

Environmental Due Diligence

Caltrain Communication Tower Bird

City of San José

Prepared For:



Peninsula Corridor Joint Powers Board

Prepared By:



ICF International

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Introduction

The Peninsula Corridor Joint Powers Board (JPB) provides rail commuter services (Caltrain) through the counties of San Francisco, San Mateo and Santa Clara. JPB has developed this environmental document in support of an environmental due diligence for its communication system implementation. The information included in this document provides an environmental review of elements of potential impact.

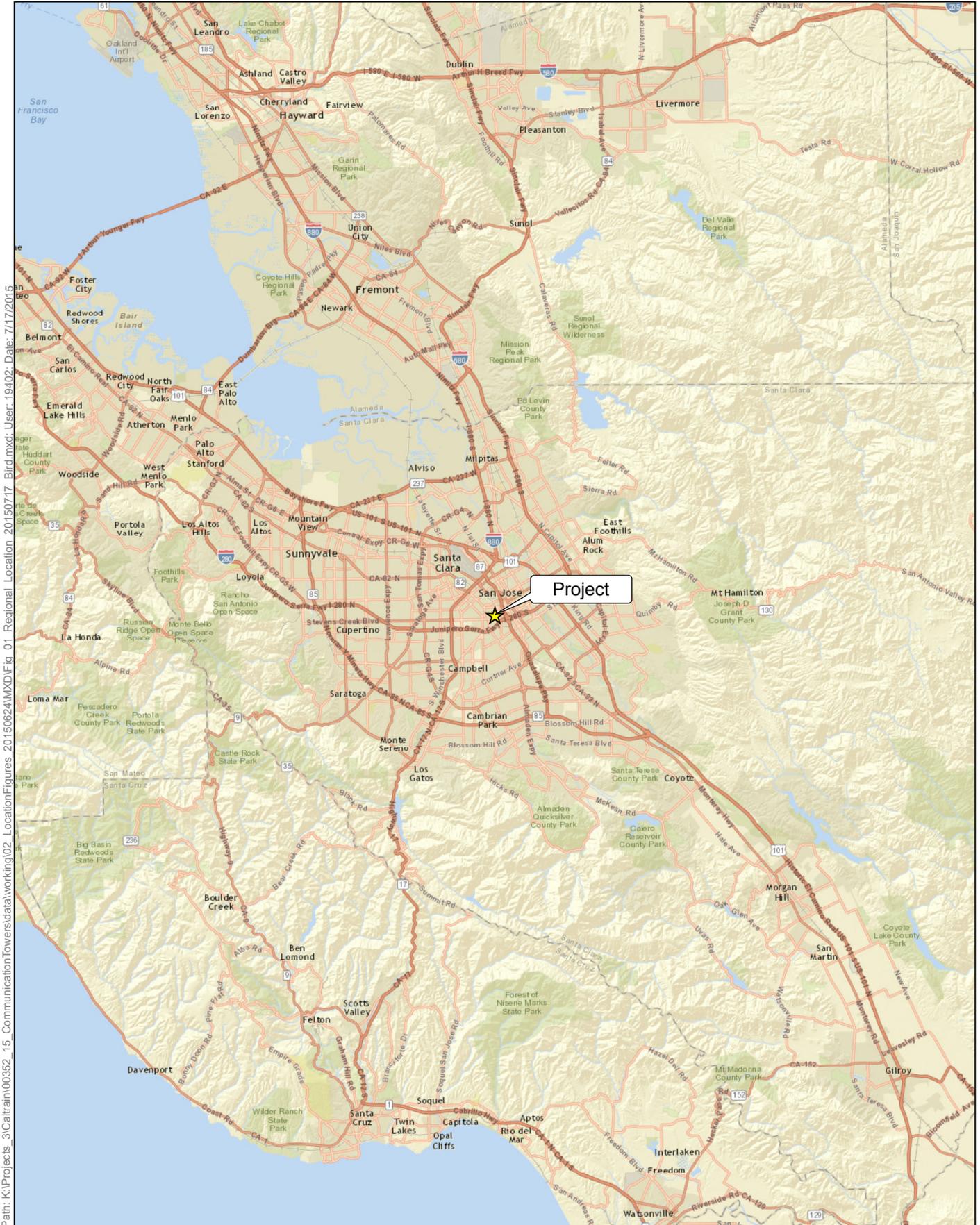
Project Description

The JPB communication system was dependent on commercial telephones lines provided by AT&T and other third parties. In 2002, a major AT&T failure created massive delays to Caltrain operations and passengers. In subsequent years, additional outages took place resulting in similar impacts to Caltrain's signal control systems. To remediate this problem, JPB engaged in a comprehensive design and installation program of its own Advanced Train Control System (ATCS), a wireless system to remove dependency from third party providers.

JPB designed and installed its ATCS wireless network for 31 Control Points (CPs). Project implementation included antennae and cabling at two Mountain Tops (MTs) at leased antenna sites, radio equipment, tilt-down towers (60 feet or 80 feet) complete with foundations, antennas, and cables. Additionally, JPB improved its ATCS signal data communication link reliability and performance, with increased capacity and better balance of the traffic load between the two ATCS channels. The JPB ATCS network removed JPB's dependency on AT&T and improved reliability of its communication network, minimizing delays resulting from communication failures.

The specific project discussed in this document is the construction of CP Bird at Mile Post (MP) 47.6 in the City of San José (see Figure 1, Regional Location). The project is located near the intersection of Park Avenue and McEvoy Street, within an area developed with predominately industrial and residential uses (See Figure 2, Project Location). The project is located on Assessor's Parcel Number (APN) 261-35-034 and is within the Caltrain right-of-way. The approximately 63-foot ATCS tower, an omnidirectional antenna, was constructed in 2009. The footprint of the tower base is approximately 13 square feet (sf). The tower operates during normal operating hours transmitting signals to trains and tracks along the corridor.





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Source: Basemap, ESRI World Street Map 2015

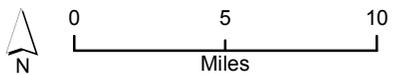


Figure 1
Regional Location

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Source: Basemap, Microsoft Bing 2015

Figure 2
Project Location

Elements of Potential Impact

A discussion of potential impacts is provided under each of the resource areas below.

a) Aesthetics/Visual

The project consisted of the installation of a 63-foot communication tower with an approximate footprint of 13 sf. There are no lights installed on the tower. The vicinity of the project includes industrial and residential development. The immediate vicinity of the project is utilitarian in appearance and consists of other communication equipment and utility poles. The Caltrain tracks extend to the north and south of the project.

Sensitive viewers typically include nearby residents and recreational users. The closest residence to the project is in a multi-family development located approximately 0.07 mile north of the project on Laurel Grove Lane. The closest park to the project is Cahill Park, which is located approximately 0.2 mile north of the project. Additionally, Discovery Dog Park is located approximately 0.4 mile east of the project and the Guadalupe River Trail is located approximately 0.5 mile east of the project. There are no Officially Designated State Scenic Highways in the vicinity of the project.¹ As such, the project is consistent with the existing utilitarian visual character in the area. The view of the tower from the closest residence is partially obstructed by fencing and buildings located south of the residence. However, the tower is slender and, in general, does not obstruct any scenic views. The tower is not visible from Cahill Park, Discovery Dog Park, or Guadalupe River Trail due to intervening structures.

The project is similar in appearance to the other communication equipment and utility poles in the vicinity of the project. Additionally, the project did not result any additional sources of light or glare. Therefore, the project did not result in adverse impacts related to aesthetics or visual quality.

b) Agricultural Resources

The project is located within a highly urbanized area that is not used for agricultural purposes. Therefore, the project had no impacts to agricultural resources.

c) Air Quality

The project involved the installation of a tower comprised of prefabricated materials. Due to the nature of the project (the installation of a tower), the project did not involve substantial excavation, grading activity, or additional vehicle trips outside of normal operations. As such, the project required minimal air quality-degrading construction activities and a relatively short construction period. Therefore, the project did not result in adverse impacts related to air quality.

¹ Caltrans, California Scenic Highway Mapping System. Santa Clara County. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed: October 12, 2015.

d) Biological Resources

The vicinity of the project is urban and built out. The project is surrounded by gravel and minimal vegetation. There are no biological resources in the immediate vicinity of the project.² Therefore, the project had no impacts to biological resources.

e) Cultural Resources

There are no known archaeological resources on or near the track within 1,000 feet of the project.³ The vicinity of the tower consists of previously disturbed soil, which limited the potential for disturbance of below ground cultural resources (e.g., human remains) or other paleontological resources. The closest known historical resource on or near the track is the San José/Cahill Station (Diridon) near MP 47.50 in the City of San José, which is approximately 1.6 miles west of the project. The San José/Cahill Station was constructed in 1935 and is listed on the National Register of Historic Places and California Register of Historical Resources.⁴ However, due to the distance between the tower and the San José/Cahill Station, the project did not affect this historic resource. Therefore, the project did not result in adverse impacts related to cultural or historical resources.

f) Geology and Soils

Due to the nature of the project (the installation of a tower), which did not include any habitable structures and required minimal excavation and no grading, the project had no impacts to geological hazards or soil instability.

g) Hazards and Hazardous Materials

The project is not listed on the California Department of Toxic Substances Control List of Hazardous Waste & Substances Sites.⁵ The installation of the tower did not produce any toxic substances, nor did it unearth or expose any hazardous materials. Additionally, the installation of the tower did not involve the routine use and transport of hazardous materials. Therefore, the project did not result in adverse impacts related to hazardous materials.

² ICF. Review of aerial imagery for the vicinity of the project. October 8, 2015.

³ Peninsula Corridor Joint Powers Board. 2014. Final Peninsula Corridor Electrification Project Environmental Impact Report. December.

⁴ Peninsula Corridor Joint Powers Board. 2014. Final Peninsula Corridor Electrification Project Environmental Impact Report. December.

⁵ Department of Toxic Substances Control. 2015. EnviroStor. Available: http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&z=18&ms=640,480&mt=m&findaddress=True&city=park%20avenue%20and%20laurel%20grove%20lane,%20san%20jose&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_site=true&tiered_permit=true&evaluation=true&military_evaluation=true&school_investigation=true&operating=true&post_closure=true&non_operating=true. Accessed: July 28, 2015.

h) Hydrology and Water Quality

According to the Federal Emergency Management Agency Flood Insurance Rate Map, the project is not located within a 100-year floodplain.⁶ Due to the nature of the project (the installation of a tower), which did not change the amount of impervious surface area and did not contribute additional stormwater runoff or contribute to stormwater pollution, the project did not result in adverse impacts related to hydrology and water quality. Additionally, the project did not place a habitable structure within a floodplain, nor did it redirect flood flows.

i) Land Use and Planning

The project, adjacent parcels (the tracks), and other nearby parcels are zoned as Light Industrial, whereas other parcels in the vicinity of the project are zoned as Mixed Uses, High to Very High Density Residential, Heavy Industrial, and Public/Quasi Public.⁷ The vicinity of the project includes primarily industrial and residential uses as well as transit- and transportation-oriented uses and, thus, the project is compatible with surrounding uses. Therefore, the project did not result in adverse impacts related to land use and planning.

j) Mineral Resources

There are no mineral resource sites in the vicinity of the project.⁸ Therefore, the project had no impacts to mineral resources.

k) Noise

Due to the nature of the project (the installation of a tower), no noise or vibration is generated by the project. There are multi-family residences, which are noise-sensitive land uses, located north of the project. The closest residence is located approximately 0.07 mile north of the project. Given the temporary nature of construction activities and the minor need for heavy construction equipment, no substantial construction noise was generated during the installation of the tower. Therefore, the project did not result in any long-term adverse impacts related to noise.

l) Population and Housing

No acquisitions or relocations occurred as a result of the project. Therefore, the project did not result in adverse impacts related to population and housing.

⁶ Federal Emergency Management Agency. 2015. Flood Insurance Rate Map, Map Number 06085C0234H. Revised October 2, 2015. Available: <https://msc.fema.gov/portal>. Accessed: October 6, 2015.

⁷ City of San José. 2015. Land Use Zoning. Available: <http://csj-landzoning.appspot.com/index.html>. Accessed: July 28, 2015.

⁸ City of San José. 2011. Envision San José 2040 General Plan. Available: <https://www.sanjoseca.gov/DocumentCenter/Home/View/474>. November. Accessed: July 28, 2015.

m) Public Services and Recreation

The project did not result in an increase in population. As such, the project did not include uses that required additional police services, fire services, or recreational facilities. Therefore, the project did not result in adverse impacts related to public services.

n) Transportation/Traffic

It is estimated that a signal maintainer or radio technician visits the tower two times per year for regular inspections and as needed to troubleshoot equipment issues. Due to the nature of the project (the installation of a tower), the project did not result in the generation of a substantial amount of additional traffic. Therefore, the project did not result in adverse impacts related to transportation or traffic.

o) Utilities and Service Systems

Due to the nature of the project (the installation of a tower), the project did not result in a substantial demand for utilities (e.g., water, electricity, natural gas) or generation of utilities (e.g., wastewater and solid waste). Therefore, the project did not result in adverse impacts related to utilities and service systems.

NEPA Categorical Exclusion

Given the discussion above, the project qualifies for a NEPA Categorical Exclusion (CE) in accordance with 47 CFR 1.1306. This regulation pertains to actions which are categorically excluded from environmental processing. The project meets this criteria because it involves minor modifications of existing or authorized facilities or equipment and does not involve a site specified under §1.1307(a) (1)-(7), involve high intensity light under §1.1307(a)(8), or result in human exposure to radio frequency radiation in excess of the applicable safety standards specified in §1.1307(b).