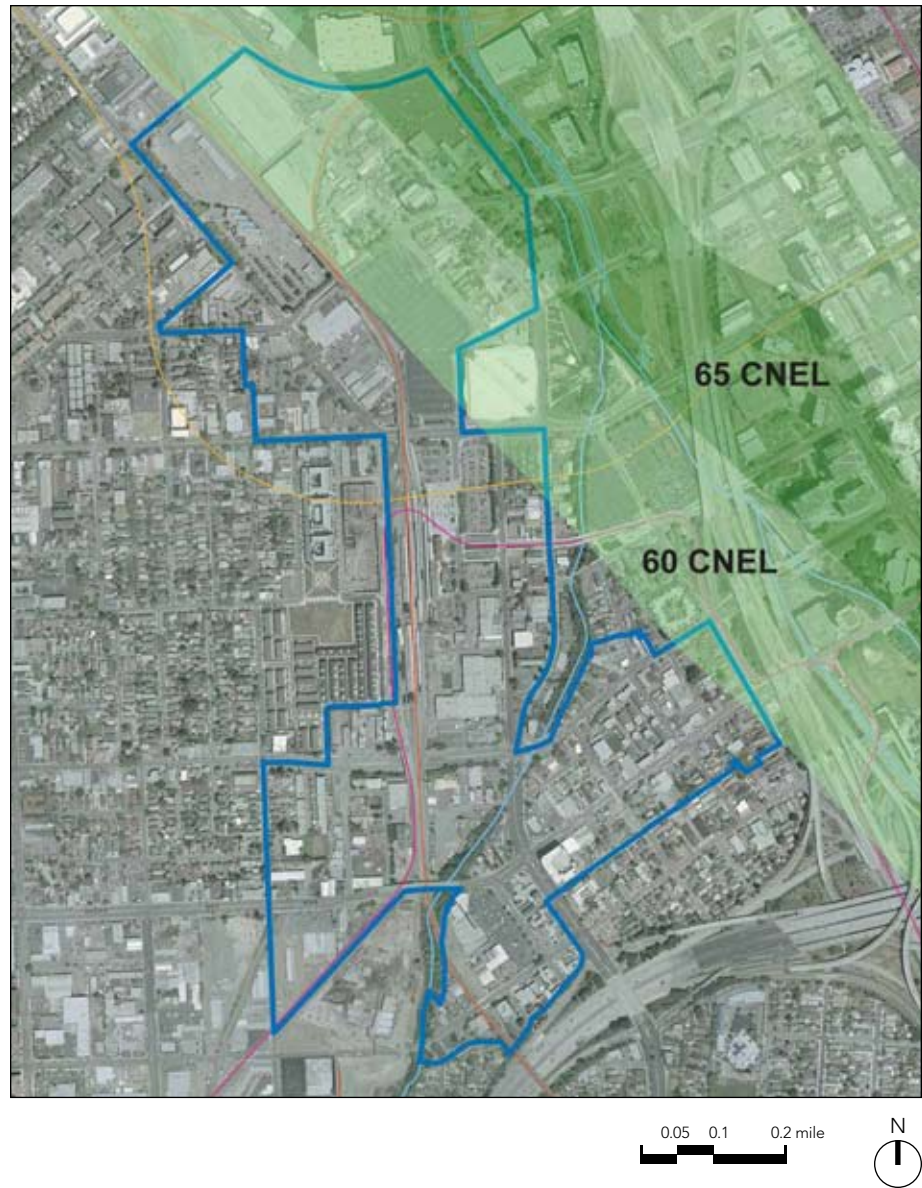


4. KEY ENVIRONMENTAL FACTORS

This chapter reviews existing environmental documents prepared by various Lead Agencies for projects within the proposed Diridon Station Area Plan area. These environmental documents are listed in Appendix B. The most recently prepared documents (i.e., the Baseball Stadium in the Diridon/Arena Area EIR and Coleman Avenue/Autumn Street Improvement Project Final Focused EIR, February 2006 and January 2008, respectively) have provided the majority of the information contained in this chapter. In addition, the City's Geographic Information System (GIS) was used extensively to create the figures presented in this chapter.

The information presented in this chapter should be considered preliminary and is only intended to assist the City as it begins to analyze plan alternatives for the proposed Diridon Station Area Plan. These factors will be investigated in greater detail during the Environmental Analysis Phase of the project.

Figure 4-1: NOISE



4.1 Noise/Vibration

Noise in the project area is currently dominated by traffic, rail, and aircraft noise. Ambient noise levels within the project area range from approximately 55 to 75 dBA Ldn¹ depending upon the proximity to roadways, rail and the flight path of Mineta San José International Airport. Although these levels exceed the San José 2020 General Plan's long- and short-term exterior noise goals for residential uses (long-term is 55 dBA and short-term is 60 dBA), they are typical of those found in the Downtown area, along major roadways, and in the vicinity of the airport.

As shown on Figure 4-1, the Community Noise Equivalent Levels (CNEL) in the project area from aircraft noise are 60 and 65 CNEL dBA.² Residential, commercial, and office uses are located within the City of San José where aircraft noise levels are comparable to those found in the project area.

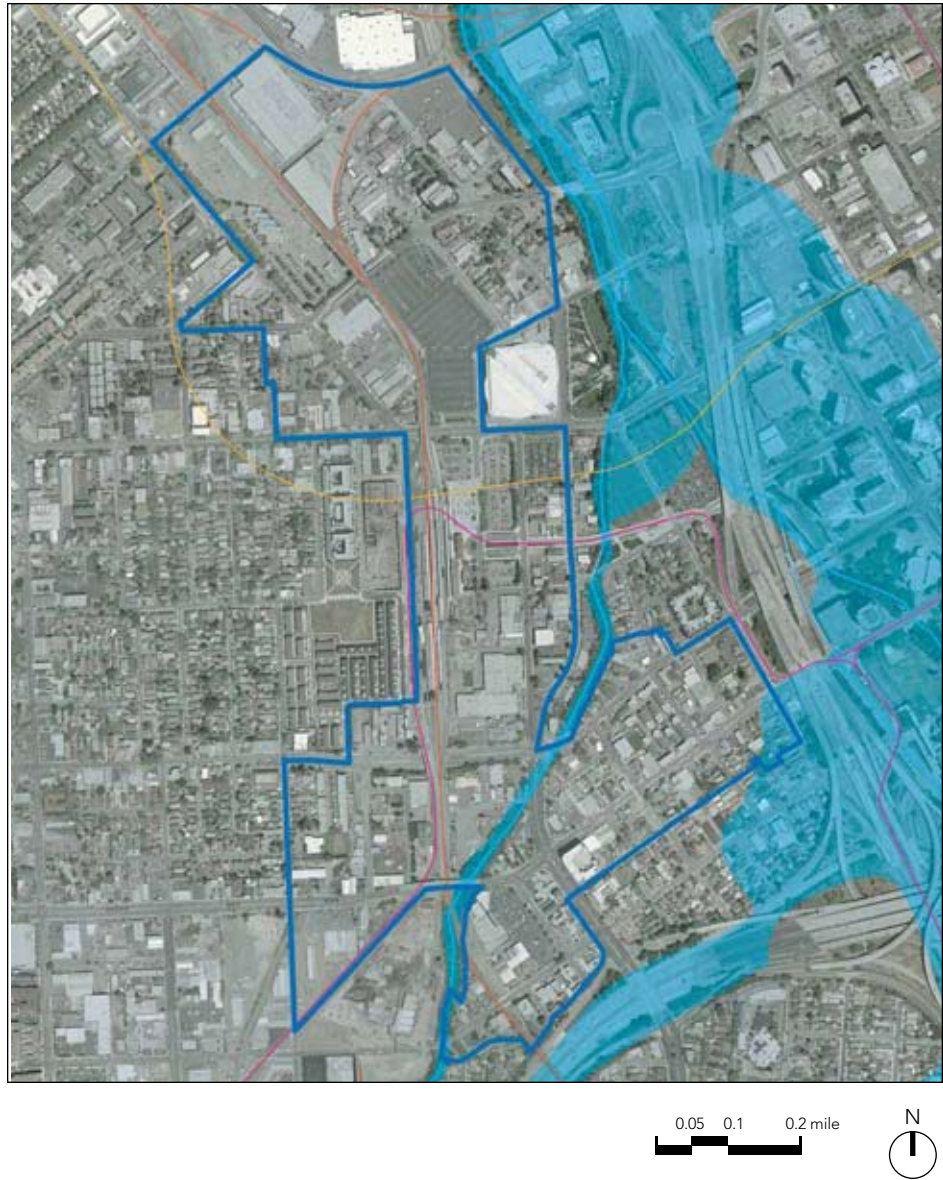
In 2006, the Federal Transit Administration (FTA) updated the guidance manual for their Transit Noise and Vibration Impact Assessment, which presents procedures for predicting and assessing noise and vibration impacts of proposed mass transit projects. Vibration studies were not completed for the project area as part of the Vasona Corridor LRT project; therefore, existing information regarding vibration levels is not available.³

(1) Noise is measured in "decibels" (dB) which is a numerical expression of sound levels on a logarithmic scale. An "A-weighted decibel" (dBA) filters out some of the low and high pitches which are not as audible to the human ear and gives greater weight to frequencies of sound to which the human ear is most sensitive. Thus, noise levels are commonly identified as dBA. Ldn is a 24-hour average of day and night noise levels, with a 10 dB penalty applied to noise occurring between 10 p.m. and 7 a.m.

(2) City of San José, Department of Planning, Building, and Code Enforcement, Geographic Information System (GIS), Existing Mineta San José Airport Noise Contours, 2009.

(3) Email Communication, Christina Jaworski, Senior Environmental Planner, VTA, September 9, 2009.

Figure 4-2: FLOODPLAIN



4.2 Floodplain

The City's GIS floodplain map for the project area is based upon the 1982 Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map (FIRM). According to the GIS map and as shown on Figure 4-2, an approximately 1.5-acre area south of the intersection of Delmas Avenue and San Carlos Street is located within the 100-year floodplain.

The most recent FIRM map for the project area (Figure 4-3), shows two additional areas that are within the 100-year floodplain. These areas are located near the intersection of The Alameda (West Santa Clara Street) and Stockton Avenue, and south of the Union Pacific Railroad tracks near Howard and Cinnabar Streets.

4.3 Hazardous Materials

Phase I and Phase II (testing) Environmental Site Assessments have been completed for various sites within the Diridon Station Area Plan area; however, GIS data are not available. Based on a cursory review of relevant EIRs, current and historical land uses within the plan area include industrial uses such as canneries, blacksmiths, railroad spurs and lines, dry cleaners, auto repair, compressed gas manufacturing, an electrical substation, gas stations, iron works/machine shops, and medical laboratories. Fill materials, underground storage tanks, some of which may have leaked or be leaking, and electric generators may be present on these sites and others within the plan area.

In addition to existing underground and surface contamination, it should be assumed that many of the buildings within the plan area contain either lead paint or asbestos-containing materials. Demolition of these structures will require standard measures to ensure that these contaminants are not released during construction.

Figure 4-3: FLOOD INSURANCE RATE MAP



4.4 Biological Resources

The project site is located in a highly urbanized area and, except in proximity to Los Gatos Creek, vegetation is ornamental. Ordinance size trees are located within the project area, some of which are native species. An evaluation of riparian habitat within the project area has not been completed for this existing conditions report; however, a previously completed Environmental Impact Report for the KB Home Monte Vista Residential project (June 2005), which is located upstream of the project, characterized the creek as a willow riparian corridor. Vegetation is moderately dense within this sensitive habitat. While the dominant tree species is arroyo willow, both native and non-native understory plants were observed within the moderate to steep banks. Concrete riprap is also located within the banks of the creek.

Special-status wildlife species with the potential to occur within the creek riparian and aquatic habitats include Chinook salmon, steelhead trout, western pond turtle, and bird species including sharp-shinned hawk, Cooper's hawk, Red-tailed hawk, willow flycatcher, Peregrine falcon, and American kestrel. No evidence of special-status bat species were detected.

Wildlife species within the project area (outside of the creek corridor) include those that are typical of urban areas and have adapted to such conditions. However, in urban areas, planted trees and shrubs can provide wildlife habitat for birds, including those protected by the Migratory Bird Treaty Act (primarily birds of prey). It is anticipated that these species use the nearby creek environs, as well as the project area, for foraging and nesting.

4.5 Cultural Resources

As shown on Figure 4-4, the majority of the Plan area is located within an area of archaeological sensitivity, based on the City's General Plan. The potential for as-yet-unknown prehistoric sites is moderate to high along creek areas, including Los Gatos Creek. In addition, the potential for buried historic resources is high due to the past residential and commercial uses in the area. The potential deposits (e.g., trash pits, wells, foundations, privies, etc.) may be associated with the former and current buildings and structures noted on Figure 4-5. At the same time, it is probable that prior disturbance from grading, excavation, filling, and other construction and development activities over the past 100+ years may have impacted the integrity of any such deposits.

As shown on Figure 4-5, historic resources are located within the project area. At least four sites are either listed or eligible for listing on the National Register of Historic Places, the California Register, or as a City of San José Landmark. Diridon Station itself and associated structures have been listed on the National Register since 1993. The 645 Park Avenue KNTV Broadcast Facility appears eligible for the California Register and is a Candidate City Landmark. The Evangelical church structure at 217 Delmas Avenue appears eligible for the National Register and is a Candidate City Landmark. Finally, the Dennis residence at 237 North Autumn Street appears eligible for the National Register and is a City Landmark. Other architectural resources may also be located within the Plan area.

Figure 4-4: ARCHAEOLOGICAL SENSITIVITY

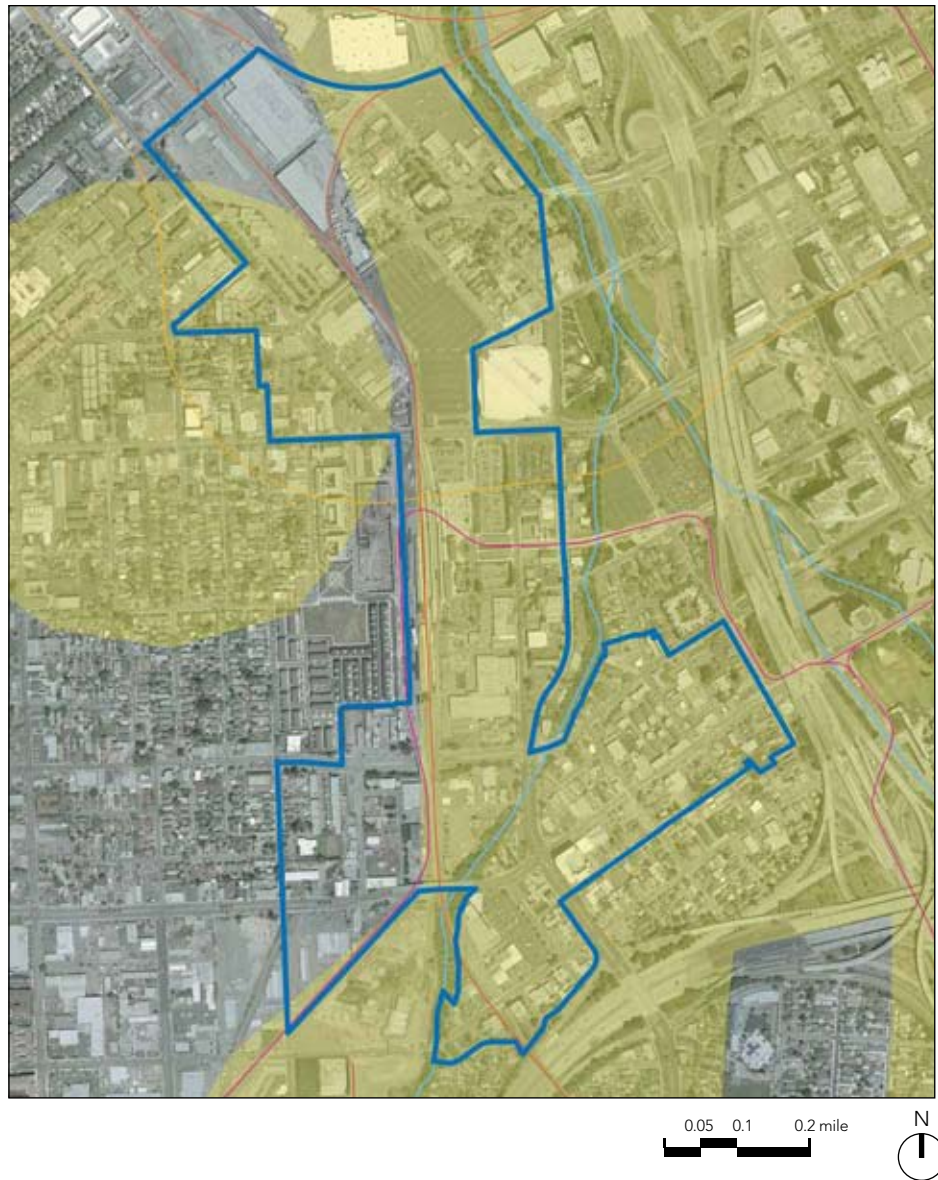
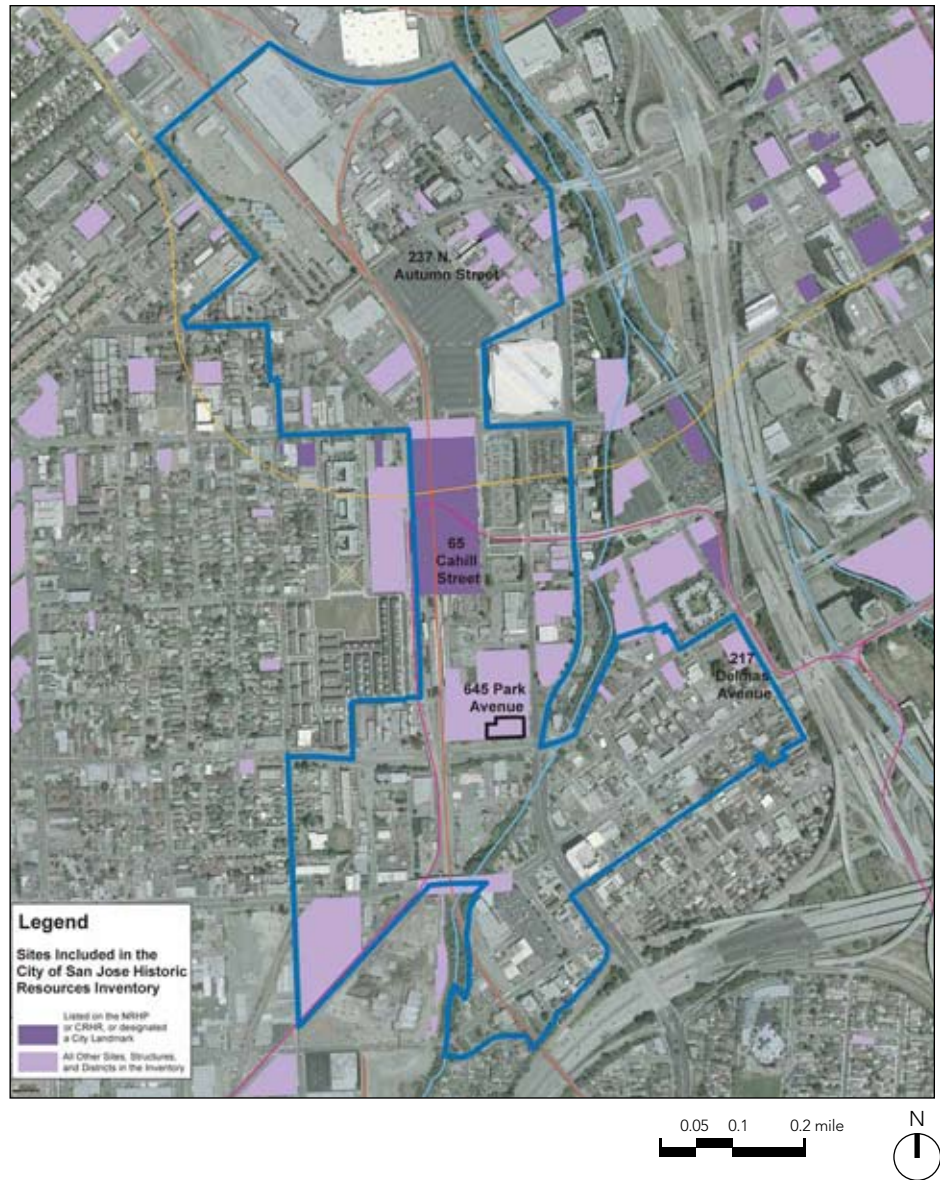


Figure 4-5: HISTORIC RESOURCES



4.6 Air Quality

Despite the substantial growth of the Bay Area in recent decades, overall air quality has been improving. The improvement is primarily due to the implementation of measures that have reduced emissions from both stationary sources (e.g., factories, power plants, refineries, etc.) and mobile sources (e.g., automobiles, buses, trucks, aircraft, etc.). Complementing source-control measures are a variety of strategies, policies, and programs that are designed to improve air quality. These include programs to buy-back older automobiles and gasoline-powered lawnmowers, incentives for replacing older wood-burning stoves and fireplaces, incentives/subsidies for transit riders/carpoolers, incentives for purchasing low-emission products, Spare-the-Air campaigns, and local land uses policies that result in a reduction in the number/length of vehicle trips. The latter category includes locating jobs near housing, constructing mixed-use developments, and zoning land along rail corridors for higher densities.

The Bay Area is designated as an “attainment area”, meaning the area meets the relevant standards, for carbon monoxide, nitrogen dioxide, and sulfur dioxide. The region is classified as a “nonattainment area” for both the federal and state ozone standards, although a request for reclassification to “attainment” of the federal standard is currently being considered by the U.S. EPA. The area does not meet the state standards for particulate matter (see Table 4-1).

4.7 Geology

The project site is located in northern Santa Clara County, an alluvial valley between the Mt. Hamilton Range (east) and Santa Cruz Mountains (west). The area is underlain by Quaternary-aged unconsolidated, moderately compressible, alluvial soils consisting of soft to stiff silts, clays, and loose to dense sands. The area is relatively flat with an average elevation of approximately 100 feet above mean sea level. Soils are of the Yolo association and have moderate to high shrink/swell potential.

The entire Bay Area is located within the San Andreas Fault Zone, a complex of active faults where moderate to strong earthquakes have been generated. For this reason, the Bay Area is classified as Zone 4, the highest risk category for seismic risk. Regional active faults include the San Andreas, Hayward, and Calaveras; however, no faults cross the project area.

Much of the Santa Clara Valley, including the Plan area is located within a Liquefaction Hazard Zone. Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or failure to occur.

Table 4-1: SUMMARY OF RECENT AIR QUALITY MONITORING DATA - CENTRAL SAN JOSE (Source: Bay Area Air Quality Management District, 2005)

[Expressed as Number of Days Exceeding the Standard]

Pollutant	Standard	San Jose Central		
		2005	2006	2007
Ozone	State 1-Hour	1	5	0
Ozone	Federal 8-Hour	0	1	0
CO	State/Federal 8-Hour	0	0	0
NO ₂	State 1-Hour	0	0	0
PM ₁₀	Federal 24-Hour	0	0	0
PM ₁₀	State 24-Hour	2	2	3
PM _{2.5}	Federal 24-Hour	-	6	9

CO = carbon monoxide NO₂ = nitrogen dioxide PM = particulate matter

There are three BAAQMD monitoring stations in San José, including one on Jackson Street in Downtown (San José Central). Table 4-1 summarizes recent data at this nearest station in terms of the number of days the applicable standard was exceeded.