

IV. ENVIRONMENTAL SETTING

IV.A. EXISTING CONDITIONS

1. Land Use

The project area currently contains a variety of land uses including agricultural farmlands, nurseries, recreation, open space and low density residential uses. The area to the east of Hetrick Road and north of Willow Road contains pasture lands used for cattle grazing, the C&M Nursery, open grasslands, and scattered homesites on large parcels. The land west of Pomeroy Road includes the Black Lake Golf Course and residences. The remainder of the land around the project area generally contains homes on relatively small lots, to which access is provided by rural roads.

2. Traffic and Circulation

US 101 provides regional access to the project area. US 101 serves as an important route for traffic between the "Five Cities" area (including Arroyo Grande, Grover Beach, Pismo Beach, Shell Beach, and Oceano) and San Luis Obispo to the north and Santa Maria to the south. Existing nearby US 101 interchanges are located at Tefft Street and Los Berros/Thompson Road. These interchanges provide access to the local roadway system. Tefft Street is a 4-lane arterial road that defines the southern boundary of the project area. Los Berros Road is a two-lane arterial road that defines the northern boundary of the project area. Thompson Road is a two-lane arterial road along the eastern boundary of the project area and Pomeroy Road is a two-lane rural road along the western boundary of the project area. Los Berros Road and Thompson Road provide access to US 101 for traffic originating from the west and east, respectively. Tefft Street is the primary arterial serving the community of Nipomo. Pomeroy Road connects Los Berros Road with Tefft Street, providing a key route for traffic from the interior of Nipomo Mesa heading to US 101.

In additions to these roads, several other roads are key to the circulation system in the project area. Willow Road is a discontinuous rural road that provides a primary link to State Route 1 on the Nipomo Mesa, Black Lake Village, rural residences, nurseries, and vacant lots along its various segments. Hetrick Avenue is a narrow two-lane rural road (portions currently unmaintained) that runs roughly northwest-southeast between Summit Station Road and Pomeroy Road.

3. Noise

The existing roadways that provide access to and through the project area also provide the greatest source of noise. Noise within the project area is primarily derived from traffic along US 101, Thompson Avenue, Pomeroy Road, Willow Road, and Hetrick Avenue. Exterior ambient noise levels at residences within the project area range from 42 to 58 dBA L_{dn} . This noise level range falls below the County noise standard of 60 dBA L_{dn} .

4. Climate and Air Quality

While traffic generates some of the pollutants that can affect air quality, climatic conditions also have considerable influence on air quality. Seasonal variation in the strength and position of an area of high pressure over the eastern Pacific affects the circulation of air onshore and offshore. This variation influences the dispersal and concentration of pollutants. Consequently, concentrations of pollutants are most likely to occur during the fall and winter, when pollutants may become trapped onshore or when winds transport pollutant-laden air from the east and southeast.

Airborne pollutants for which state standards exist include carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulates less than 10 microns (PM₁₀). The Nipomo Regional Park air quality monitoring station monitors four of these pollutants: ozone, NO₂, SO₂, and PM₁₀. The closest monitoring station with CO and PM_{2.5} data is the Santa Maria station. CO levels have been below state standards during the past three years. Ozone levels, NO₂ levels, and SO₂ levels have been lower than state standards for the past five years. Only the PM₁₀ levels have exceeded state standards recently, having exceeded the state standard from 1 to 3 days per year in the past five years.

5. Public Services

The County of San Luis Obispo provides law enforcement services to the project area through their Oceano substation. Traffic enforcement is provided by the California Highway Patrol. The California Department of Forestry/San Luis Obispo County Fire Department provides fire protection and emergency response services for the Nipomo area. The project area is also served primarily from the Nipomo and Nipomo Mesa (Station 22) Stations. The Nipomo area is served by the Southern California Gas Company for natural gas service and Pacific Gas and Electric for electrical service. The Nipomo Community Services District provides water and wastewater services. Telephone and cable television services are provided by Pacific Bell and Charter Communications respectively. Underground utilities are located throughout the project area and an overhead electric power line runs from east of Pomeroy, over US 101 and over to Thompson Avenue.

6. Biological Resources

The vegetation on the property is a mosaic of several habitat types. Seventeen plant communities, or variations of these communities, exist within the study area. Of the seventeen communities within the project area, state and/or local agencies consider four of them (oak woodland, maritime chaparral, willow riparian, and freshwater marsh) to be sensitive primary plant communities. The Nipomo Creek drainage supports the freshwater marsh and willow riparian habitats, increasing the diversity of habitat in the project area. No federally listed, state listed, or proposed endangered or threatened plant species were observed within any of the plant communities during surveys on the project site. In addition to native and naturalized plant communities, the project area contains ornamental plantings, eucalyptus groves, agricultural lands, and developed and/or disturbed areas. Disturbed/developed areas and oak woodland predominate within the project area.

Wildlife species occurring within the study area are characteristic of those found within these habitats. One sensitive reptile species, California horned lizard (*Phrynosoma coronatum frontale*), was observed during both the 1997 and the 2003 surveys. The California horned lizard is a State Species of Special Concern. In addition, habitat within and adjacent to the study area is appropriate

for this species, so significant substantial populations may be present in the vicinity. Two additional sensitive species (loggerhead shrike [*Lanius ludovicianus*] and the American badger [*Taxidea taxus*]) were observed during the 1997 surveys but not during 2003 surveys. Both of these species are also State Species of Special Concern.

7. Cultural Resources

Twenty-two archaeological sites occur within one mile of the project area. Five of these sites—CA-SLO-1319H, CA-SLO-1620, CA-SLO-1767, and CA-SLO-2133, and CA-SLO-2271—occur in the project area. Prehistoric settlement in the region concentrated along the eastern edge of Nipomo Mesa, located west of US 101. This vantage point provided access to Nipomo Creek and its tributaries—located east of US 101—without being subject to seasonal flooding.

Historic-era settlement also clustered near this edge of Nipomo Mesa. The project area was part of the Nipomo Rancho granted by the Mexican government to William Dana in 1837. In 1881, Dana's heirs gave permission to the Pacific Coast Railroad to cross the property. Within the project area, the Pacific Coast Railroad bed runs between the Mesa's edge and Nipomo Creek. Dana's heirs then subdivided and sold the property. The community of Nipomo rose around the railroad. Near the project area, most development has occurred since the 1950's as part of the settlement shift from urban areas and isolated farms. The earliest existing building in the vicinity of the project area dates to 1952. Nevertheless, much of the area that lies within and adjacent to the proposed project comprises agricultural lands.

8. Agriculture

A variety of agricultural practices have occurred in the project area and surrounding region. Farmers have practiced dry farming both to the west of US 101 on Nipomo Mesa and to the east of US 101 within Nipomo Valley. This farming no longer occurs on Nipomo Mesa, however, because of the poor, sandy soils in this area. Farmers have also irrigated fields for crop production between Nipomo Creek and Thompson Road. Undeveloped areas on Nipomo Mesa and within Nipomo Valley have also been occasionally used for cattle grazing. Two nurseries currently operate in the project area, including the C&M Nursery and Pismo Flowers (formerly Brand Flowers, Inc.), a greenhouse/flower growing operation. C&M Nursery lies adjacent to and immediately east of US 101, while Pismo Flowers, Inc. is located between Hetrick Avenue and Pomeroy Road. Ten agricultural preserves exist within the project area. The County assesses taxes on these preserves at a low rate as long as the land owner and the County agree to maintain the contract establishing the preserve and the existing uses remain agricultural or open space.

The type of agriculture practiced in the region depends on the ability of local soils to support particular land uses. Soils differ considerably between Nipomo Mesa and Nipomo Valley. Sandy Oceano series soils, found on Nipomo Mesa, are primarily used for rangeland, urban development, and limited crops (lemons, avocados, strawberries, and Christmas trees). Cropley Clay and Diablo series soils, located within Nipomo Valley, are "prime" agricultural land when irrigated. Without irrigation, these soils are still suitable for dryland crops such as vegetables and small grains or for rangeland. Tierra series soils lie on a stream terrace adjacent to Nipomo Creek within Nipomo Valley. This soil has been used for rangeland and for growing hay crops and small grains.

9. Visual Aesthetics

The predominance of agricultural uses and open space in the region contribute greatly to the visual setting of the project. Many views include relatively undisturbed areas, native vegetation, and mature trees. The largely undeveloped Temattate ridge to the east provides a scenic backdrop. Automobile headlights from US 101 constitute the primary source of light and glare in the project area followed by the urban commercial development of Nipomo to the south. Light and glare in the project vicinity can be seen as far east as Tematatte Ridge and as far west as Hetrick Road.

10. Geology and Soils

The project area lies within the Coast Ranges Geomorphic Province. Fault-bounded mountain ranges, trending northwest to southeast, characterize this region. Within the project area, the Wilmar Avenue fault reaches the surface near Nipomo Creek and crosses the proposed extension of Willow Road. This fault is a "blind" reverse fault, a type for which the potential for surface rupture is thought to be low. A major earthquake on the fault in this area could, however, cause warping and fracturing of the ground surface. Bedrock occurs at 70 to 80 feet below the ground surface. Groundwater likely occurs at depths of 70 feet or more throughout most of the project area, which substantially reduces the potential for liquefaction. Liquefaction typically occurs only in places where the groundwater exists within 50 feet of the ground surface. The project area lies on a coastal plain, which slopes gradually from east to west. Most of the project area lies within the Nipomo Mesa, an area of thick, sandy dune deposits that form smoothly eroded hills and shallow linear valleys. Oceano series soils, formed from the dune deposits, occur on Nipomo Mesa. Nipomo Creek borders the eastern edge of Nipomo Mesa. Nipomo Creek and its tributaries have deposited alluvium in adjacent areas, and Cropley Clay series soils developed in these deposits. Undifferentiated Diablo and Cibo Clay series soils lie near the southern end of Thompson Road.

11. Drainage, Erosion, and Sedimentation

On the Nipomo Mesa, the topography comprises open flat areas, linear valleys, and hilly knolls, formed in an area of sand dunes. Slopes in this area generally vary between two and ten percent, although slopes may range between ten and 20 percent in some local depressions. No areas of standing water exist on the Mesa near the project area. The only noteworthy water feature on the Nipomo Mesa is the Black Lake Slough. The Mesa does include numerous closed depressions or bowls where water collects without an outlet. Nipomo Creek, a secondary waterway, runs along the eastern edge of the Mesa, passing through the project area. This creek is shallow and broad. It drains a total of 2,103 acres. During a 100-year flood event, the creek channel would be two to three feet deep and its width would span from 280 and 560 feet.

Because different types of soils exist on Nipomo Mesa and in Nipomo Valley, these areas have different levels of susceptibility to erosion. The sandy soils of Nipomo Mesa may erode easily when vegetation is removed or where surface flows are concentrated, forming gullies during winter storms. Winds can also erode these soils, especially when their vegetation is disturbed. Soils within Nipomo Valley do not erode as readily, although winds can affect the Tierra Sandy Loam series soil that borders the northern side of Nipomo Creek.

12. Water Quality

Within the project area, surface runoff either drains towards Nipomo Creek or into closed depressions. Water collected in the closed depressions percolates quickly into the soil and groundwater basin below. The creek discharges to the Santa Maria River about four miles downstream. Levels of total and fecal coliform, nitrate, total dissolved solids, chloride, sodium, and sulfate exceed applicable criteria at sampling stations located a short distance downstream from the project site.

The project site lies within the Santa Maria River Valley Groundwater Basin, at the border of the Lower Nipomo Mesa Hydrologic Sub-Area (HSA) and the Nipomo Valley Subbasin. Groundwater is unconfined in most of the basin except in the coastal areas. Local areas of shallow perched groundwater occur within the project area, particularly near Nipomo Creek. Groundwater in most of the project area, however, probably occurs at 135 feet below the ground surface. The Santa Maria Valley Groundwater Basin, including the Nipomo Mesa, has a history of high nitrate and total dissolved solids concentrations, particularly in the vicinity of the Cities of Santa Maria and Guadalupe. Such pollution likely derives from nonpoint sources generated by agriculture and urban activities.

13. Hazardous Materials

Some of the land uses within the proposed project area have the potential to generate or use hazardous materials. Pesticides may have been used on agricultural fields near the project, and these pesticides may be present on surface soils. Most agricultural lands lie to the east of US 101. West of US 101, the land use has been classified as Residential Rural, but most of these lands occupy areas that are currently cultivated or have been cultivated in the past. Farmers may have used pesticides in these areas. Nurseries located close to the project area may have also used pesticides.

Hazardous materials in the project area may also derive from other sources. San Luis Obispo is among the counties listed as containing serpentine and ultramafic rock. The General Location Guide for Ultramafic Rocks in California shows no areas of natural occurring asbestos (NOA) in the project vicinity. However, in the unforeseen event of the discovery of ultramafic or asbestos containing materials, there are county requirements that must be followed to reduce or eliminate the NOA impact. An underground natural gas pipeline, owned by Pacific Gas & Electric, lies along the western boundary of US 101. Two Unocal pipelines exist east of US 101 and west of Thompson Avenue. Potentially hazardous materials, including small oil tanks and other unidentified tanks, occur on private property located west of US 101 and south of the proposed interchange. None of these potential sources of hazardous materials is known to be leaking such materials currently.

14. Socioeconomics

The community of Nipomo contained a population of 15,391 people in 2000. Since 1980, population in the community increased at a much higher annual rate of growth than the County as a whole. The median house price in Nipomo during 2000 was \$234,600 which was lower than the median house price for the County. Nipomo contains a variety of small and medium sized businesses, which cater primarily to local customers. The majority of these businesses lie adjacent to the main thoroughfares Tefft Street, US 101, Orchard Road, and Old Towne.

IV.B. CUMULATIVE PROJECTS

The CEQA Guidelines, Section 15355, defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts”. These individual effects may derive from a single project, or they may result from the implementation of a number of distinct projects. Cumulative impacts resulting from separate projects are the sum of the individual environmental changes caused by the implementation of past, present, and likely future projects. The impact of any individual project may be modest, but the sum of the impacts from multiple projects, implemented over a period of time, may be significant.

Chapter V provides an analysis of cumulative impacts for each issue discussed in that chapter. The analyses consider the combined impacts of 24 private projects and two other public projects in the region around the proposed project (Table IV-1). These projects derive from a list of pending and recently approved projects provided by County staff. Most of the cumulative projects occur on Nipomo Mesa to the west of the proposed project (Figure IV-1) in the area serviced by this project. Many of the projects on the cumulative projects list propose new subdivisions of existing lots, increasing the total number of lots in the area. These projects also include plans for three golf courses, two green houses, a resort hotel, a lodge, a Mini Storage facility, and other commercial uses. Some of the projects entail the conversion of agricultural land or rural residential land to other uses. As noted in Chapters III and IX, the proposed project facilitates and accommodates the increased population and traffic created by the cumulative projects.

Table IV-1: Cumulative Projects

Type	Project Name	Description	Location	Current Status
Private	Cypress Ridge Tract Map & Development Plan	18 hole golf course, 386 homes	At Halcyon Road & El Campo in Mesa Village area	Approved
Private	Black Lake Specific Plan Amendment & Tract Map	Increase existing Specific Plan densities by 44 units	Willow Road and Pomeroy	Approved
Private	Meier/Herreck Tract Map	Resubdivide 113 lots into 183 lots (70 lot increase)	Old Nipomo, Thompson Rd. & Chestnut	Approved
Private	Teter Tract Map	Resubdivision from 3 to 4 lots (one lot increase)	Pomeroy & Live Oak	Approved
Private	Greenhart Farms Development Plan	415,000 sq.ft. greenhouse	Zenon Rd., south of Cheesepeake	Approved
Private	Murphy Tract Map	6-lot subdivision	Division St. & Tyrus Ct.	Approved
Private	Katzenstein Parcel Map	4-lot subdivision	Zenon Rd. & Black Lake Canyon	Approved
Private	Armstrong Tract Map	27-lot subdivision	Orchard and Grande	
Private	Sheilds & Shields Tract Map	41-lot subdivision	Hwy 101 & Hwy 166	Approved
Private	Lampe Tract	7-lot subdivision	S. Oak Glen	
Private	Busick Tract Map	18-lot subdivision	El Campo Rd. & Hwy 101	To P/C in Aug/04
Private	Sejera/Thompson Tract	13-lot subdivision	Thompson & Hwy 101	Approved

Type	Project Name	Description	Location	Current Status
	Map			
Private	Belsher & Becker Tract Map	4-lot subdivision	Pomeroy near Willow	Approved
Private	Ball Seed Development Plan	208,000 sq.ft. greenhouse	Zenon & Cheasapeake	
Private	The Woodlands Specific Plan	1,320 dwelling units, 31 acres commercial/business park, 18 acre (500 unit) resort hotel, and two golf courses (45 holes)	East of Hwy 1, one mile south of Willow Road	Approved; 1st tract/golf course approved and under construction
Public	North Mesa Assessment District	Improve various roads on north side of Black Lake Canyon	Portions of El Campo, Zenon, Stanton	Approved
Public	Widen portion of Halcyon Road	Widen portion of Halcyon Road		Approved
Private	Nipomo Oaks/Melschau	Change 40 acres designated agriculture land to commercial retail (175,000 sq.ft.)	Willow & Hetrick	Pending
Private	Brand	Change 32 acres residential rural land to residential suburban and 40 acres rural lands to commercial service	S. Frontage Road & Southland	Pending
Private	Craig/Lucia Mar School District	Change 40 acres residential rural land to 16 acres recreation and 24 acres of public utilities (school and ancillary uses)	Willow & Via Concha	Pending
Private	Cypress Ridge	Change 18 acres of residential suburban land to recreation, including a 102 room lodge and clubhouse expansion	El Campo & Halcyon	Approved
Private	SLO County-Summit Station and Robertson et. al.	Amend the land use ordinance to remove two standards that apply to Summit Station. Increase development potential of 46 primary and 184 secondary dwellings	Pomeroy/Frontage Rd/Los Berros	Approved
Private	Anderson	Change 38 acres agricultural land to residential rural	NE corner Guadalupe & Willow	Approved
Private	Vellagio	20 Lots, Tract 2381	Near Willow Road and Pomeroy Road	Approved
Private	Robinson Weaver	Mini Storage with offices, approximately 2.5 acres	Northwest of the corner of Sandydale Drive and N. Frontage Road, just west of Hwy 101	Approved
Private	Biorn LUO Amendment	Change up to 50 acres from CS/RS to IND	Immediately west of Hwys 166/101 interchange	Pending

ID	Type	Name	Location
1	Private	Cypress Ridge Tract Map & Development Plan	Halcyon Road & El Campo Road
2	Private	Black Lake Specific Plan Amendment & Tract Map	Willow Road & Pomeroy Road
3	Private	Meier/Herreck Tract Map	Old Nipomo Road, Thompson Road & Chestnut Road
4	Private	Teter Tract Map	Pomeroy Road & Live Oak Ridge Road
5	Private	Greenhart Farms Development Plan	Zenon Road, south of Cheasepeake Place
6	Private	Murphy Tract Map	Division Street & Tyrus Court
7	Private	Katzenstein Parcel Map	Zenon Road & Black Lake Canyon
8	Private	Armstrong Tract Map	Orchard Road & Grande Street
9	Private	Sheilds & Shields Tract Map	US 101 & Hwy 166
10	Private	Lampe Tract	South Oakglen Avenue
11	Private	Busick Tract Map	El Campo Road & US 101
12	Private	Sejera/Thompson Tract Map	Thompson Avenue & US 101
13	Private	Belsher & Becker Tract Map	Pomeroy Road near Willow Road
14	Private	Ball Seed Development Plan	Zenon Road & Cheasapeake Place
15	Private	The Woodlands Specific Plan	East of SR 1, one mile south of Willow Road
16	Public	No. Mesa Assessment District	Portions of El Campo Road, Zenon Road, & Stanton Road
17	Public	Widen portion of Halcyon Road	Halcyon Road
18	Private	Nipomo Oaks/Melschau	Willow Road & Hetrick Avenue
19	Private	Brand	South Frontage Road & Southland Avenue
20	Private	Craig/Lucia Mar School District	Willow Road & Via Concha
21	Private	Cypress Ridge	El Campo Road & Halcyon Road
22	Private	SLO County-Summit Station & Robertson et. al.	Pomeroy Road/Frontage Road/Los Berros Road
23	Private	Anderson	Northeast corner of Guadalupe Road & Willow Road
24	Private	Vellagio	Near Willow Road & Pomeroy Road
25	Private	Robinson Weaver	Northwest of the corner of Sandydale Drive and N. Frontage Road, just west of US 101
26	Private	Biom LUO Amendment	Immediately west of the Highway 166/US 101 interchange

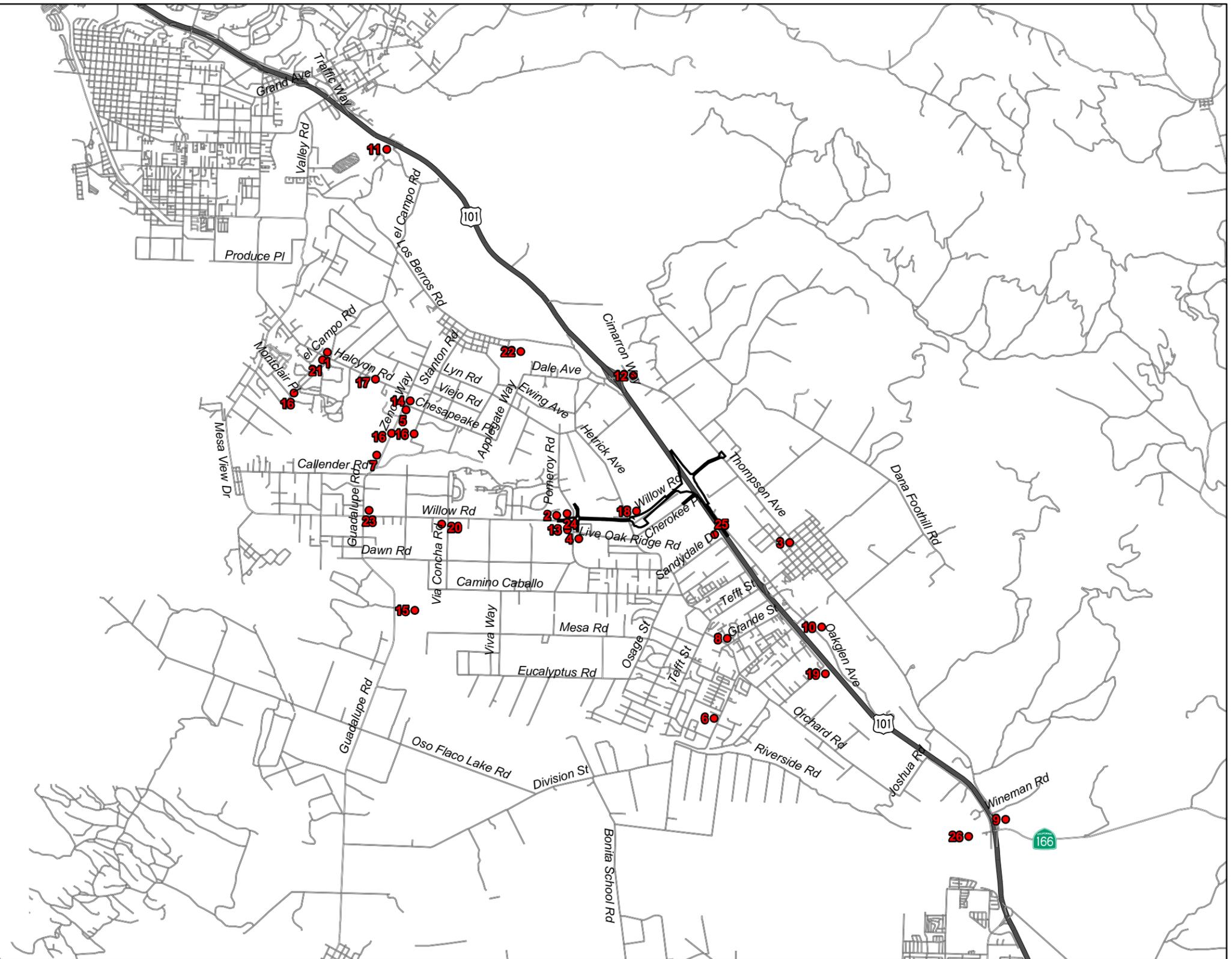
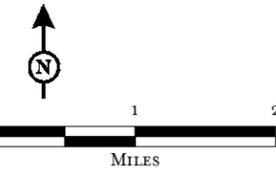


FIGURE IV-1

LSA



Willow Road Extension/U.S. 101 Interchange Project
Cumulative Projects

SOURCE: Census 2000 Tiger/Line Data, County of San Luis Obispo Planning and Building Department.
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