

# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Barry Ng  
Kimberly J. Becker

**SUBJECT: SHARED USE BIKE PATH-  
AIRPORT BOULEVARD**

**DATE:** February 3, 2016

Approved



Date

2/4/16

## INFORMATION

On October 6, 2015, Council awarded the Mineta San Jose International Airport – Airfield Fence Improvements 2015 Project to Granite Rock Company in the amount of \$3,730,629. Council also requested staff investigate the potential of incorporating a pedestrian and bicycle connection from the Guadalupe River Trail to Avaya Stadium along the southern end of the Mineta San José International Airport (Airport).

Currently, both pedestrians and cyclists are allowed to travel along Airport Boulevard, between the Guadalupe River Trail connection and Avaya Stadium, although it is not designated as an official bike or pedestrian facility. In its current state, bicyclists can use the travel lane, and pedestrians can walk along the barrier fence on an uneven earth surface.

## BACKGROUND

### Airport Fence

Due to security-related incidents that have occurred at the Airport, the Federal Aviation Administration (FAA) identified grant funding for the Airport to use to provide enhancements to the existing Air Operations Area (AOA) perimeter fence. The Airfield Fence Improvements Project will replace portions of the existing airfield fence with a new 10-foot-high security fence. There are three strategic locations for the new fence, including the southern end of the airport bordering Airport Boulevard. Construction of the fencing has begun.

### Airport Boulevard/Existing Bicycle Facilities

Airport Boulevard transitions from four to two lanes along the southern edge of the Airport, one of the four lanes becoming a tunnel to southbound Highway 880 (Attachment A). Currently, there is no designated bike lane on Airport Boulevard, however, bicyclists can legally use the roadway as is the case on any public roadway. The posted speed limit is 35 mph, however,

based on staff's observation, the majority of motorists tend to travel at a higher speed than the posted limit.

In the general vicinity, there is a designated bike lane on Hedding Street and Coleman Avenue that bicyclists can use to connect from the Guadalupe River Trail to travel to Avaya Stadium via Coleman Avenue. However, high traffic volumes at the Coleman Avenue/I-880 Interchange may discourage travel by cyclists and pedestrians.

### Planned Bicycle Facilities

In 2009, the City Council adopted Bicycle Plan 2020, which calls for the construction of a shared use path (off-street Class I trail) for bicyclists and pedestrians along the southern edge of the Airport connecting the Guadalupe River Trail to Coleman Avenue and Avaya Stadium. The shared use path project has also been in the Valley Transportation Plan (VTP) 2040 since 2009. However, no feasibility, design or environmental work has been conducted. Moreover, construction of the I-880/Coleman Avenue interchange, including Airport Boulevard, left little space between the interchange ramps and the existing perimeter fence along the southern boundary of the Airport. The existing southern Airport perimeter fence is generally located approximately eight (8) feet from the existing back of curb along westbound Airport Boulevard. However, physical obstructions like water supply standpipes, streetlights and drainage facilities further limit the available off-street width at several points (Attachment B).

A Class I Bikeway is a designation defined by the Caltrans Highway Design Manual. The City's Department of Parks, Recreation and Neighborhood Services develops the City's Trail Network and seeks to build a network of interconnected Class I Bikeway trail systems. Caltrans uses the Class I Bikeway term for trails as narrow as eight (8) feet when site conditions limit width. An eight-foot wide facility must be paired with two-foot minimum shoulders and/or fall zones adjacent to obstructions, therefore the functional width requirement is 12 feet.

### ANALYSIS

Staff conducted an investigation to determine if a Class I facility could be developed along Airport Boulevard, either on the south side (I-880) or north side (Airport) of Airport Boulevard.

Staff found significant pinch points, utility obstructions and Airport facilities that limit the opportunity for development of a Class I facility. Staff found insufficient available width to meet the Class I Bikeway facility requirements, but believe that a facility with appropriate signage guidance might be developed to provide a shared use path between the trail and stadium. Staff looked at two alignments and had the following observations:

South side of Airport Boulevard (Highway 880)

- Significant space is available at both entry points from Coleman Avenue and the Lower Guadalupe River Trail, however there is not sufficient room in the middle reach of this alignment.
- A narrowing of the existing 19-foot travel lane might be possible, but there would not be enough room to accommodate a Class I facility.

North side of Airport Boulevard (Airport)

- In general, there is approximately eight (8) feet of width between the roadway curb and airport fence.
- Significant utility conflicts (fire hydrant, backflow preventer, sign structure, utilities and airport perimeter fence, see Attachment B) occur along the route, with several presenting a physical barrier to developing a facility as a low-cost improvement.
- Access to this facility, would require a mid-block crossing. Its location would be north of the Airport Boulevard bend at the southeast corner of the Airport. Placement of the crossing would be determined by the City Traffic Engineer and may be a significant distance from the transition point because of observed speed of travel, visibility, and other factors. Signage, striping, beacons, and other visibility devices may be needed for the crossing.
- The Department of Transportation's (DOT) ideal conceptual plan shows construction of a shared use path along the north side of the Airport Boulevard and installation of a cross walk. However, it would require the perimeter fence to move approximately five feet north to allow development of the path. The location of the crosswalk would be at the connection point of the shared use path and the Guadalupe River Trail. A preliminary review of the crosswalk location by DOT shows it meets the requirements for the stopping sight distance.

In either the north alignment or south alignment, installing a bike path "crossing" of Airport Boulevard at or near the south end of the Airport adjacent to the Guadalupe River Trail has potential safety concerns because of the curve in the roadway, vehicle stopping sight distances and vehicle speeds. The visiting airport passengers are not familiar with the bike community and are focused on signage to get to their destination. This unfamiliarity adds a level of safety concerns to potential crossings, especially in a curve.

Of these two alignments, staff has concluded that the north side is the more viable. However, multiple challenges exist, including the relocation or alteration of utilities, with some fixtures blocking access at this time. In particular, moving the planned fence line to gain an additional five feet would be subject to extensive FAA regulatory review and existing grant requirements.

These FAA review and approvals are subject to the following issues:

- Redesign of the current fence project (already under construction) and moving the fence toward the existing airfield would degrade Airport compliance with FAA design standards and risk the loss of the \$1.5 million FAA grant just received to conduct a study to improve design standards compliance.
- Changing the schedule of the new fence project for redesign and FAA approval would risk losing the \$3.4 million FAA grant for the project and delay needed security improvements.
- Property defined by the airport's Airport Layout Plan is considered to be "dedicated" or "obligated" property for airport purposes due to the grant assurances of the grants received from the FAA. This project would convert an aeronautical use (airfield property) to a non-aeronautical use (public right-of-way).
- Further reduction in an already non-compliant Object Free Area (OFA) width, if approved, may result in shortening usable runway landing and departure length, with implications on airline service. There is exact precision to the location of all requirements to the aircraft movement surfaces and any adjustment will require changes in the runway lighting and striping. The most significant impact would be on the instrument approach and adjustments to the airspace requirements.
- Narrowing the separation between the perimeter fence and the existing runway localizer array (behind 30L blast fence) may cause potential signal interference in the localizer critical area.
- Relocating the existing airfield perimeter fence further into the Airport property would potentially narrow the existing airport service road located behind the Airport perimeter fence may impact safe and efficient movement of large vehicles such as fire trucks, fuel trucks, and maintenance equipment which is necessary to meet the requirements of the Airport's Federal Aviation Regulations/Part 139 certification.

## **CONCLUSION**

Considering the conditions and analysis to date, staff believes that a modified shared facility for bikes and pedestrians is a possibility if site challenges can be addressed and design standards altered. Alternately, a sidewalk with up to five feet of clear space can be constructed.

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**COORDINATION**

This memorandum has been coordinated with the Departments of Transportation and Parks, Recreation, and Neighborhood Services.

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/s/  
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Director of Aviation

For questions please contact Michael O'Connell, Deputy Director, Public Works Department, at 408-535-8300.





LOCATION MAP  
NTS



**ATTACHMENT B**

**North side of Airport Boulevard, looking east (south end of the Airport)**

