac" (Cartier 1980/form). Four of the five points found were located within an approximately 40-acre area within the 300-acre site. The precise location and boundaries of this artifact scatter are not available in Cartier (1980) or Cartier and Detlefs (1980). All of the finds were isolates found on the surface. Backhoe test trenches were excavated to a minimum depth of 140 cm and a maximum depth of 300 cm; no prehistoric material was recovered.

The historic era component of the resource is on the edge of the old location of the early Santa Clara Mission (Cartier 1980). A 1980 report by Cartier and Detlefs presents two mission locations: Location A First Site of Mission Santa Clara – 1777 and Location B Second Site of Mission Santa Clara – 1779. Neither location is within the CHRIS/NWIC configuration on file for P-43-000433 (CA-SCI-430/H). Additional detail about each mission complex is presented in Skowronek and Wizorek (1997). The first site was on the Guadalupe River near its confluence with Mission Creek. The site was short lived 1777-1779 and abandoned due to flooding. The destructive flood of January 1779 resulted in almost total removal of the complex with only the storehouses and a few timbers remaining. The second church, 1779-1784, had an associated cemetery with a location at the corner of Martin and De la Cruz Boulevard. The location conforms to the Mission Santa Clara de Asis Historical Monument. No significant American Era resources have been identified within or adjacent to P-43-000433 (CA-SCI-430/H) (Cartier 1980; Cartier and Detlefs 1980). Monitoring by Basin Research Associates (2020) over the prior 15 years within and adjacent to the mapped resource boundary for various Airport improvements has failed to expose any significant Hispanic or American era cultural materials.

Basin Research Associates. 2020. Compilation of Basin Research Associates Archaeological Reviews and Monitoring Closure Reports, Norman Y Mineta San Jose International Airport 1992-2015. Information provided to D.J. Powers & Associates, August 2020. Data includes report compilation, spreadsheets and mapping. On file, Basin Research Associates, San Leandro.

Cartier, Robert. 1980. Archaeological Site Record for CA-SCL-430/H (P-43-433). On file at the Northwest Information Center, California Historical Resources Information System, Sonoma State University, Rohnert Park, California.

Cartier Robert and Charlene Detlefs (Archeological Resource Management). 1980. Archeological Evaluation of the San Jose Municipal Airport. MS on file, S-8469, CHRIS/NWIC, Sonoma State University, Rohnert Park.

Skowronek, Russell K. and Julie C. Wizorek. 1997. Archaeology at Santa Clara de Asís: The Slow Rediscovery of a Moveable Mission. Pacific Coast Archaeological Society Quarterly 33(3):54-92.

U.S. Department of Transportation, Federal Aviation Administration. 1999. San José International Airport Master Plan Update Improvements: Final Environmental Impact Statement, Volume 3. San Jose, CA: FAA, October 1999.

4. **SHPO Comment:** You note that you have initiated consultation with Native American tribes identified by the California Native American Heritage Commission as potentially having additional cultural knowledge of the project area. To date, has the FAA received any responses?

FAA Response: The FAA received a response from the Tamien Nation on December 18, 2024, requesting additional information regarding the specific location, scope, and potential impacts of the project, including any surveys or assessments that have been conducted related to cultural and historic resources. The FAA has complied with their request for information by submitting all relevant project documents. However, the Tamien Nation has not responded to the FAA's request for consultation on multiple occasions. Please see the email correspondences in the attachments for further details. No other responses to the FAA consultation letters were received.

Based on a review of the available archaeological data obtained during the monitoring of subsurface construction for previous improvements since 1992, the likelihood of encountering archaeological resources during construction of the proposed project is considered low. Archaeological monitoring of subsurface activities associated with the proposed action will be implemented within ASA 4.

Based upon past records review and archaeological monitoring, the FAA finds the proposal would result in no historic properties affected. The FAA is requesting your concurrence with the direct and indirect APE, and concurrence with the FAA's finding of no historic properties affected.

Please let us know if you have any further questions. We look forward to continuing to work with you on this project.

Sincerely,

Vincent T. Nguyen Digitally signed by VINCENT T M NGUYEN
Date: 2025.03.13 10:11:46 -07'00'

Vincent Nguyen, EIT
Environmental Engineer
ATO Technical Operations
WSA Engineering Services (AJW-2W16E)
Phone 206-304-2372
Email vincent.t.nguyen@faa.gov

1. SHPO does not object to a finding of No Historic Properties Affected for the undertaking.

2. Your letter does not indicate if archaeological monitoring will occur for ground disturbance required for the demolition and replacement of the Air Traffic Control Tower. While 5.47-acre Area of Potential Effects (APE) is described as disturbed due to construction of the tower and a variety of other airport improvement projects, this prior disturbance does not preclude the presence of prehistoric and historic-era properties associated with CA-SCL-430. SHPO recommends the FAA require archaeological monitoring as a condition for ground disturbing work undertaken with the boundary of CA-SCL-430, as shown on the map included with your letter.

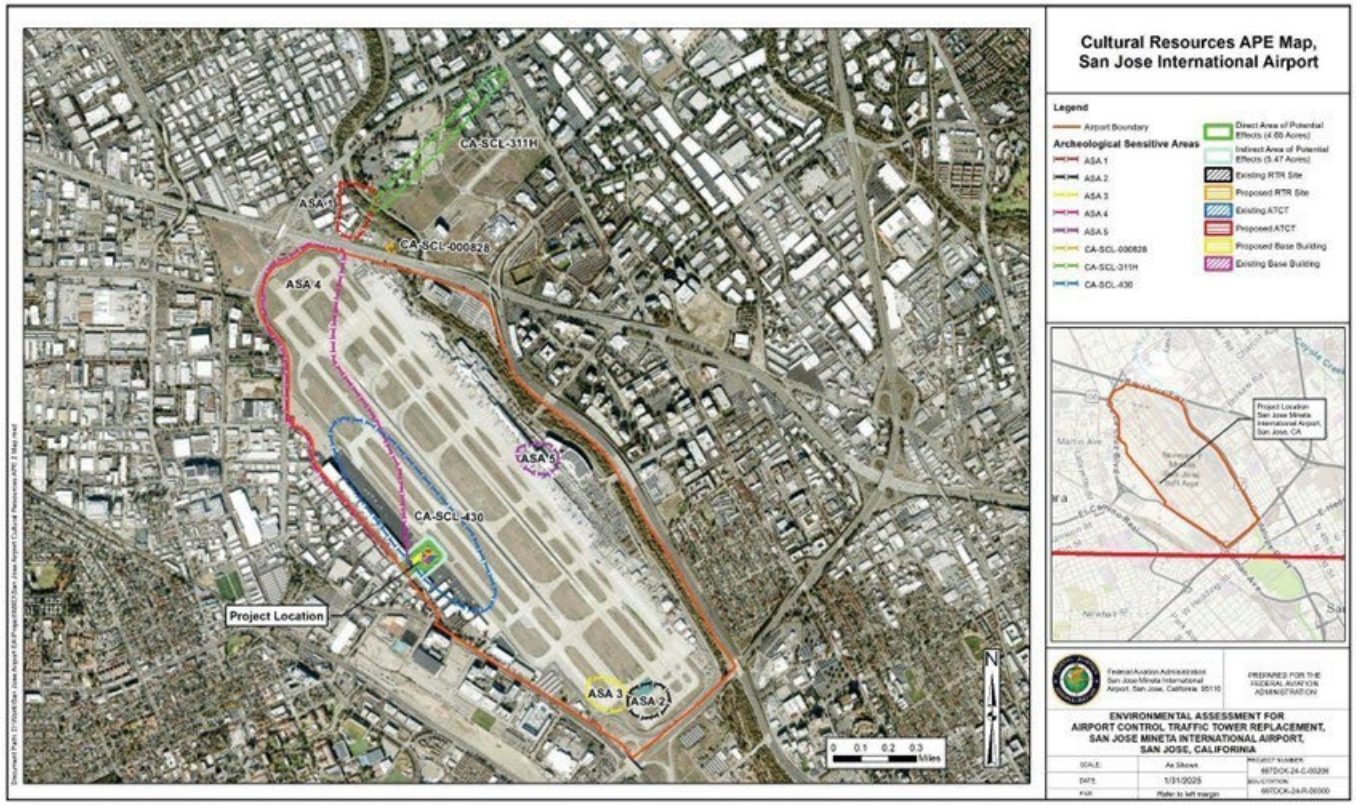
Please be reminded that in the event an inadvertent discovery or a change in scale or scope of the undertaking, the FAA may have additional consultation responsibilities under 36 CFR Part 800. If you have any questions or comments, please contact staff historian Tristan Tozer at (916) 894-5499 or Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Attachments:

Cultural Resources APE



Location of ASA 4 and Site CA-SCL-430.