# HISTORIC STRUCTURES/SITES REPORT

# Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project, Santa Barbara, California

Prepared For

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# CONTENTS


**1 INTRODUCTION** ..... 1

**2 PROJECT DESCRIPTION** ..... 1

**3 DOCUMENTS REVIEW AND METHODOLOGY** ..... 5
- 3.1 RECORDS AND LITERATURE SEARCH ..... 5
- 3.2 ARCHITECTURAL FIELD SURVEY ..... 6

**4 SITE, ARCHITECTURAL, AND SOCIAL HISTORY** ..... 7
- 4.1 EARLY HISTORY ..... 7
- 4.2 AMERICANS AND STATEHOOD ..... 7
- 4.3 INCREASED URBANIZATION AND RESIDENTIAL DEVELOPMENT ..... 9
- 4.4 EASTSIDE NEIGHBORHOOD ..... 10
- 4.5 SYCAMORE CREEK ..... 11
- 4.6 STONE MASONRY CONSTRUCTION IN SANTA BARBARA COUNTY ..... 12
- 4.7 DESIGNERS AND BUILDERS ..... 13

**5 FIELD INVENTORY** ..... 14

**6 HISTORIC STRUCTURE ASSESSMENT** ..... 19
- 6.1 THRESHOLDS OF SIGNIFICANCE ..... 19
- 6.2 SIGNIFICANCE ASSESSMENT ..... 22
- 6.3 INTEGRITY EVALUATION ..... 25

**7 EVALUATION OF POTENTIAL PROJECT EFFECTS** ..... 25
- 7.1 GUIDELINES FOR DETERMINING PROJECT IMPACTS ..... 25
- 7.2 PROJECT ALTERNATIVES ..... 26
  - 7.2.1 No-Build Alternative ..... 26
  - 7.2.2 Alternative 1—Rehabilitation and Widening ..... 27
  - 7.2.3 Alternative 2—Separate Pedestrian Structure ..... 27
  - 7.2.4 Alternative 3—Culvert Relocation ..... 28
  - 7.2.5 Alternative 4—Bridge Replacement (Proposed Project) ..... 28
- 7.3 ANALYSIS OF PROPOSED PROJECT ..... 29

**8 SUMMARY AND RECOMMENDATIONS** ..... 29

**9 RESOURCES CONSULTED** ..... 31


## APPENDICES


**A Complete Project Description**
**B 1923 Drawing of the Culvert**
**C California Department of Parks and Recreation Forms for the Montecito-Yanonali Street Culvert**

## FIGURES

1 Location of the Montecito-Yanonali Street Culvert in the city of Santa Barbara .....2
2 Aerial view of the HSSR study area .....3
3 Upstream (north) elevation illustrating the culvert arch, spandrel wall, steel rails, and concrete curbing on the deck .....14
4 Detail view of the interior abutment, stone course, and board-formed concrete arch .....15
5 Main sewer line attached with triangular brackets to the south spandrel wall .....15
6 Looking west at the wing wall adjacent to the northwest corner of the culvert .....16
7 Uncut rubble masonry arch bridge on State Route 192 over Sycamore Canyon Creek.....17
8 Rattlesnake Canyon Bridge illustrating a rectangular cut arch with uncut rubble spandrel walls .....18
9 Rectangular cut, closed spandrel arch on Mission Canyon Road over Mission Creek .....18
10 Ashley Road Bridge over Montecito Creek in Santa Barbara County is also a rectangular cut, closed spandrel arch.....19

## TABLES

1 Masonry Bridges on Public Roads in Santa Barbara City/County .....17

# 1 INTRODUCTION

The City of Santa Barbara (City) proposes to replace the Montecito-Yanonali Street Culvert over Sycamore Creek in the city of Santa Barbara, Santa Barbara County, California. The replacement of the obsolete structure is only one component of the larger Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project. Although the City has allocated revenue toward this project, the project is funded primarily by a grant from the Active Transportation Program (ATP) with state only money. This Project does not have any federal entailment. In support of the project, Applied EarthWorks, Inc. (Æ) prepared this Historic Structures/Sites Report (HSSR) under subcontract to Drake, Haglan, and Associates, at the request of the City. This report only addresses the significance and potential project impacts to the Montecito-Yanonali Street Culvert and does not consider impacts to the built environment resources surrounding the larger pedestrian improvements project.

Architectural Historian Aubrie Morlet, M.A., who is appropriately qualified under the Secretary of the Interior's Professional Qualifications Standards for conducting architectural historical studies, evaluated the resource in accordance with the 2002 *City of Santa Barbara Master Environmental Assessment, Guidelines for Archaeological Resources and Historic Structures and Sites* (herein MEA). Æ also evaluated the eligibility of the resource for listing on the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP).

# 2 PROJECT DESCRIPTION

The proposed project is in the southeastern part of the city of Santa Barbara. It lies within an unsectioned portion of Township 4 North, Range 27 West as shown on the U.S. Geological Survey Santa Barbara, Calif., 7.5-minute topographic quadrangle (Figure 1). The setting features a densely populated urban area with residential, community, and educational buildings typically seen within the city of Santa Barbara. Developed in consultation with the City of Santa Barbara Public Works Department, the HSSR study area is bound to the Montecito-Yanonali Street Culvert (Figure 2). For purposes of this project, Montecito and Yanonali streets are discussed as generally running east to west and Sycamore Creek flows from north to south within the study area.

The City is proposing to replace the existing Montecito-Yanonali Street Culvert over Sycamore Creek with a new bridge at the same location and add pedestrian improvements to the surrounding area as part of the Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project. The pedestrian improvements will consist of adding new sidewalks, curb ramps, and pedestrian-scale lighting along Montecito Street, Yanonali Street, and Salinas Street. The project is located in the heart of the Eastside neighborhood of the city of Santa Barbara, which has one of the highest concentrations of pedestrian activity and bicycle commuters in the city. The project is split between the service boundary lines for Cleveland and Franklin elementary schools (Adelante Charter School is next to the Franklin School campus) and is the same distance to both schools at approximately 0.4 mile. There is one bus stop just east of the bridge and roundabout along Salinas Street providing a walk/transit connection. There are two other bus stops within a 0.25 mile of the bridge: one on Montecito Street west of Soledad

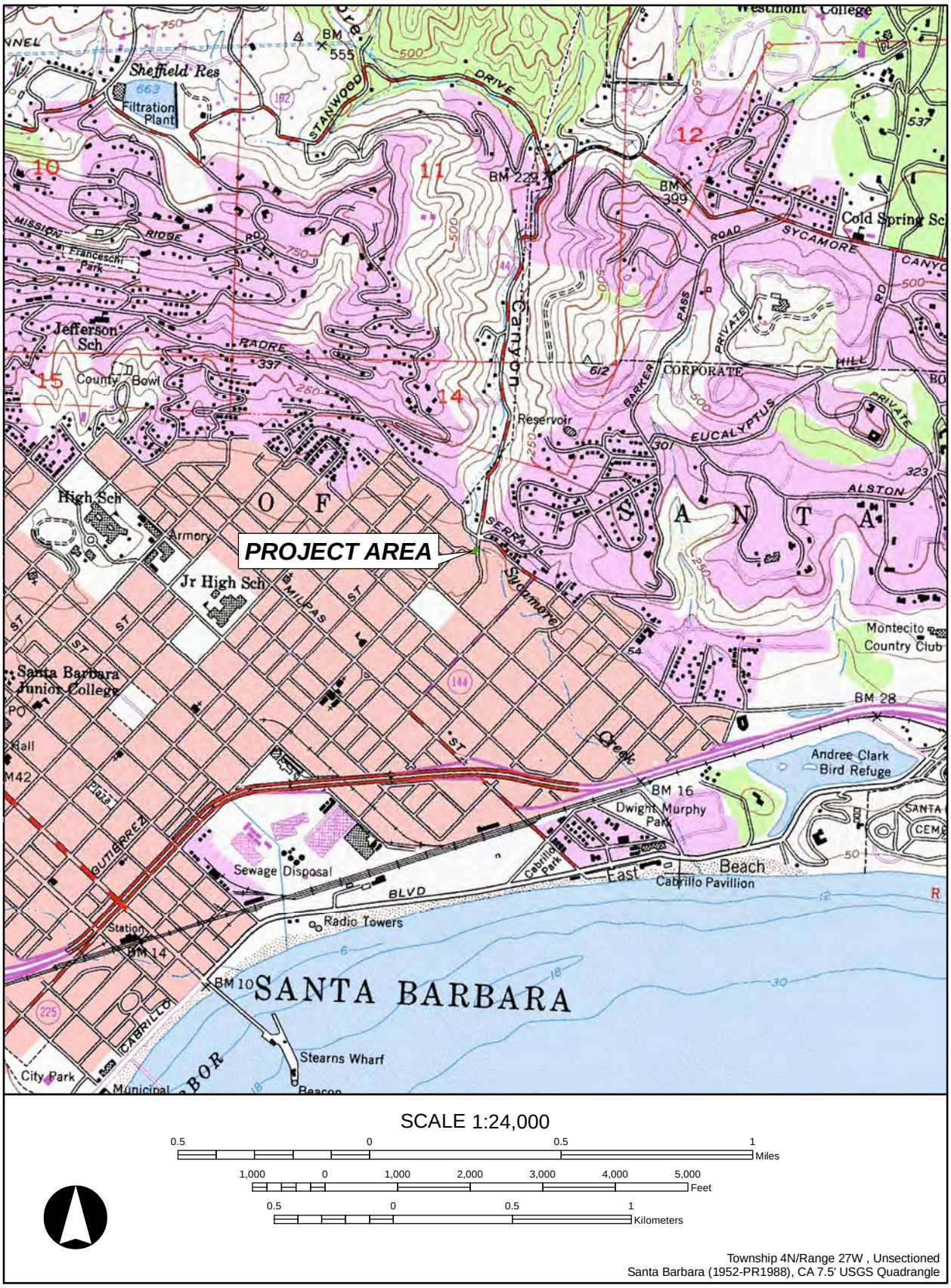


**Figure 1 Location of the Montecito-Yanonali Street Culvert in the city of Santa Barbara.**

**Figure 2 Aerial view of the Montecito-Yanonali Bridge Replacement HSSR study area.**

Street and one at the intersection of Salinas and Mason streets. The Franklin Neighborhood Center and Eastside Library are located two blocks from the bridge, and Eastside Neighborhood Park is about one block away. The project encourages alternative modes of transportation by providing attractive and safe facilities along school routes and to public facilities.

The project design will focus on enhancing the pedestrian environment while preserving and protecting adjacent riparian habitat. The bridge will be replaced at the same location as the current culvert to match the existing roadway alignment but will be widened to accommodate a sidewalk on the east side of the bridge as well as roadway shoulders for bicyclists. All sidewalks will be added along the existing local street alignments. The proposed replacement bridge and pedestrian improvements will meet current applicable City, American Association of State Highway and Transportation Officials (AASHTO), and California Department of Transportation (Caltrans) design standards. The bridge will also be constructed according to Federal Emergency Management Agency (FEMA) flood regulations. Appendix A provides the complete description for the Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project, including proposed minimization measures to address potential project impacts. The following only identifies activities related to the replacement of the existing structure.

Constructed in 1923, the existing stone arch spans approximately 16 feet over Sycamore Creek. As the existing spring line is less than 20 feet long, it is not on the National Bridge Inventory (NBI) (in accordance with Caltrans and Federal Highway Administration standards) and has no bridge number. The culvert carries approximately 6,000 vehicles per day and is on a transit and truck delivery route. From rail to rail, the culvert is about 30 feet wide, which accommodates two traffic lanes only. There are no sidewalks or roadway shoulders. The eastbound approach to the culvert is around a blind curve. The culvert is shaded, and during daytime hours objects on the culvert are difficult to see due to the contrast between sunny and shaded areas.

The culvert spans Lower Sycamore Creek, which begins at Yanonali Street (project location) and ends at the Pacific Ocean approximately 1 mile away. Lower Sycamore Creek is in an urbanized area and retains a fairly natural streambed. Several road crossings of various configurations occur along its stretch. Mature native riparian vegetation mixed with a high abundance and diversity of nonnative plant species occurs throughout this reach. Valley foothill riparian habitat primarily occurs on the upstream side of the culvert in a narrow band between the margins of Sycamore Creek and the residential development and includes western sycamore, cottonwood, and coast live oak along with a variety of ornamental trees such as eucalyptus and palms. Understory species include Himalayan blackberry, nasturtium, horsetail, and English ivy. Willow scrub is the dominant vegetation community on the downstream side of the bridge and common species include arroyo willow, ditch beard grass, nettles, horsetail, Himalayan blackberry, and kikuyu grass.

The proposed project will construct a critical missing sidewalk link to an otherwise complete network of sidewalks. The sidewalk improvements along Montecito Street will add a new sidewalk from the “Five Points” roundabout, across Sycamore Creek on the downstream side of the new bridge, and up the north side of Montecito Street to the North Canada Street/Montecito Place intersection. The sidewalk will be 5 feet wide except over the bridge, where it will be 6 feet wide. To make this important connection, the existing 92-year-old culvert will be replaced because it cannot in its current condition safely accommodate vehicular, pedestrian, and bicycle

traffic. It is too narrow to provide a protected sidewalk for pedestrians or roadway shoulder for bicyclists. The existing culvert is also incapable of accommodating flow from a 10-year or greater flood.

The new replacement bridge will be a concrete slab bridge supported on pile foundations. The bridge will be approximately 45 feet long and approximately 43 feet wide. The bridge span is increasing from the current bridge span to accommodate future channel widening of Lower Sycamore Creek. The Sycamore Creek Master Plan set the target design conveyance of the Montecito-Yanonali Street Bridge at 3,000 cubic feet per second (cfs). The new bridge will improve hydraulics by passing at least a 10-year storm event. The proposed bridge will also not cause a rise in backwater. The new bridge will have a 34-foot roadway clear width (5-foot shoulders and 12-foot lanes) in addition to the 6-foot-wide sidewalk on the downstream side of the bridge. The sidewalk will improve pedestrian safety and accessibility, while the shoulders will benefit motorists and bicyclists. The bridge will have open type railings that will be designed to meet current Caltrans and AASHTO safety standards. The bridge will be constructed primarily within the existing City right-of-way, but some small permanent acquisitions and temporary construction easements and/or rights to enter and construct will be needed.

Demolition of the existing culvert will be performed in accordance with Caltrans Specifications to meet environmental permit requirements. Prior to construction, the contractor will be required to prepare and submit for approval a culvert demolition plan, including creek diversions/bypass details, that are in conformance with the environmental permits. All concrete and other debris resulting from the demolition of the existing culvert will be removed from the proposed project site and properly disposed of by the contractor. Expert arborist Bill Spiewak and Associates has been hired to consult on the project and their recommendations for trimming the tree will be incorporated into the project design to protect the large sycamore tree on the upstream side of the bridge. All other trees and brush will be removed.

# 3 DOCUMENTS REVIEW AND METHODOLOGY

Æ's research and field methods fulfill two basic research requirements to identify and evaluate the historical significance of the Montecito-Yanonali Street Culvert. The first task involved background archival research to gather previous cultural resource studies and available information on the development history of the culvert and surrounding neighborhood. Second, Æ's architectural historian surveyed the subject structure and all known masonry arch bridges in the city limits. Each of these tasks is described in greater detail below.

## 3.1 RECORDS AND LITERATURE SEARCH

On August 26, 2015, Æ Staff Archaeologist Eric Nocerino completed a records search at the Central Coast Information Center (CCIC) of the California Historical Resources Information System housed at the University of California, Santa Barbara. He reviewed documentation of all recorded historical structures/buildings, archaeological sites, prior resource surveys, and archaeological excavations within a 0.25-mile radius of the project area. In addition, Nocerino examined the National Historic Landmarks, National Register of Historic Places and updates, California Register of Historical Resources, State Historic Landmarks, and California Points of

Historical Interest listings for resources within the project study area. He also inspected the State Historic Properties Data File. This search did not identify any listed buildings or structures in the project area.

Æ Architectural Historian Aubrie Morlet conducted archival research in repositories located in the City of Santa Barbara to gather information specific to the subject property. Research focused on historical maps, written histories, previous cultural resource studies, City of Santa Barbara Building Permits, Official Minutes of the Santa Barbara City Council, and the Official Records of Santa Barbara County. She visited the following repositories to gather information for preparation of this report:

- Santa Barbara County Clerk, Recorder, and Assessor, Santa Barbara (official record books);
- Santa Barbara County Surveyor's Office, Santa Barbara (official survey maps);
- City of Santa Barbara Public Works Department (engineering archival vault, street files-building permits, and building permit log books);
- City of Santa Barbara Community Development Department (previous studies, Survey of Architectural and Historical Resources 1976–1990);
- City of Santa Barbara Clerk's Office (minutes of City Council meetings);
- Central Library, Santa Barbara Public Library, Santa Barbara (city directories and vertical subject files);
- Gledhill Library, Santa Barbara Historical Museum, Santa Barbara (historical documents, newspapers, maps, and photographs);
- Special Collections, Davidson Library, University of California, Santa Barbara (Eastside neighborhood, City parks, and City planning documents); and
- Map and Imagery Laboratory, Davidson Library, University of California, Santa Barbara (aerial photographs and historical maps).

In addition, Morlet examined the City of Santa Barbara Landmarks and Structures of Merit designation lists, and the Potential Historic Resources and Landscapes identification lists. This search did not identify any listed buildings, structures, sites, historic features, or landscape elements in the project area. To assist in the evaluation of the subject bridge, the Caltrans Cultural Studies Office in Sacramento provided information from the Caltrans bridge evaluation report for three masonry arch bridges in Santa Barbara County identified in the Caltrans Historic Bridge Inventory as eligible for listing on the NRHP.

## 3.2 ARCHITECTURAL FIELD SURVEY

On September 15, 2015, Morlet conducted the architectural field survey of the Montecito-Yanonali Culvert. She photographed the culvert using a digital camera and recorded the structure on the appropriate California Department of Parks and Recreation (DPR 523) forms. These forms are provided in Appendix C. To provide a base for comparison, Morlet performed a

windshield survey of all the known masonry arch bridges within or near the city limits. Results of both the field study and archival research were used to compile a historic context for the general area and to assess the original physical characteristics of the subject structure.

# 4 SITE, ARCHITECTURAL, AND SOCIAL HISTORY

The project area is located in the eastern part of the city of Santa Barbara. The City of Santa Barbara Community Development Department defines this area as the Eastside neighborhood. The neighborhood is bounded by East Canon Perdido to the north, Alameda Padre Serra/Salinas Street to the east, State Highway 101 to the south, and Milpas Street to the west. Development of this primarily residential neighborhood occurred between 1920 and 1960.

## 4.1 EARLY HISTORY

Exploration of the California coast in the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain recognized that it would have to settle Alta California to preclude encroachment by the Russians and British. Therefore, in the latter half of the eighteenth century Spain founded a series of presidios, or military camps, along the California coast, and the Franciscan Order established a chain of missions beginning at San Diego in 1769.

Spanish occupation of the study area began with the establishment of the Santa Barbara Presidio at a site selected by Governor Felipe de Neve and Lieutenant José Francisco Ortega in 1782. Mission Santa Barbara was established in 1786. Pueblo Santa Barbara grew around the presidio as a collection of scattered adobe buildings concentrated primarily south of the presidio. Mission Creek meandered its way to the ocean west of El Estero, a “salt-encrusted dry lake bed” (Cole 1999:4). Both flooded during the rainy season.

In 1821, Mexico opened the ports of San Diego and Monterey to foreign trade (Crouch et al. 1982:200). American ships docked at California ports to purchase tallow and hides, which were known as California banknotes. Americans also settled in California, some of them becoming citizens and owners of large ranchos. As Jedediah Smith, John C. Fremont, and other American trappers and explorers brought news of California’s favorable climate and bountiful natural resources eastward, the United States government began to view California as a region worth acquiring (Work Projects Administration 1939:49–50).

Conflicts between the Californios and the central government in Mexico City led to a series of uprisings culminating in the Bear Flag Revolt of June 1846. However, Mexican control of California had effectively ended the year before when the Californios expelled Manuel Micheltorena, the last Mexican governor.

## 4.2 AMERICANS AND STATEHOOD

With the signing of the Treaty of Guadalupe-Hidalgo on February 2, 1848, California became a U.S. military district and 2 years later, on September 9, 1850, became the thirty-first state in the Union. Between those 2 years came a large influx of Americans seeking their fortunes, triggered by James Marshall’s 1848 discovery of gold at Sutter’s Mill. On April 9, 1850, the City of Santa

Barbara was incorporated and the City's first Common Council was established on August 26, 1850, although no business was conducted until after word of statehood reached the city.

Population figures indicate that at the time of statehood in 1850, Santa Barbara remained almost completely Spanish (Nelson 1979:46) and political control of the city remained with the old Spanish families (Williams 1977:7). The "Americanization" of Santa Barbara was a gradual, steady imposition of Anglo-American traditions on the town. The most noticeable physical example of this was the grid system that was laid out by Salisbury Haley and mapped by V. Wackenreuder in 1853. The streets were not aligned with the cardinal directions but instead travel at a 45 degree angle that allows State Street, or Estado as penned by Wackenreuder (1853), to extend directly to the Pacific Ocean. Both State and Estado are illustrated on Wackenreuder's map at different points along the street. It is unknown if the name State Street was imposed by Americans and then restated for Hispanic readers on the map or if Estado existed before the creation of the 1853 map. The first pier was constructed at the foot of Chapala Street in 1868 but was not long enough to handle ocean-going ships. As a result, in 1871 John Stearns' plans to construct a second wharf at the base of State Street that extended 1,500 feet were approved (Cole 1999:3–4). The second wharf was completed in 1872. An 1877 bird's-eye view of Santa Barbara clearly shows State Street and the wharf, with some buildings west of State Street and a lumber yard east of State and south of Mission Creek (Glover 1877).

In 1887, the Southern Pacific Railroad completed track from Los Angeles to Santa Barbara; by 1901 it was connected to San Francisco. The establishment of Stearns Wharf and the coming of the railroad were significant influences on Santa Barbara during the latter half of the nineteenth century. The most important influence was the growing number of travelers then able to visit the city. Tourism soon became a principal economic activity as wealthy easterners were encouraged to spend winters in Santa Barbara (Tompkins 1975). While many tourists returned home in the spring, others became permanent residents, bringing with them the brick and wood-framed building styles popular in the east during the nineteenth century. These changes were lamented, but not halted:

> The old landmarks and the most charming characteristics of Santa Barbara are disappearing before the march of "improvements" and though our practical people cannot move the mountains, nor change the [sea], nor spoil the climate, they are doing all they can to despoil the quaint beauty of the place and make it just a commonplace American town [*Daily Press* 3 January 1874, quoted in Work Projects Administration 1941:43].

In the early years of the twentieth century, the City planned such civic improvements as a city-wide street-paving program (Williams 1977:131). On October 25, 1912, the City Council passed an ordinance creating a special bridge fund. In addition to these practical improvements, the City hired Charles Cheney to complete a major traffic street, boulevard, and park system plan. He in turn brought the Olmsted Brothers to the project. Originally founded by Frederick Law Olmsted, his son and stepson continued the business, becoming the largest and most prestigious landscape architecture firm in the country by the 1920s. The Santa Barbara plan focused on improving the aesthetic appeal of the waterfront area and connecting the city with a circuit of parkways (Cheney and Olmsted Brothers 1924:21). Before the plan could be implemented, the earthquake of 1925 damaged much of the city.

During the 1920s, the Plans and Planting Committee of the Santa Barbara Community Arts Association supported the creation of an Architectural Board of Review and City Planning Commission that would establish design controls for new construction within the city (Streatfield 2005:121–122). According to the official minutes, the first meeting of the City Planning Commission occurred on September 28, 1923 (City of Santa Barbara 1923). The Architectural Board of Review was created by the Santa Barbara City Council on July 16, 1925, just 2 weeks after the earthquake that significantly damaged many of the buildings in the city. As a result, much of the post-earthquake construction was designed in the Spanish Colonial Revival and other Mediterranean architectural styles. Areas of the city developed prior to the post-earthquake era were designed in the Victorian styles popular in the late nineteenth century and the Arts and Crafts styles of the early twentieth century. The mixture of architectural styles found in the Eastside neighborhood is reflective of the organic nature of the residential development over a long period of time.

## 4.3 INCREASED URBANIZATION AND RESIDENTIAL DEVELOPMENT

At the time of incorporation in 1850, there was little development outside of the area surrounding the old Presidio. At this time, City of Santa Barbara Common Council Ordinance 2 declared the center of town bound by Figueroa, Santa Barbara, Ortega, and Chapala streets (Southworth 1920). This 12-block area encompassed the majority of the existing Spanish development; therefore, newcomers sought new areas within which to establish American businesses. Bound by Mission Creek on the west and El Estero on the east, urban residential development by American newcomers expanded east and west from State Street. Primarily developed by American and European immigrants between 1855 and 1870, businesses located on lower State Street between Ortega Street and Mason Street catered to the needs of residents building homes nearby.

The 1870s brought significant changes to the city. During this decade, Santa Barbara connected to the Overland Telegraph, the first commercial bank opened, Stearns Wharf was completed, and gas lights were installed on State Street with the establishment of the first manufactured gas plant. The County Courthouse and City Hall were constructed, and public improvements such as piped water and wood sidewalks were installed. From 1872 to 1874, a small real estate boom occurred due to the widely advertised beauty and climate of Santa Barbara. Prior to the boom, subdivided city lots closer to State Street could be purchased for as little as $1 each in 1856 and $10 each in 1860 (Williams 1977:34; Work Projects Administration 1941:38). By 1873, vacant lots within new residential subdivisions could be acquired for $150, and a single lot with a newly constructed house could be purchased for a price of $1,000 (*Santa Barbara Weekly Press* 1873). At a time when skilled laborers such as carpenters, bricklayers, plasterers, machinists, and blacksmiths made $3–$4 a day, a workingman's family might still be able to afford to purchase land and build a home. A drought that occurred over the winter of 1876–1877 caused a drop in real estate values that would persist for the next several years.

Starting in the summer of 1875, the City's first public transportation system went into operation. Initially, the mule-drawn trolley traveled only on State Street between Victoria Street and Mason Street, but branch lines extended north to Valerio and Pedregosa streets by 1887. In 1896 the trolley line was converted to electric cars and the line was again extended to reach areas farther north and east as residential development continued to extend outward (Everett and Coombs

1984:13, 36). Although the expansion of public transportation directly influenced residential development in the northern part of the city, the trolley routes never crossed Milpas Street into the Eastside neighborhood prior to being discontinued in 1929.

## 4.4 EASTSIDE NEIGHBORHOOD

Separated from downtown by the Estero, the Eastside neighborhood primarily contained small farms with single-family dwellings and agricultural buildings from 1870 through 1910. Although a few subdivisions were filed with the County Recorder during this time, the area remained under cultivation into the twentieth century. The most notable subdivision, the Eddy Tract, was recorded in 1888. Although the lots were presumably available for purchase, the 1912 Barry map illustrates that more than half of the lots were held by the subdivision owners and several lots were owned by building contractors active in the city at that time.

The arrival of the railroad and increase in population expanded the types of businesses present in the city. Commercial and light industrial businesses such as lumberyards, auto wreckers, a home furnishing center, paint and coffin factories, machine shops, electronics firms, van and storage warehouses, commercial laundries, and agricultural warehouses provided significant employment of skilled and unskilled labor in the east downtown area south of Gutierrez Street (Tompkins 1993:104). As housing in the Eastside neighborhood became available, many of these workers appeared to settle in the area during the 1920s and 1930s (U.S. Census 1910, 1920, 1930). To meet the educational needs of the new residents, Franklin Elementary School was completed at North Voluntario and East Yanonali Streets in 1924.

From 1919 to 1932, the Santa Barbara County Recorder’s Office filed a considerable number of residential subdivision tracts in the Eastside neighborhood. The majority of the subdivisions were limited to a single city block, while a few encompassed several blocks. Subdivisions filed during this period include:

- Milpas Gardens (1919),
- Around the City Boulevard Tract (1921),
- Packard Home Gardens (1921),
- J. M. Warren and C. L. Vivian Tract (1921),
- Casitas Tract (1922),
- Sycamore Tract (1922),
- Harbor View Heights (1923),
- Independence Square 1923),
- Terrace Vista (1925),
- Las Casitas No. 6 (1926), and
- Arata Heights (1932).

The increase in subdivisions and new building permit applications does not appear to have been limited to the Eastside area. On February 11, 1926, the *Morning Press* (1926c) headlined that

"Santa Barbara Sets Pace for New Buildings" and reported that the City experienced a 32 percent increase in building activity compared to the previous year. Newspaper advertisements from February 9–10, 1926, illustrate the varying costs of property:

> **Cacique Street Bargain**, Modern bungalow on lot 50x150. This is in the business zone and is a good investment at $5,250, reasonable terms can be arranged [*Morning Press* 1926a].
>
> **Lot Bargain**, Level lot, 50x100, in good residential section. Paving and all improvements in and paid for. Price $2,000, terms [*Morning Press* 1926b].
>
> **Working Man's Home**, East side 2 bedrooms, modern conveniences, garage and shop, including furniture. Price reduced to $3,500 by out-of-town owner. Small down payment and easy terms for balance [*Morning Press* 1926b].

A 1928 aerial photograph of the Eastside neighborhood shows that approximately half of the Eastside neighborhood was developed with residential buildings at that time. On the 1930 Sanborn map, only 16 of the 70 blocks in the Eastside neighborhood appear to show room for additional subdivision (Sanborn 1930). Although many residential buildings were still present on Milpas Street, the Sanborn maps illustrate a well-developed commercial corridor between East De la Guerra and East Montecito streets. Following World War II, the postwar housing boom appears to have filled in the open areas within the Eastside neighborhood. The only open land visible in the 1959 aerial photograph is adjacent to Franklin Elementary School and a half block at the southeast corner of South Soledad and Cacique streets. Both of these areas would see additional development soon after.

The Eastside neighborhood experienced a second period of development between 1968 and 1978. Due to overcrowding and deteriorating facilities, a new Franklin Elementary School was completed in May 1968. The new school is just one block south of the previous location. The old school site is currently occupied by the Eastside Branch Library built in 1973; the Franklin Neighborhood Center was added in 1974–1975. Sunflower Park in the 1100 block of East Mason Street was acquired in 1972, and Eastside Neighborhood Park in the 100 block of North Soledad Street was developed in 1978. It is interesting to note that currently only one commercial business is located within the entire Eastside neighborhood beyond those on Milpas Street. Located across the street from the library and Franklin Neighborhood Center, this small general store has undergone many alterations to its façades, but a building with the same footprint is depicted on the 1930 Sanborn map. Several other corner stores have operated in the neighborhood over the years, but this property appears to be the only one remaining.

## 4.5 SYCAMORE CREEK

Early maps of Santa Barbara show Sycamore Creek, formerly named Alisos Creek, as much broader between Mason and Cacique streets than it is today. Although the banks have been modified, the creek has not been channelized in the area. As Sycamore Creek is situated several miles east of the early urban core of Santa Barbara, historical maps do not depict bridges on the creek until near the end of the nineteenth century. The 1889 Mensch map illustrates Sycamore Creek bridge crossings at Yanonali, Mason, Quinientos, Cacique, and Punta Gorda streets. The type of bridge at each location is not identified. Sanborn maps, which usually provide more

detailed information, do not cover the Eastside neighborhood until 1930. By that time, many bridges in the city had been replaced with concrete bridges, although the bridge at East Mason Street was still a wood bridge and bridges at East Yanonali/Montecito and Alameda Padre Serra are identified as stone.

A severe storm hit Santa Barbara beginning on January 23 and culminating on January 25, 1914, during which Mission Creek flooded:

> [I]t left its banks, crossed Hollister Avenue, pouring through a broad spread of properties, flooding the floors of homes, tearing out fences and smaller buildings and continuing on his [its] havoc-creating career to the sea, spending itself in various sorts of furies [*Morning Press* 1914a].

While Mission Creek and the Santa Ynez River were assigned much of the blame for temporarily inundating the town, a few small articles report damage along Sycamore Creek. On January 27, the *Morning Press* reported that only one road, Punta Gorda Street, was open for travel between Montecito and Santa Barbara. The article further explained that the Cacique Bridge was completely gone and that the bridge below Eucalyptus Hill (Quinientos) may have been salvageable but was impassable at the time (*Morning Press* 1914b). A second article in the same edition reported that many felled sycamore trees blocked the roads and creek farther into Sycamore Canyon, trapping the residents at home (*Morning Press* 1914e).

In February, a *Morning Press* article discussed the merits of concrete bridges, reporting that "while several antiquated bridges were carried out by the Mission creek flood three weeks ago, all the concrete spans were uninjured" (*Morning Press* 1914c). As the article expresses that Santa Barbara plans to only use this type of structure in the future, it is not surprising to find that most bridges built after the 1914 flood were constructed of reinforced concrete. On March 10, 1914, the citizens of Santa Barbara approved a special tax levy of $150,000 to repair the storm damage, including reconstruction of the damaged bridges (*Morning Press* 1914d). As a result of the tax approval, several new concrete bridges were constructed on Mission and Sycamore creeks between 1914 and 1920.

In September 1925, the Santa Barbara City Council approved the sale of $60,000 of bonds for bridge improvements in the city. The City also hired a new structural draftsman to draw plans for the new bridges, the first of which was advertised for construction bids in December (Santa Barbara City Council 1925). After 1925, all new bridges were constructed of reinforced concrete as the majority of bridges damaged in the earlier storms were wood constructed. The concrete bridges were placed high and designed at street width to increase clearance beneath and reduce the amount of blockage by debris. This approach has served the community well as these bridges remained in service for 80–100 years.

## 4.6 STONE MASONRY CONSTRUCTION IN SANTA BARBARA COUNTY

Sections 4.6 and 4.7 were excerpted from *Survey and Evaluation of Masonry Arch Bridges*, a thematic study prepared by Stacie Ham and Andrew Hope (2003:11–14) for the Caltrans State and Local Historic Bridge Inventory update.

Use of masonry for construction in the Santa Barbara area dates back to the time the Spanish arrived. Since it was necessary to travel some distance into the woods to obtain lumber, but rocks were found scattered on the ground, stone became the preferred building material. Stones were cut and incorporated into the original Santa Barbara Mission structures, although most of the early buildings and walls of the mission were made of adobe. In 1811, stone arches were erected the length of the main corridor. After the mission was badly damaged in the earthquake of 1812, thick walls of sandstone were incorporated into the towers (Santa Barbara News-Press 2 March 1975).

The tradition of building with stone continued in Santa Barbara County through the 19th century. This method of construction was often chosen because local brown sandstone was readily available and easily transformed from round or shapeless boulders into symmetrical smooth faced stone for building purposes. A local stonemason explained in July of 1883, “When a quantity of it is wanted, a blast of powder is drilled into the heart of one of the large boulders and exploded and a number of square edged building stones are produced” (Santa Barbara News-Press July 1883). Many residences, walls, bridges, and commercial structures were constructed out of local sandstone during the nineteenth and early twentieth century.

Immediately after the First World War, Santa Barbara began a concerted effort to revamp its visual image. During this time city planners carefully monitored all construction of any new structure to make sure it was consistent with the master plan that was based on a Hispanic/Mediterranean streetscape mode (Conard and Nelson 1986:14). The use of a traditional building material, sandstone, in the construction of the many new bridges and culverts built during this period was in line with Santa Barbara’s planning and design efforts.

## 4.7 DESIGNERS AND BUILDERS

The majority of the masonry arch bridges built in Santa Barbara County were the result of designs by county surveyor Owen Hugh O’Neill, Jr. O’Neill was born on February 8, 1873 in La Graciosa in Santa Barbara County. His father, O.H. O’Neill Sr., was born in Ireland and educated at Trinity College in Dublin, and upon coming to the United States, he found work in a company of engineers. The younger O’Neill spent time in Mexico where he worked from 1905 until 1909 at various companies including the Canarea Consolidated Copper Company and Guerrero Plantation and Investment Company. He returned to Santa Barbara County in 1909 where he worked as a draftsman for both the city engineer and county surveyor. He was elected county surveyor in 1914 and held that position until 1946. While serving as county surveyor, he also maintained a private practice until the surveyor’s position became a full-time job in 1931. He served as president of the California County Engineer’s Association and was a life member of the American Society of Civil Engineers. After retiring, he was elected to the Santa Barbara City Council for one term in 1949 and then became planning commissioner for Santa Barbara County until 1961. An important local figure in the Santa Barbara community, O’Neill edited a history of the county in 1939 and also lectured on California history (Israel 1980:197–199).

# 5 FIELD INVENTORY

The FHWA legally defines a bridge as “a structure, including supports, erected over a depression or an obstruction, such as water, a highway, or a railway, having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches” (Title 23 Code of Federal Regulations Part 650.403[a]). The Montecito-Yanonali structure measures 16 feet at the spring line (interior span) of the arch and thus is classified as a culvert.

Constructed in 1923, the Montecito-Yanonali Street Culvert is a closed spandrel, masonry arch structure (Figure 3). The locally quarried stone is rectangular cut and laid in regular courses. The structure is trapezoid in shape measuring 43.3 feet long on the upstream (north) spandrel wall and 51.6 feet long on the downstream (south) spandrel wall. The structure is 30 feet wide accommodating two 12-foot-wide traffic lanes and two 3-foot-wide shoulders with concrete curbs and steel rails. The arch span is 16 feet and the rise from the creek bed to the keystone is 9 feet. A stone layer rests between the reinforced concrete abutments and board-formed concrete arch (Figure 4). The south wall carries a large main sewer line on triangular metal brackets (Figure 5). A single wing wall is present at the northwest corner of the culvert (Figure 6).

The wing wall measures 16.5 feet long and 10.5 feet high. A small pipe passes through the spandrel wall to the other side. The original stone parapet railings on each side of the bridge were removed prior to 1963, creating the open shoulder between the subsequent steel rails and concrete curbs. Appendix B provides the original culvert drawing.

**Figure 3 Upstream (north) elevation illustrating the culvert arch, spandrel wall, steel rails, and concrete curbing on the deck.**

**Figure 4** **Detail view of the interior abutment, stone course, and board-formed concrete arch.**

**Figure 5** **Main sewer line attached with triangular brackets to the south spandrel wall.**

**Figure 6 Looking west at the wing wall adjacent to the northwest corner of the culvert.**

Santa Barbara County contains many historic age masonry arch bridges, four of which have been determined eligible for listing on the NRHP (Ham and Hope 2003). Although all four were originally constructed in the county, three of these bridges are now located within the city limits: Sycamore Canyon Creek Bridge (1921), Rattlesnake Canyon Bridge (1919), and Mission Creek Bridge (1891). The fourth eligible bridge, Ashley Road Bridge over Montecito Creek (1918), remains outside of the city limits. To provide a basis for comparison, all four eligible bridges and two ineligible bridges were visited during this study.

Table 1 provides location, construction, and eligibility information about each of the eligible bridges and the subject culvert. The Sycamore Canyon Creek Bridge and the Rattlesnake Canyon Bridge were both found eligible for listing on the NRHP as they are the only two remaining unmodified masonry arch bridges made of uncut rubble in all of the state of California (Figures 7 and 8). The Mission Creek Bridge is eligible as a rare example of masonry arch architecture in southern California and as the oldest bridge in Santa Barbara County (Figure 9). The Ashley Road Bridge over Montecito Creek is eligible as a rare, unmodified example of masonry arch architecture in southern California (Figure 10). The Mission Creek and Ashley Road bridges are currently listed on the NRHP under a multiple property documentation titled Historic Highway Bridges of California (Napoli 2004).

**Table 1**
**Masonry Structures on Public Roads in Santa Barbara City/County**

| Name | Location | Bridge No. | Type | Date | Mason/ Architect | Eligibility Status |
|---|---|---|---|---|---|---|
| Sycamore Canyon Creek Bridge | SR 192, north of fork SR 144 | 510106 | Uncut rubble, laid irregular courses, closed spandrel arch; 21-foot span | 1921 | John Arroqui/ Owen Hugh O'Neill Jr. | 2003 Eligible NRHP Criterion C |
| Rattlesnake Canyon Bridge | Mission Canyon Rd., Skofield Park | 51C0054 | Rectangular cut arch with uncut rubble spandrel walls laid in irregular courses, closed spandrel arch; 25-foot span | 1919 | John Poole/ Owen Hugh O'Neill Jr. | 2003 Eligible NRHP Criterion C |
| Mission Creek Bridge | Mission Canyon Rd., Rocky Nook Park | 51C0051 | Rectangular cut and laid in regular courses, closed spandrel arch; 23.9-foot span | 1891 | Joseph Dover & Joseph Woods/ Rowland Hazard | 1986 Eligible NRHP Criterion C/ identified as City Landmark |
| Montecito Creek Bridge | Ashley Rd. | 51C0043 | Rectangular cut and laid in regular courses, closed spandrel arch; 25-foot span | 1918 | John Arroqui/ Owen Hugh O'Neill Jr. | 1986 Eligible NRHP Criterion C |
| Montecito-Yanonali Culvert | Between E. Yanonali St. and Alameda Padre Serra | n/a; classified as culvert (<20-foot span) | Rectangular cut and laid in regular courses, closed spandrel arch; 16-foot span | 1923, modified with metal rails prior to 1963 | Mason unknown/ Leland Ross Walker | Appears eligible for local listing as a City Structure of Merit |

**Figure 7** **Uncut rubble masonry arch bridge over Sycamore Canyon Creek on State Route 192.**

**Figure 8** **Rattlesnake Canyon Bridge illustrating a rectangular cut arch with uncut rubble spandrel walls.**

**Figure 9** **Rectangular cut, closed spandrel arch on Mission Canyon Road over Mission Creek.**

**Figure 10 Ashley Road Bridge over Montecito Creek in Santa Barbara County is also a rectangular cut, closed spandrel arch.**

# 6 HISTORIC STRUCTURE ASSESSMENT

This chapter presents the regulatory framework and Æ's eligibility evaluation of the Montecito-Yanonali Street Culvert. The criteria for evaluating significance and eligibility of Historic Structures/Sites are found in the *Master Environmental Assessment Guidelines for Archaeological Resources and Historic Structures and Sites* (MEA; City of Santa Barbara 2002). The MEA includes locally designated criteria in addition to the eligibility criteria for the NRHP and CRHR.

## 6.1 THRESHOLDS OF SIGNIFICANCE

The City of Santa Barbara MEA defines significant historic resources to include, but not be limited to, the following:

1. Any structure, site or object designated on the most current version of the following lists:

    a. National Historic Landmarks

    b. National Register of Historic Places

    c. California Register of Historical Landmarks

d. California Register of Historical Resources

e. City of Santa Barbara Landmarks

f. City of Santa Barbara Structures of Merit

2. Selected structures that are representative of particular architectural styles including vernacular as well as high styles, architectural styles that were popular fifty or more years ago, or structures that are embodiments of outstanding attention to architectural design, detail, materials, or craftsmanship.

3. Any structure, site or object meeting any or all the criteria established for a City Landmark and a City Structure of Merit, as follows:

   a. Its character, interest or value as a significant part of the heritage of the City, the State, or the Nation;

   b. Its location as the site of a significant historic event;

   c. Its identification with a person of persons who significantly contributed to the culture and development of the City, the State, or the Nation;

   d. Its exemplification of a particular architectural style or way of life important to the City, the State, or the Nation;

   e. Its exemplification as the best remaining architectural type in its neighborhood;

   f. Its identification as the creation, design or work of a person or persons whose effort has significantly influenced the heritage of the City, the State, or the Nation;

   g. Its embodiment of elements demonstrating outstanding attention to architectural design, detail, materials, or craftsmanship;

   h. Its relationship to any other landmark if its preservation is essential to the integrity of that landmark;

   i. Its unique location or singular physical characteristic representing an established and familiar visual feature of a neighborhood;

   j. Its potential of yielding significant information of archaeological interest;

   k. Its integrity as a natural environment that strongly contributes to the well-being of the people of the City, the State, or the Nation [Santa Barbara Municipal Code 22.22.040].

4. Any structure, site or object meeting any or all the criteria provided for the National Register of Historic Places and the California Historical Landmark list:

   National Register Criteria for Evaluation. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings,

structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive character of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history [Code of Federal Regulations, Title 36, Part 60].

5. Any structure, site, or object associated with a traditional way of life important to an ethnic, national, racial, or social group, or to the community at large; or illustrates the broad patterns of cultural, social, political, economic, or industrial history.

6. Any structure, site, or object that conveys an important sense of time and place, or contributes to the overall visual character of a neighborhood or district.

7. Any structure, site, or object able to yield information important to the community or is relevant to historical, historic archaeological, ethnographic, folkloric, or geographical research.

8. Any structure, site, or object determined by the City to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the City's determination is based on substantial evidence in light of the whole record [Title 14, California Code or Regulations (CCR), Chapter 3, Section 15064.5(a)(3)].

In addition to meeting one or more of the significance criteria, the resource must retain enough of its historic character to convey the reason for its significance. This is assessed by examining seven aspects of integrity, which are defined as follows:

> Location is the place where the historic property was constructed or the place where the historic event occurred. . . .
>
> Design is the combination of elements that create the form, plan, space, structure, and style of a property. . . .
>
> Setting is the physical environment of a historic property. . . .
>
> Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. . . .
>
> Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. . . .

> Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. . . .
>
> Association is the direct link between an important historic event or person and a historic property. . . [National Park Service 1997:44–45].

"Integrity is based on significance: why, where, and when a property is important" (National Park Service 1997:45). Only after significance is fully established is the issue of integrity addressed. Ultimately, the question of integrity is answered by whether or not the property is able to communicate those aspects for which it is significant.

Resources included in a local register of historical resources (pursuant to Section 5020.1(k) of the California Public Resources Code (PRC), or identified as significant in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC), are considered "historical resources" for the purposes of CEQA. The fact that a resource is not listed in, or determined to be eligible for listing on the CRHR, not included in a local register of historical resources, or identified in a historical resources survey, does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC 5020.1(j) or 5024.1.

## 6.2 SIGNIFICANCE ASSESSMENT

Constructed in 1923, the Montecito-Yanonali Street Culvert is a rectangular cut sandstone, closed spandrel arch structure with stones laid in regular courses. Construction details, including the mason selected to construct the culvert, were not located in the City of Santa Barbara Council Minutes as is normally the case for public works projects. It is possible that the culvert was constructed by the Street Department and as such, a construction contract was not issued. It is also possible that the culvert was constructed as part of another public works project and therefore is not specifically identified in the City Council Minutes. The Montecito-Yanonali Street Culvert appears to be one of only two masonry structures built by the City of Santa Barbara. The second structure, replaced in 1963, was upstream of the subject culvert on Alameda Padre Serra. All of the known masonry bridges currently located within the city limits were constructed by Santa Barbara County and brought into the city limits through subsequent municipal expansions. Prior to the construction of the masonry culvert, a wood bridge carried traffic across Sycamore Creek.

Based on the culvert drawing on file at the City of Santa Barbara Public Works Department, the culvert was designed by civil engineer Leland Ross Walker during his first year of employment with the City of Santa Barbara. Prior to his arrival in California, Walker worked as a draftsman for structural steel companies in St. Louis, Missouri; engineer/designer at the City of Tucson, Arizona; and as a designer for the Trussed Concrete Steel Company in Youngstown, Ohio. From 1918 to 1921, he was employed at the Imperial Irrigation District in Calexico, California. At the City of Santa Barbara, Walker served as a civil engineer from 1923 to 1926 and as the Assistant City Engineer from 1927 until his death in 1933. No significant biographical information was located for Walker.

**Criterion 1.** The structure is not significant under Criterion A as it is not designated on any of the identified lists.

**Criterion 2.** The Montecito-Yanonali Street Culvert is representative of a masonry architectural style important to the city of Santa Barbara and embodies outstanding attention to architectural design, detail, materials, and craftsmanship. The culvert is a rare example of masonry arch architecture in an urban setting and the only extant masonry culvert constructed by the City of Santa Barbara. **The structure is significant under Criterion 2.**

**Criterion 3a.** The Montecito-Yanonali Street Culvert adds value as a significant part of the heritage of the City as it is the only extant masonry arch constructed by the City of Santa Barbara. **The structure is significant under Criterion 3a.**

**Criterion 3b.** The structure is not significant under Criterion 3b as it is not the site of a significant historic event.

**Criterion 3c.** The structure is not significant under Criterion 3c as it is not associated with a person or persons who significantly contributed to the culture and development of the city, state, or nation.

**Criterion 3d.** The Montecito-Yanonali Street Culvert is a rare example of a masonry culvert in an urban setting and exemplifies an architectural style important to the city of Santa Barbara. **The structure is significant under Criterion 3d.**

**Criterion 3e.** The Montecito-Yanonali Street Culvert is the best remaining architectural type in its neighborhood. **The structure is significant under Criterion 3e.**

**Criterion 3f.** The structure is not significant under Criterion 3f as it is not the creation, design, or work of a person or persons whose effort has significantly influenced the heritage of the city, the state, or the nation.

**Criterion 3g.** The Montecito-Yanonali Street Culvert is the embodiment of elements demonstrating outstanding attention to architectural design, detail, materials, and craftsmanship. **The structure is significant under Criterion 3g.**

**Criterion 3h.** The structure is not significant under Criterion 3h as it is not located near any other landmark and is not located in a potential historic district or landscape.

**Criterion 3i.** Due to vegetation and a lack of pedestrian access, the structure is not clearly visible to the public. The structure is not significant under Criterion 3i as it is not located in a unique location nor is it an established and familiar visual feature of a neighborhood.

**Criterion 3j.** The structure is not significant under Criterion 3j as it does not possess the potential of yielding significant information of archaeological interest.

**Criterion 3k.** The structure is not significant under Criterion 3k as the culvert does not strongly contribute to the well-being of the people of the city, the state, or the nation.

**Criterion 4.** The construction of the Montecito-Yanonali Street Culvert appears to be associated with municipal maintenance. As the current culvert is not the first structure at the location and no significant information was discovered regarding the culvert or surrounding area, it does not

appear that the construction of the culvert significantly influenced transportation or economic development in the city. As such, the culvert does not appear to be associated with events that have made a significant contribution to the broad patterns of our history and does not appear to be significant under NRHP Criterion A or CRHR Criterion 1. Little information is available regarding the culvert, and the names of individuals who might have been involved with the development and construction of the culvert are not known. As the culvert does not appear to be associated with a significant person(s), the culvert does not appear to be significant under NRHP Criterion B or CRHR Criterion 2.

Although masonry culverts are very common in rural California, masonry culverts in urban areas such as the city of Santa Barbara are rare. The subject culvert is simple in design and does not exhibit innovative engineering characteristics. While the masonry arch culvert does display the distinctive characteristics of a type, period, and method of construction, the removal of the masonry parapets diminishes the culvert's ability to convey its architectural detailing. Further, the engineer does not appear to be significant and the culvert does not represent the work of a master. As such the culvert does not appear to be significant under NRHP Criterion C or CRHR Criterion 3. The culvert is common in construction, materials, and design, and the scaled drawing of the culvert is digitally archived at the City of Santa Barbara Public Works Department. As information about this structure and other similar structures is amply available from both published and unpublished sources, the culvert does not appear to be significant under NRHP Criterion D or CRHR Criterion 4.

Based on the research conducted for this investigation, the Montecito-Yanonali Street Culvert does not appear to be eligible for listing on the NRHP or CRHR.

**Criterion 5.** The structure is not significant under Criterion 5 as it is not associated with a traditional way of life important to an ethnic, national, racial, or social group, or to the community at large; nor does it illustrates the broad patterns of cultural, social, political, economic, or industrial history.

**Criterion 6.** The structure is not significant under Criterion 6 as it does not convey an important sense of time and place, nor contribute to the overall visual character of a neighborhood or district.

**Criterion 7.** The structure is not significant under Criterion 7 as is does not possess the ability to yield information important to the community, nor is it relevant to historical, historic archaeological, ethnographic, folkloric, or geographical research.

**Criterion 8.** The structure is not significant under Criterion 8 because it has not been determined by the City to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the City's determination is based on substantial evidence in light of the whole record [Title 14, California Code or Regulations (CCR), Chapter 3, Section 15064.5(a)(3)].

The Montecito-Yanonali Street Culvert is significant under MEA Criteria 2, 3a, 3d, 3e, and 3g for its exemplification of masonry architecture. The period of significance is 1923–1925. In 1925, the City of Santa Barbara passed a new bond measure that initiated a city-wide bridge

replacement program that facilitated the construction of many reinforced concrete girder bridges. Masonry architecture would not be utilized again for city-funded waterway crossings.

### 6.3 INTEGRITY EVALUATION

Integrity of the subject property was assessed with reference to the seven aspects of integrity mentioned above. For a property to retain integrity, it must possess most of the character-defining features associated with its architectural style. More specifically, "a property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows or doors, texture of materials, and ornamentation" (National Park Service 1997:46).

The Montecito-Yanonali Street Culvert remains in its constructed location in the Eastside Neighborhood. The structure is surrounded by creek vegetation and residential neighborhoods dating from circa 1920 to 1960. The structure retains integrity of location and setting.

Based on field measurements and observations, the structure matches the original designed drawing. The sandstone blocks are in good condition and the spandrels and arch ring illustrate negligible mortar separation. Although the sandstone rails have been removed and replaced with incompatible iron pipe railing, the culvert still retains more than 75 percent of its original sandstone and concrete materials. The structure retains integrity of design, materials, and workmanship.

The structure continues to convey its historical character through its architectural features and urban residential setting. The property retains integrity of feeling and association.

As the Montecito-Yanonali Street Culvert meets MEA Criteria 2, 3a, 3d, 3e, and 3g and retains integrity, the structure appears to be eligible for listing as a Structure of Merit for the City of Santa Barbara and is a historical resource for the purpose of CEQA.

## 7 EVALUATION OF POTENTIAL PROJECT EFFECTS

The MEA states that upon a determination that a structure or site has potential historic significance, a project's impacts on the historic resource must be determined. The City utilizes CEQA Guidelines Section 15064.5 for determining the significance of impacts to historic resources. Per CEQA, project impacts should be identified specifically as significant unavoidable (Class I), potentially significant unless mitigated (Class II), or less than significant (Class III).

### 7.1 GUIDELINES FOR DETERMINING PROJECT IMPACTS

CEQA, and hence the MEA, defines a potential significant impact as one that would cause a substantial adverse change in the significance of a historical resource. Such a substantial change means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings that justify its eligibility for the CRHR or its inclusion in a local register of historic resources (California Code of Regulations [CCR] 15064.5 [b][1,2]). And as per the CEQA Guidelines, generally if a project involving significant historical resources follows *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving,*

*Rehabilitating, Restoring, & Reconstructing Historic Buildings* (Weeks and Grimmer 1995), that project is considered to be mitigated to a level of less than significant (CCR 15064.5 [b][3]; MEA 2002:55).

The Secretary's Standards for Preservation are:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken [Weeks and Grimmer 1995:18].

## 7.2 PROJECT ALTERNATIVES

Prior to the selection of the current project design, which requires demolition and replacement of the culvert at Montecito-Yanonali Street, four alternatives were considered. The alternatives included a no-build option, rehabilitation and widening of the culvert, separation of the pedestrian structure, culvert relocation, and bridge replacement. A description of each alternative is provided below.

### 7.2.1 No-Build Alternative

The No-Build Alternative was first considered for this project. In this alternative, the Montecito-Yanonali Street Culvert would remain in its existing condition with no changes. The existing deficiencies and inadequacies of the culvert would remain, resulting in a worsening, unsafe

condition for vehicular, bicycle, and pedestrian traffic. This alternative does not meet the purpose and need of the project or fulfill the defined project objectives and was therefore dismissed.

### 7.2.2 Alternative 1—Rehabilitation and Widening

In this alternative the existing culvert would be widened to accommodate pedestrian traffic only. The widening would be performed by adding a concrete slab to the top of the existing culvert that would overhang the downstream side of the structure. The overhang would be approximately 5–6 feet wide to serve pedestrian traffic only, while the existing roadway and structure would continue to serve vehicular and bicycle traffic. Since the existing structure would require modification to accommodate pedestrian use on an overhanging slab, the current culvert railings would need to be rehabilitated to improve safety for all modes of transportation on the structure. The existing pipe railings are deficient for traffic, bicycle, and pedestrian safety, and they do not meet Americans with Disabilities Act (ADA) requirements. The work associated with this alternative would therefore require removal of the existing pipe railings and installation of new railings that meet current standards.

Ultimately this alternative was rejected because the additional depth of the new structural pedestrian slab and bridge barriers would result in a rise in the backwater, which is inconsistent with the design requirements of a 100-year storm event. The existing culvert is not capable of accommodating a 10-year storm event and is overtopped by the 100-year storm flow. In a 100-year storm event, water must be able to flow over the top of the existing culvert and around the existing pipe rails. Since this alternative requires a thick concrete slab on top of the existing culvert and new bridge railings that would be less open to hydraulic flow, the widened and rehabilitated structure in this alternative would increase flow obstruction over the existing culvert and cause a rise in the backwater. Such a rise is restricted by FEMA and also would result in strict flood insurance implications for Santa Barbara residents. Additionally, since this alternative only addresses pedestrian deficiencies on the existing structure, it was determined to be less desirable than Alternative 3. This alternative also would not improve vehicular and bicycle conditions on the existing structure.

### 7.2.3 Alternative 2—Separate Pedestrian Structure

Another alternative was to build a separate pedestrian structure to the side of the existing culvert. It was determined that the new pedestrian bridge would have to be built on the downstream side of the existing culvert because building on the upstream side would require removal of a large sycamore tree. In this alternative the existing culvert would not need to be modified in any way and pedestrian traffic would be accommodated over the new pedestrian bridge while vehicular and bicycle traffic remained on the existing culvert. Similar to Alternative 1, the separate pedestrian structure would need to be high enough over the creek so it would not interfere with the 100-year flood flows and cause a rise in the backwater. FEMA prohibits a rise in the backwater associated with construction of a separate pedestrian structure and such a rise can have strict flood insurance implications for city of Santa Barbara residents. The profile required to raise the new pedestrian structure over the required flood flows would result in a long and high pedestrian bridge that would need significant amounts of room to accommodate the required ADA pedestrian grades.

This alternative was ultimately dropped as adding a new structure on the downstream side of the existing culvert would place the new structure outside the City's existing right-of-way and require the City to acquire additional right-of-way. Furthermore, the room needed to get the new structure above the required flood flows and also meet ADA requirements would increase the need for right-of-way acquisition and likely cause at least one full acquisition at parcel APN 017-073-001. Additionally, because this alternative only addresses pedestrian deficiencies on the existing structure, it was determined to be less desirable than Alternative 3. This alternative also does not improve vehicular and bicycle conditions on the existing structure.

### 7.2.4 Alternative 3—Culvert Relocation

Relocating the existing structure to another public site as an element of bridge replacement was investigated; however, the possibility was rejected as a viable alternative as it would cause a severe economic hardship for the project. In this alternative the existing structure stone would be carefully documented and deconstructed, transported to a new public location, and reconstructed either in its current dimensions or in a smaller scale. Whether the reconstructed culvert would be reused as a pedestrian structure or repurposed as a visual landmark only would need to be decided based on the proposed relocation site. If the culvert were to serve as a pedestrian structure, crossing a creek in a public park for example, it would need to be redesigned and reconstructed with modern construction techniques in order to meet modern structural codes. To accomplish this, the structure would need to be reinforced with concrete and steel, with the original stone serving as a façade only. Assuming the structure could be reconstructed inside existing City right-of-way outside the proposed project area, relocating the existing culvert is anticipated to cost approximately $750,000 or more in addition to the cost for replacing the structure. This would include environmental review of the proposed public site, engineering design, recordation/deconstruction, transportation and reconstruction at a new location. This cost would be borne exclusively by the City, as the grant funding being used for the proposed project would not support these costs. As there are no City funds budgeted at this time and the grant funding for the proposed project will have expired by the time these additional funds could be identified, it was determined that relocating the existing culvert would cause a severe economic hardship for the project, rendering it not a viable alternative.

### 7.2.5 Alternative 4—Bridge Replacement (Proposed Project)

Bridge replacement was the last alternative investigated for this project. For this alternative the existing structure would be completely removed and a new bridge constructed in its place. The new bridge would be wide enough to safely accommodate vehicular and bicycle traffic on the roadway; pedestrians would be accommodated on a raised sidewalk on the new bridge. The new bridge would also be longer than the existing culvert, making it capable of having modern bridge rails to improve safety without causing a rise in the backwater, making it compliant with FEMA requirements. The new bridge rails would be safe for vehicular, bicycle, and pedestrian traffic while still allowing sufficient water flow over the new bridge in a 100-year storm event to avoid a rise in the backwater. Lastly, this alternative could be constructed completely inside the City's existing right-of-way and, therefore, would not requiring any permanent property acquisitions.

As Alternative 4 improves safety for all three modes of transportation, does not require any property acquisitions, meets FEMA requirements, and improves the bridge rails, it was chosen as

the most prudent proposed alternative. This alternative meets the project's purpose and need as well as the defined project objectives and FEMA requirements.

### 7.3 ANALYSIS OF PROPOSED PROJECT

The Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project proposes to remove the existing masonry arch culvert and replace it with a bridge at the same location to align with the existing roadway approach and exit. The new bridge will be widened to accommodate a sidewalk on the east side of the bridge, as well as roadway shoulders for bicyclists. The new bridge will greatly improve both pedestrian and vehicular safety at the intersection. Removal of the structure is necessary to meet the needs of the project. Demolition of the culvert will cause a substantial adverse change in the significance of a historical resource. According to the MEA, the HLC may determine that mitigation measures will reduce the project impact to a less than significant level.

## 8 SUMMARY AND RECOMMENDATIONS

The Montecito-Yanonali Street Culvert is recommended eligible for listing as a City of Santa Barbara Structure of Merit and, therefore, is considered a cultural resource for the purpose of CEQA. As demolition of the structure will result in a significant impact, mitigation to reduce the impact is proposed as part of the project description, although it may not fully reduce the impact to a less than significant level.

*The MEA* offers mitigation measures "when *in-situ* preservation or incorporation of historic structures or sites is not feasible or desirable" (City of Santa Barbara 2002:65). The MEA states:

> Depending on the proposed project's effects, one or a combination of listed mitigation measures could be required to reduce significant impacts or recommended to further reduce less than significant impacts to historic structures and/or sites affected by a proposed project. Implementation of any combination of one or more of the mitigation measures listed [in the MEA] or developed specifically for the proposed project may not fully mitigate a proposed project's significant impacts to a historic structure or site [City of Santa Barbara 2002:65].

Mitigation Measure 7 of the MEA recommends recordation according to the Community Development Department's *Required Documentation of Buildings Prior to Demolition.* This guidance identifies the documentation materials that must be submitted prior to the issuance of a demolition permit including photographic prints and digital files, detailed history of the building or structure, site plans, and scaled elevation drawings. This HSSR provides the written history for the Montecito-Yanonali Street Culvert. The only known scaled drawing of the culvert is archived at the City of Santa Barbara Public Works Department. Additionally, several books and informational articles have been published discussing other masonry work in Santa Barbara. As information is available that meets part of the documentation effort, it is recommend that 5–6 high-resolution digital images (11 megapixels or greater) be taken of the Montecito-Yanonali Street Culvert prior to demolition. These photographs shall be printed on archival quality paper, added to the written history and scaled drawing, and placed in a manila 8½ x 11 pocket file folder for filing at the City Community Development Department and Santa Barbara Public

Library as specified in the City's *Required Documentation of Buildings Prior to Demolition* guidelines. This documentation is intended to create a record of the lost resource.

Mitigation Measure 10 in the MEA recommends "commemoration of the demolished structure." For the purposes of this project, it is recommended that an enclosed display of text and photographs designed by a City-approved historical consultant will be placed near the pedestrian sidewalk of the new bridge structure.

Mitigation Measure 11 offered by the MEA is recommended to further reduce the impact of the loss of the Montecito-Yanonali Street Culvert. This measure recommends the salvage of significant material (i.e., sandstone) from the demolished structure for use in new construction according to an approved physical conservation program. The physical conservation program report shall be written by the historian performing/or supervising the physical conservation work (City of Santa Barbara 2002:67).

a. Proposals

   A proposal for a Physical Conservation Program, including work plan and discussion of techniques for physical conservation, must be submitted for approval. The proposal must be forwarded to the HLC [Historic Landmarks Commission] for its review and approval. Fieldwork cannot begin until approval is obtained.

b. Physical Conservation

   Physical conservation is directed at salvaging significant materials from a historic structure/site prior to its damage or destruction. Large format photographs and measured architectural drawings may be prepared to provide a permanent record of structures/sites subject to the project effects [per Mitigation Measure 7, above].

c. Disposition

   Physical materials conserved from a demolished historic structure or site shall be adaptively reused in public view on the project site. Storage of such physical materials is not adequate.

While the legislative purpose of mitigation is to diminish the impact of demolishing a historical resource, mitigation should also strive to be a meaningful effort to minimize the loss of that resource to the public. As the Montecito-Yanonali Street Culvert is one of only a few remaining examples of a masonry stone arch structure in the city but is not highly visible, it is reasonable to conclude that the preservation of another similarly eligible masonry stone arch structure with greater public access would provide compensatory mitigation for the loss of this rare resource type. There are currently three masonry arch bridges either listed or previously determined eligible for listing on the NRHP in the city of Santa Barbara. The Mission Creek Bridge is listed on the NRHP under a multiple-property documentation package. The Sycamore Canyon Creek and Rattlesnake Canyon bridges have not been listed but are determined to be eligible for listing on the NRHP. One of these resources, the Sycamore Canyon Creek Bridge, is located on State Route 192, is on an active thoroughfare, and only provides one lane of traffic. This bridge will likely need to be replaced/upgraded in the near future, resulting in the loss of another such structure. The Rattlesnake Canyon Bridge, however, is located in Skofield Park and is eligible for listing on the NRHP. It is one of only two unmodified masonry arch bridges made of uncut rubble in all of the state of California (Ham and Hope 2003). The bridge's location in the park

provides greater accessibility to the public compared to the visually restricted location of the Montecito-Yanonali Street Culvert. To further enhance recognition of the rare masonry bridge type and its historical significance to the public, it is recommended that the City nominate the Rattlesnake Canyon Bridge for listing on the NRHP, ensuring its preservation into the future, as additional mitigation for the loss of the Montecito-Yanonali Street Culvert. It is further recommended that the City Urban Historian nominate the bridge as a City Landmark. Nominating the Rattlesnake Canyon Bridge for listing on the NRHP and listing it as a City Landmark will increase public awareness and appreciation of the rarity of the architectural type for future generations and enhance the history of masonry architecture in the city of Santa Barbara.

# 9 RESOURCES CONSULTED

**Books, Manuscripts, Unpublished Documents**

Bureau of the Census

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1873 Advertisements. 15 September:5. Santa Barbara, California.

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Streatfield, David C.
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**Maps**

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Wackenreuder, Vitus
1853 Map of the City of Santa Barbara, laid out by Salisbury Haley and drawn by V. Wackenreuder. On file, Davidson Library, University of California, Santa Barbara.

# APPENDIX A

## Complete Project Description

# Montecito Street Bridge Replacement and Pedestrian Improvements Project Description

## Introduction

### *General*

The City of Santa Barbara (City) is proposing to replace the existing Montecito Street Bridge over Sycamore Creek with a new bridge at the same location and add pedestrian improvements to the surrounding area as part of the Montecito Street Bridge Replacement and Pedestrian Improvements Project (Project). The pedestrian improvements will consist of adding new sidewalk, curb ramps, and pedestrian-scale lighting along Montecito Street, Yanonali Street, and Salinas Street. The Project is located in the center of the Eastside neighborhood of the City of Santa Barbara, which has one of the highest concentrations of pedestrian activity and bicycle commuters in the City[1]. The Project is split between the service boundary lines for Cleveland and Franklin Elementary Schools (Adelante Charter School is next to Franklin School Campus) and is the same distance to both schools at approximately 0.4 miles. There is also one bus stop just east of the bridge and roundabout along Salinas Street providing a walk/transit connection. There are also two other bus stops within a 0.25 miles of the bridge; one on Montecito Street at the Franklin Neighborhood Center and the other on Salinas Street at the Mason Street intersection. Franklin Neighborhood Center and Eastside Library are a couple of blocks from the bridge and Eastside Neighborhood Park is about one block away. The Project encourages alternative modes of transportation by providing attractive and safe facilities along school routes and to public facilities.

**Bus Stop Locations**

The Project is funded primarily by the Active Transportation Program (ATP) with state only funds. The City has allocated $433,000 towards this project. This Project does not have any federal funding.

The Project design will focus on enhancing the pedestrian environment while preserving and protecting adjacent riparian habitat. The bridge will be replaced at the same location to match the existing roadway alignment, but will be widened to accommodate a sidewalk on the east side of the bridge, as well as roadway shoulders for bicyclists. All sidewalks will be added along the existing local street alignments. The proposed replacement bridge and pedestrian improvements will meet current applicable City, American Association of State Highway and Transportation Officials (AASHTO), and Caltrans design standards. The bridge will also be constructed according to FEMA flood regulations.

Because the work at Montecito Street and Salinas Street is not contiguous, their discussions are broken out below as "Montecito Street" and "Salinas Street." "Montecito Street" work will refer to the Montecito Street bridge replacement over Sycamore Creek and the pedestrian improvements along Montecito Street and Yanonali Street. Pedestrian scale lighting is proposed as a part of the pedestrian improvements along both Montecito Street and Yanonali Street from the "Five Points" roundabout to Soledad Street. "Salinas Street" work will refer to the pedestrian improvements along the north side of Salinas Street between Mason and Clifton Streets as well as pedestrian scale lighting along Salinas Street from the "Five Points" roundabout to Clifton Street.

## Project Purpose and Need

### *Montecito Street*

The Montecito-Yanonali Bridge (Bridge) is very difficult to navigate as a pedestrian. Currently, pedestrians walk on a sub-standard vehicle travel lane to cross the Bridge because there is not a sidewalk across the Bridge. There is a blind corner feeding into the Bridge, and vehicles do not have good visibility of pedestrians until they are at the Bridge. The Bridge is shaded by large trees in the creek, making objects on the Bridge difficult to see when approaching from the sunny side of the Bridge. The Metropolitan Transit District's (MTD) Line 2 crosses the Bridge every 15 minutes for a total of 65 times per day. See the "Bus Stop Locations" figure on page 1 for locations of bus stops near the project.

Another issue is that the current Bridge is located in the floodway of Sycamore Creek. According to the Federal Emergency Management Agency (FEMA), a regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations. Causing a rise in a floodway may result in the loss of residents' ability to have flood insurance in the City. Currently the existing bridge is not capable of passing a 10 year or greater flood event and gets overtopped during these storms.

The purpose of the Project is to improve pedestrian/bicycle safety and access along Montecito Street for students and their families traveling to and from the nearby elementary schools and nearby public

facilities. The obsolete bridge will be replaced to accommodate pedestrians and bicyclists and the new Bridge will meet current structural, geometric, and hydraulic standards. The Project will incorporate an expert arborist's, Bill Spiewak and Associates, recommendations to protect the large sycamore tree on the upstream side of the Bridge during construction. The Project will conform to local, state, and federal environmental and planning policies.

The Project objectives are defined as:

- Improve public safety and access to the neighboring schools and public facilities by accommodating a pedestrian crossing at Sycamore Creek
- Accommodating roadway shoulders for bicyclists on the bridge
- Improve public safety and enhance pedestrian access along Montecito Street with new sidewalk and pedestrian scale lighting
- Cause a no rise in backwater at the Sycamore Creek crossing
- Adopt arborist preservation recommendations and measures to protect the Sycamore tree on the upstream side of the bridge
- Improve site lines and facilitate a pedestrian crossing at Montecito Street and Yanonali Street intersection
- Maintain traffic circulation at the "Five Points" roundabout
- Minimize potential right-of-way take and work with property owners to remove their encroachments from City right-of-way

*Salinas Street*

The Eastside neighborhood of the City of Santa Barbara has one of the highest concentrations of pedestrian activity and bicycle commuters in the City[1]. Currently the Project site at Salinas Street has no sidewalks on the north side from Mason Street to Clifton Street. This segment is the only part of the northern section of Salinas Street without sidewalk in this area.

The purpose of the Project is to improve pedestrian safety and enhance pedestrian access. The Project will conform to local, state, and federal environmental and planning policies.

The Project objectives are defined as:

- Improve public safety as well as routes to school and public facilities by accommodating pedestrian access and lighting along Salinas Street
- Minimize right-of-way take and work with property owners to remove their encroachments from City right-of-way

# Project Description

## *Existing Conditions*

### *Montecito Street*

Constructed in 1923, the existing stone arch structure spans approximately 16 ft over Sycamore Creek. Since the existing span is less than 20 ft long, it is not on the National Bridge Inventory (NBI) (in accordance with Caltrans and FHWA standards) and has no bridge number. The existing structure is founded on bearing foundations. The bridge carries approximately 6,000 vehicles per day and is on a transit and truck delivery route. From bridge rail to bridge rail is about 30 feet, meaning there is only enough room for two traffic lanes. There are no sidewalks or roadway shoulders. According to the as-built plans, the structure originally had stone barriers approximately 1.5 ft wide and 2 ft tall. These barriers have since been removed and replaced with pipe hand railings. The eastbound approach to the bridge is around a blind curve. The bridge is shaded, and during daytime hours, objects on the bridge are difficult to see due to the contrast between sunny and shaded areas. Additionally the northern foundation is approximately 3 ft from the base of the large sycamore tree upstream of the bridge.

The existing Montecito Street and Yanonali Street intersection is not stop controlled. Currently, the sight lines for the eastbound approach are the most restricted. There are no sidewalks along the north side of Montecito Street making the site unsafe for pedestrians and bicyclists. In some locations, the residents have encroached into City owned right-of-way with their fences and landscaping. Lighting in the neighborhood is also sparse.

This bridge spans Lower Sycamore Creek, which begins at Yanonali Street (Project Location) and ends at the Pacific Ocean approximately 1 mile away. Lower Sycamore Creek is located in an urbanized area and retains a fairly natural streambed. Several road crossings of various configurations occur along its stretch. Mature, native riparian vegetation mixed with a high abundance and diversity of non-native plant species occurs throughout this reach. Valley foothill riparian habitat primarily occurs on the upstream side of the bridge, in a narrow band between the margins of Sycamore Creek and the residential development and includes western sycamore, cottonwood, and coast live oak along with a variety of ornamental trees such as eucalyptus and palms. Understory species include Himalayan blackberry, nasturtium, horsetail, and English ivy.

Willow scrub is the dominant vegetation community on the downstream side of the bridge and common species include arroyo willow, ditch beard grass, nettles, horsetail, Himalayan blackberry, and kikuyu grass.

*Salinas Street*

Currently the Project site at Salinas Street has no sidewalks on the north side from Mason Street to Clifton Street. This segment is the only part of the northern section of Salinas Street in the area without sidewalk. At several locations along Salinas Street, privately owned fences, walls, and landscaping encroach into City owned right-of-way. There are many street trees located along Salinas Street that have been planted by the private residences and are encroaching in the City right-of-way. Many of these trees will need to be removed.

## *Proposed Conditions*

*Montecito Street*

The proposed Project will construct a critical missing sidewalk link to an otherwise complete network of sidewalks. The sidewalk improvements along Montecito Street will add new sidewalk from the "Five Points" roundabout, across Sycamore Creek on the downstream side of the new bridge, and up the north side of Montecito Street to the N. Canada Street/Montecito Place intersection. The sidewalks will be 5-6 ft wide except over the bridge where it will be 6 ft wide. To make this important connection, the existing 92 year old bridge will be replaced because it cannot currently safely accommodate vehicular, pedestrian, and bicycle traffic, as it is too narrow to provide a protected sidewalk for pedestrians or roadway shoulder for bicyclists. The existing bridge is also incapable of passing flows from a 10 year or greater flood.

In addition to the sidewalk and bridge improvements, the existing three-way intersection at Montecito Street and Yanonali Street will be converted to an all-way stop. The intersection will improve pedestrian and bicycle safety at a blind corner. Vehicular safety will also be improved as a stop controlled intersection will help motorists safely negotiate the curve in the roadway alignment. Pedestrian scale lighting is proposed along both Montecito and Yanonali Streets to make the route safe and visible for pedestrian traffic traveling to schools and facilities in the area.

The new replacement bridge will be a concrete slab bridge supported on pile foundations. The bridge will be approximately 45 feet long and approximately 43 feet wide. The proposed bridge will not cause a rise in backwater. The new bridge will have a 34 ft roadway clear width (5 ft shoulders and 12 ft lanes) in addition to the 6 ft wide sidewalk on the downstream side of the bridge. The sidewalk will improve pedestrian safety and accessibility while the shoulders will benefit motorists and bicyclists. The bridge will have open type railings that will be designed to meet current Caltrans and AASHTO safety standards.

A large Sycamore tree is present at the project site upstream of the bridge. In order to meet AASHTO standards, the new bridge will be wider than the existing bridge; and therefore, it will be closer to the large Sycamore tree. An expert arborist, Bill Spiewak and Associates, has been hired to consult on the project and their recommendations will be incorporated into the project to protect the large Sycamore tree. To limit impacts to the tree, the proposed bridge abutment on the northerly side will be designed

to be further to the north than the existing abutment as recommended by the arborist. The proposed bridge will also be constructed on pile foundations to limit the amount of damage to the tree roots during substructure work as recommended by the arborist, and the Sycamore tree will be pruned to counteract its natural lean prior to construction per the arborist's recommendations. There is also a pittosporum tree located on the downstream side of the bridge, a pepperwood tree located on the upstream side of the bridge, and small landscape trees on APN 017-073-001 (223 N Salinas St) that will be removed as part of the project.

The elevation of the roadway surface will be similar to existing conditions, but roadway approach work will be required from the Montecito and Yanonali Streets intersection on the south, to the "Five Points" roundabout to the north. Roadway approach work will consist of minor grading, pavement reconstruction, new curb and gutter, conforms, and re-striping. The realigned intersection and all-way stop conversion will improve sight lines on the bridge.

The proposed construction will require relocation of underground utilities from the existing bridge onto or through the replacement bridge. Overhead utilities will be cleared from the Project site for construction as necessary. Surface drainage patterns within the project area will remain generally unchanged, and existing storm drain inlets will be adjusted, as necessary. The project will be required to comply with the City's Storm Water Management Program (SWMP). The Project will comply with the SWMP Tier III requirements.

The Project will be constructed primarily within the existing City right-of-way, but some small permanent acquisitions and temporary construction easements and/or rights to enter and construct will be needed.

Montecito Street is a vital collector street through the City; however multiple detours approximately a ½ mile or less in length are available. Therefore, to complete construction in one season and minimize traffic and community impacts, the bridge across Sycamore Creek will be closed during construction. Closing the bridge during construction will also improve safety during construction. The proposed project will not cause a rise in the backwater and improve vehicular, pedestrian, and bicyclist safety.

*Salinas Street*

The proposed Project will add new sidewalk along the north side of Salinas Street between Mason Street on the west and Clifton Street on the east. This segment is the only part of the northern section of Salinas Street without sidewalk in the area. Pedestrian scale lighting is proposed to make the route safe and visible for pedestrian traffic. Work in the existing roadway is limited to removal of the existing curb and gutter, and therefore will only require small amounts of pavement reconstruction. The proposed construction includes new retaining walls at the back of sidewalk, curb, gutter, 700 linear feet of new five feet wide sidewalk, and potential relocation of the existing underground utilities. Overhead utilities will be cleared from the Project site for construction if determined necessary. Surface drainage patterns within the Project area will generally remain unchanged, and existing storm drain inlets will be adjusted,

as necessary. The project will be required to comply with the City's Storm Water Management Program (SWMP). The Project will comply with the SWMP Tier III requirements.

The Project will be constructed primarily within the existing City right-of-way. Temporary construction easements and/or rights to enter and construct will be needed to construct the retaining walls and driveway conforms. In this area many of the residents have encroached into City right-of-way. Private retaining walls, trees, and landscaping will be in conflict with the new sidewalks and will need to be removed and/or relocated as necessary.

Salinas Street is a minor arterial street through the City that connects to Hwy 101 on the east. Construction will occur without any permanent roadway closures but may require temporary closures and/or shoulder work during construction. The proposed Project will improve pedestrian safety and enhance pedestrian connectivity.

## *Utility Relocation*

### *Montecito Street*

Both existing underground and overhead utilities are present at the Montecito Street Project site. Anticipated underground utilities include communication, water, sewer, and gas lines. Existing underground utilities are in conflict with the bridge demolition and construction, and need to be cleared from the work site by the utility owners prior to construction. Utilities that are part of a redundant or looped system will be capped at the bridge approaches; otherwise the utilities will need to be temporarily relocated and potentially supported across the creek during construction. The new bridge will accommodate as many underground utilities as possible within the bridge for those utility companies that request accommodation. The existing sewer line that is attached to the downstream side of the existing bridge will need to be raised in its final condition to be supported by the new bridge above the soffit so it does not affect hydraulics. It is anticipated that the sewer line cannot be capped during construction so it will need to be temporarily relocated and supported across the creek during construction before being incorporated into its final location on the new bridge.

Overhead utilities at the site include electrical transmission and distribution lines on the eastern side of the bridge. The transmission lines are above the distribution lines and are not anticipated to be a problem for construction. The lower distribution lines on the eastern side of the bridge will conflict with construction activities and will need to be cleared from the project site prior to construction. These easterly lines will only need to be temporarily relocated to facilitate construction and then can return to their existing location after construction in complete. Both overhead communication lines and electrical distribution lines are located on the western side of the bridge. Both the communication lines and distribution lines on the western side of the bridge will need to be cleared from the site prior to construction as they conflict with construction activities. Because the bridge and roadway are being widened by the project, the northern wooden utility pole on the west side of the bridge supporting the communication and electrical lines will need to be permanently relocated in the final project condition

as it will interfere with the roadway shoulder. There is enough room for this pole to be relocated to the west and still remain in the City right-of-way if the utility company desires to do so. Opportunities to underground utilities will be provided to the utility owners.

Tree trimming to the large sycamore tree on the upstream side of the bridge will be required to facilitate the overhead utility work and protect the tree during construction per the project's arborist recommendations.

Additionally there two overhead utility poles on the north side of Montecito Street near Montecito Place that will be relocated to the back of the City's right-of-away at the same location to accommodate the new sidewalk.

*Salinas Street*

Both existing underground and overhead utilities are present at the Salinas Street project site. Anticipated underground utilities include communication, water, sewer, and gas lines. Much of the anticipated underground utility work along Salinas Street is adjusting utility boxes and meters and adjusting service lines for residences. Fire hydrant relocation will also need to be performed.

Overhead utilities at the Salinas Street site include communication and electrical distribution lines. The lines are located on the south side of the street but frequently cross the street to provide service to the residences. Utility poles are present on the north side of the street, but are less frequent than on the south side. Both the overhead communication lines and distribution lines will need to be cleared from the site prior to construction if they are determined to conflict with construction activities.

## *Right-of-Way*

*Montecito Street*

The Project will be constructed primarily within the existing City right-of-way, but some small permanent acquisitions and temporary construction easements and/or permissions to enter and construct will be needed. Parcels anticipated requiring temporary construction easements and/or permissions to enter and construct are:

| | |
|---|---|
| • APN 017-073-001<br>(223 N SALINAS ST) | • APN 031-392-024<br>(1303 E MONTECITO PL) |
| • APN 017-071-003<br>(1335 SYCAMORE CANYON RD) | • APN 031-384-009<br>(300 MELLIFONT AVE) |
| • APN 017-071-004<br>(1313 E MONTECITO ST) | • APN 017-072-004<br>(1319 E YANONALI ST) |
| • APN 017-071-005<br>(1301 E MONTECITO ST) | • APN 017-073-046<br>(219 SYCAMORE LN) |

Parcels APN 017-073-001 (223 N SALINAS ST) and APN 031-392-024 (1303 E Montecito Pl) are anticipated to require a portion of right-of-way acquisition. The amount of acquisition is less than 50 square feet each and are needed to construct a full width sidewalk around the corner from Montecito Street to Salinas Street and accommodate a curb ramp at a street corner.

*Salinas Street*

The proposed Project will be constructed primarily within the existing City right-of-way. Temporary construction easements and/or permissions to enter and construct will be needed in order to construct the retaining walls and driveway conforms. Properties anticipated requiring temporary construction easements and/or permissions to enter and construct are:

| | |
|---|---|
| • APN 015-180-017<br>(100 N SALINAS ST) | • APN 015-222-005<br>(1401 SALINAS PL) |
| • APN 015-180-016<br>(24 N SALINAS ST) | • APN 015-223-007<br>(1 S SALINAS ST) |
| • APN 015-180-015<br>(18 N SALINAS ST) | • APN 015-223-006<br>(7 S SALINAS ST) |
| • APN 015-180-014<br>(14 N SALINAS ST) | • APN 015-223-005<br>(11 S SALINAS ST) |
| • APN 015-222-006<br>(10 N SALINAS ST) | • APN 015-223-004<br>(19 S SALINAS ST) |

## *Detour Route/Construction Staging*

*Montecito Street*

Montecito Street is a vital collector street through the City; however, multiple detours approximately a ½ mile or less in length are available. Therefore, to complete construction in one season and minimize traffic and community impacts, the bridge across Sycamore Creek will be closed during construction. Closing the bridge during construction will also improve safety during construction.

One potential detour would use existing roadway and sidewalk networks west of the bridge and be approximately a 0.4 miles long. Traffic could travel west on Montecito Street, then north on N. Canada Street, then east on N. Gutierrez Street, and then south on Alameda Padre Serra before arriving back at the Project site on the opposite side of the bridge. An alternate detour would use existing roadway and sidewalks east of the bridge and be approximately a 0.6 miles long. Traffic could travel south on Yanonali Street, then east on N. Soledad Street, then north on E. Mason Street, and then west on N. Salinas Street before arriving back at the Project site on the opposite side of the bridge. These routes are shown in the figure below.

**Detour Figure**

*Salinas Street*

Salinas Street is a minor arterial street through the City that connects to Hwy 101 on the east. Construction will occur without any full roadway closures but may require temporary closures and/or shoulder work during construction.

## *Demolition*

*Montecito Street*

Demolition of the existing bridge will be performed in accordance with Caltrans Specifications modified to meet environmental permit requirements. Prior to construction, the contractor will be required to prepare and submit for approval a bridge demolition plan, including creek diversions/bypass details, that are in conformance with the environmental permits. All concrete and other debris resulting from the demolition of the existing bridge will be removed from the proposed Project site and properly disposed of by the contractor. An expert arborist, Bill Spiewak and Associates, has been hired to consult on the project and their recommendations will be incorporated into the project to protect the large Sycamore tree. The arborist's recommendations to protect the Sycamore tree during construction includes trimming the tree prior to construction and demolishing the existing bridge carefully to avoid root damage. These recommendations will be included in the project plans and specifications.

Demolition of existing retaining walls, sidewalks, asphalt, etc. will be performed in accordance with Caltrans Specifications environmental permit requirements. All concrete and other debris resulting from the demolition of the existing walls, sidewalks, asphalt, etc. will be removed from the proposed Project site and properly disposed of by the contractor.

*Salinas Street*

Demolition of existing retaining walls, sidewalks, asphalt, etc. will be performed in accordance with Caltrans Specifications environmental permit requirements. All concrete and other debris resulting from the demolition of the existing walls, sidewalks, asphalt, etc. will be removed from the proposed project site and properly disposed of by the contractor.

## *Construction Activities*

Construction will consist of the following activities in the general order detailed below. Activities will be performed on both the Montecito Street and Salinas Street portions unless noted otherwise:

*Clearing and Grubbing*

Remove portions of trees, bushes, and landscaping in conflict with new construction. The areas around the Project work sites will be cleared of vegetation and fencing to gain access. The work will be within the approved Project limits of disturbance. A pittosporum tree on the northeastern side of the Montecito Street Bridge, a pepperwood tree on the northwestern side of the bridge, and small landscape trees on APN 017-073-001 (223 N Salinas St) will be removed as part of the Montecito Street portion of the project. Multiple street trees along Salinas Street will also need to be removed.

*Water Diversion (Montecito Street Only)*

Water diversion methods are anticipated and may include the use of water bladders, sandbags, sheet piling, pipes, coffer dams, or other structural methods approved by the Engineer, City of Santa Barbara, California Department of Fish and Wildlife, US Fish and Wildlife Service, and the National Marine Fisheries Service. All water divergence work will be contained within the approved Project area of disturbance. The operational timeline for the stream diversion will be defined in the Project permits from the resource agencies. Impacts from the water diversion will be temporary only. A SWPPP with the appropriate BMPs will also be required and will cover the avoidance and minimization for the water diversion.

*General Demolition*

Existing retaining walls, sidewalks, asphalt, etc. identified to be removed will be demolished and properly disposed of offsite. Heavy equipment will be required to demolish and remove such features. Drainage features will be protected from contamination and all debris generated by the demolition will be removed from the site.

*Bridge Demolition (Montecito Street Only)*

The existing bridge will be demolished and properly disposed of offsite. Heavy equipment will be required to demolish and remove the existing masonry structure. The creek below will be protected from contamination and all debris generated by the demolition will be removed from the site. The project plans will incorporate the recommendations of an expert arborist for the large sycamore tree on the upstream side of the bridge. Recommendations to be implemented include lengthening, the bridge, using pile foundations, trimming the tree to counteract its natural lean, and using caution during construction to not damage existing roots. Recommendations from the project archeologist will also be included in the project.

*New Bridge Foundations (Montecito Street Only)*

The replacement bridge foundations will be supported by cast-in-drilled-hole (CIDH) concrete piles. Excavation for the abutments will be approximately 15 ft deep, measured from the roadway surface. The CIDH pile construction may require the use of high density drilling slurry and/or temporary casings. If drilling slurry is used, the contractor will be required to have a contingency plan in place before drilling operations begin, in the event there is a blow out during drilling and drilling fluid is spilled into the creek. While drilling operations are underway, the creek will be dewatered near the drilling operations with a creek diversion in place. Prior to construction, a drilling plan will be prepared and submitted by the contractor for approval in conformance with applicable permits. Any drilling slurry from the CIDH pile construction will be contained and properly disposed of offsite. All bridge construction work will be completed during the dry season when Sycamore Creek is dry or has very minimal water flow.

*General Construction*

New concrete retaining walls and curb, gutter, and sidewalks will require forms be constructed and then concrete and reinforcement be placed. Excavation will be limited to only what is required to get the formwork in place. Formwork will be removed after the concrete sufficiently cures and the surfaces will be finished. Final backfilling and grading as well as landscaping in the planted strip between the sidewalk and curb will be performed last.

Similarly, excavation for roadway and utility work will be limited to only what is needed to perform the required work. Backfill and roadway base will be placed after utility and preparation work has been performed. Lastly, the asphalt roadway surfacing and final landscaping work will be performed.

Foundations for new lighting will be excavated to City standards and be approximately 3-5 ft deep. Trenching for electrical conduit for the street lighting will also be required and will be approximately 2-3 ft deep per City standards. Once the conduit is run, all lighting fixtures will be installed and all excavations properly backfilled.

*New Bridge Construction (Montecito Street Only)*

The new bridge will require falsework to be erected on temporary steel and timber supports inside the creek limits. Forms will be constructed on the falsework, and then concrete and reinforcement will be placed for the new bridge. Falsework will then be removed from the channel and concrete surfaces will be finished. Any creek diversion elements will be removed after all the concrete has been sufficiently cured and finished and the falsework has been removed. The project plans will incorporate the recommendations of an expert arborist for the large sycamore tree on the upstream side of the bridge as discussed previously. Recommendations from the project archeologist will also be included in the project. Local native riparian landscaping will be used in the re-vegetation plan and will use the elements of the approved vegetation plan. Permanently impacted areas will be compensated at a 2:1 ratio, or as determined necessary by the permitting agencies. The mitigation area will be located along Lower Sycamore Creek within the construction footprint.

The bridge sidewalks, barriers, and roadway approaches will then be completed. Backfill behind abutments and roadway base materials will be placed and the roadway will be prepared for final surfacing.

*Construction Equipment List*

Table 1 provides a description of the type of equipment likely to be used during the construction of the proposed project.

**Table 1. Construction Equipment**

| Equipment | Construction Purpose |
|---|---|
| air compressor | bridge removal + finishing work |
| backhoe | soil manipulation + drainage work + bridge removal |
| bobcat | fill distribution |
| bulldozer / loader | earthwork construction + clearing and grubbing + bridge removal |
| compaction equipment | soil manipulation |
| concrete truck and pump | concrete placement |
| crane | placement of falsework + rebar cages + pile installation |
| debris bin | debris storage and containment |
| drill rig | pile installation |
| dump truck | fill material delivery + bridge removal |
| excavator | soil manipulation |
| flatbed truck | material handling and delivery |
| front-end loader | dirt or gravel manipulation |
| grader | ground leveling |
| haul truck | earthwork construction + clearing and grubbing |
| hoe ram | bridge removal |

| | |
|---|---|
| holding tanks | slurry storage for pile installation |
| hydraulic hammer | demolition/concrete removal |
| jackhammer | demolition/concrete removal |
| mixing tanks | slurry mixing for pile installation |
| paving equipment | approach roadway paving |
| recirculating pumps | slurry pumping for pile installation |
| roller / compactor | earthwork construction |
| truck with seed sprayer | landscaping |
| water truck | earthwork construction + dust control |

*Construction Staging Areas*

Both project sites are in a very tight construction area and will provide a challenge for construction staging areas. The most likely area for construction staging areas is the areas immediately behind the bridge abutments on both sides of the creek. The construction areas will be located so that they do not block driveways but will close the Montecito Street and Yanonali Street intersection to provide a maximum amount of staging area for the contractor. Since these construction areas are near the creek the contractor will be required to place straw barriers, swales, etc. to keep contaminants out of the creek. Construction on Salinas Street will either not have a construction staging area or can use the northerly area behind the Montecito Street Bridge abutment since it is in close proximity to the Salinas Street project area.

**Potential Staging Area Figure**

### *Construction Schedule and Timing*

It is anticipated that both the Montecito Street and Salinas Street portions of the project will be constructed at the same time; however breaking the two projects apart into different construction seasons is a possibility. Since the projects are not contiguous, separating the two projects would not add new impacts.

*Montecito Street*

Construction of the proposed project is anticipated to take one construction season to complete. The approximately 9 month construction period is scheduled to begin in Spring 2017. All in-creek construction work will be completed during the dry season when Sycamore Creek is dry or has very minimal water flow.

*Salinas Street*

Construction of the proposed project is anticipated to take approximately 9 months. The construction is scheduled to begin in Spring 2017.

## Existing Structure Minimization Measures

The proposed project includes the following measures to address impacts to the existing culvert generated by the removal/demolition of the existing structure which are consistent with the *City of Santa Barbara Master Environmental Assessment: Guidelines for Archaeological Resources and Historic Structures and Sites*:

1. Recordation according to the Community Development Department's "Required Documentation Prior to Demolition" standards.

2. Commemoration of the demolished culvert with an enclosed display of text and photographs designed by a city-approved historical consultant on the easterly end of the bridge structure.

3. The salvage of significant materials (sandstone) for conservation to be incorporated into the new bridge structure. Salvage of significant materials shall be accomplished using an approved Physical Conservation Program.

A Physical Conservation Program Report will be written by the Historian performing/or supervising the physical conservation work. The Physical Conservation Program will contain the following steps:

A. Proposals
   A proposal for a Physical Conservation Program, including work plan and discussion of techniques for physical conservation, will be submitted for approval. The proposal will be forwarded to the HLC for its review and approval. Fieldwork will not begin until approval is obtained.

B. Physical Conservation

Physical conservation is directed at salvaging significant materials from a historic structure/site prior to its damage or destruction. Large format photographs and measured architectural drawings will be prepared to provide a permanent record of structures/sites subject to project effects (consistent with mitigation measure 1 above).

C. Disposition

Physical materials conserved from a demolished historic structure or site will be adaptively reused in public view on the project site.

Furthermore, the City may consider nominating the Rattlesnake Canyon Bridge as a City Landmark and for listing on the NRHP, ensuring its preservation into the future, as additional mitigation for the loss of the Montecito-Yanonali Street Culvert. Nominating the Rattlesnake Canyon Bridge will increase public awareness and appreciation of the rarity of the architectural type for future generations and enhance the history of masonry architecture in the city of Santa Barbara.

## Conservation Measures

The following conservation measures will be followed before, during and after construction of the proposed project to avoid any environmental impact to sensitive species and habitat.

### California Red-Legged Frog

The City will implement measures to avoid and minimize potential adverse effects on California red-legged frog. Prior to conducting work and during work, the following measures will be implemented.

- A qualified biologist shall survey the work site no more than two weeks before the start of any construction-related activities to verify that California red-legged frogs are not present in work areas. If a California red-legged frog is found, the City shall contact the USFWS to determine whether relocating any life stages is appropriate. If adult California red-legged frogs are present, the construction contractor shall allow the qualified biologist reasonable time to safely collect and move them from the work site before work activities begin. Only with suitable permission from USFWS may qualified biologists capture, handle, and relocate California red-legged frogs.

- Once the work site has been cleared, a biologist designated by the City shall supervise the installation of wildlife exclusion fencing along the boundaries of the work areas and the staging areas, to prevent California red-legged frogs from entering work areas. The construction contractor shall install suitable fencing with a minimum height of 3 feet above ground surface with an additional 4-6 inches of fence material buried such that species cannot move under the fence. The fencing would be equipped with exit funnels directed away from the roadway.

- The qualified biologist will provide full-time monitoring during dewatering activities, and will routinely inspect exclusion fencing for frogs and snakes, and will also confirm proper maintenance of the fence. The biologist will be the contact person if a frog or snake is observed in the work area. If a California red-legged frog is observed in the work area, construction activities will cease until the individual has been relocated or leaves the area. USFWS will be notified before work is re-initiated. The qualified biologist will conduct weekly monitoring of exclusion fencing installed at the staging areas.

### Tidewater Goby

The following measures will be implemented as part of the proposed project to address potential construction related impacts to tidewater goby:

- All construction activities within and adjacent to Sycamore Creek shall be completed outside the primary breeding season (April-June) and during the low flow period (June 15 to October 31) to minimize harassment and mortality of this species if present. A pre-construction survey shall be completed to verify presence/absence of this species within the construction work area. If water is not present, and/or preconstruction surveys verify the absence of this species, work within Sycamore Creek may begin as early as June 1).
- Only qualified biologists authorized by USFWS under a biological opinion shall be involved in surveying, capture, handling and relocation of tidewater gobies.
- A pre-construction survey shall be completed to verify presence/absence of this species within the construction work area.
- If tidewater goby is present in the construction work area at the time construction is initiated, the work area shall be isolated from adjacent surface waters and gobies relocated to suitable habitat near the estuary.
- If pumping is required to dewater the construction work area and tidewater goby is present, pump intakes shall be fitted with a wire mesh screen with a 5 mm mesh or smaller.
- Flow to downstream reaches shall be maintained during dewatering or flow diversion.
- Appropriate sediment collection devices (silt fence, straw wattles, or equivalent) shall be installed downstream of the construction work area to prevent siltation of downstream reaches.
- The streambed (and substrate) affected by construction shall be returned to pre-construction conditions.

### Southern Steelhead

The following measures, subject to approval during acquisition of regulatory permits would be fully implemented to avoid take of steelhead:

- To avoid conflicts with fish, instream construction activities shall be planned for periods between June 15 and October 31, or periods when the work area is dry. If surface water is present when instream construction must be conducted, stream diversion shall be implemented such that diverted surface flow is returned to Sycamore Creek immediately downstream of the work area. Prior to any work within surface water, a qualified fisheries biologist will complete a survey for steelhead.
- If steelhead are found in the work area, all work affecting Sycamore Creek shall cease and NOAA Fisheries and CDFW shall be notified.
- If authorized by the NOAA Fisheries, any steelhead found in the work area shall be recaptured and relocated by a NOAA Fisheries-approved biologist to suitable habitat downstream.
- The diversion berm and pipeline shall be in place prior to beginning diversion of surface flow.
- Non-erosive materials (e.g., sandbags, sheet pile, rubber/plastic tubes) shall be used to construct the diversion berm.

- An energy dissipater and sediment trap (fiber rolls, or equivalent) shall be used at the diversion pipeline outlet.
- Excavated material shall be stored away from the low-flow channel to prevent incidental discharge.
- Any streambed access points shall be stabilized using a pad of coarse aggregate underlain by filter cloth to reduce erosion and tracking of sediment.
- Disturbed areas of the stream channel shall be re-compacted to original conditions prior to restoring flow to the original channel.
- Silty or turbid water produced from dewatering or other activities shall not be discharged into Sycamore Creek until filtered or allowed to settle prior to discharge.
- Use of heavy equipment in flowing water shall be prohibited.
- The bed and banks of Sycamore Creek shall be returned to their original configuration immediately following the completion of instream construction work.
- Riparian habitat removed by the project shall be restored and/or enhanced to improve fish habitat.

## Additional Conservation Measures

*Nesting Birds*

The following measure should be implemented to avoid potential impacts to nesting birds during vegetation clearing and bridge construction activities:

- *Remove Vegetation outside Nesting/Breeding Season.* Conduct tree and shrub removal and grading activities during the non-breeding season (generally September 1 to February 28). If grading and tree removal activities are scheduled to occur during the breeding and nesting season (March 1 through August 31), pre-construction surveys (see below) would be performed prior to the start of project's construction phase.
- *Conduct Pre-construction Surveys and Avoid Disturbance to Active Nests*. If project activities are scheduled to start during the primary bird nesting season, approximately March 1 to August 31, a qualified biologist should conduct pre-disturbance surveys to identify nesting birds, which are generally protected under the federal Migratory Bird Treaty Act (see Appendix A). Surveys should occur no more than 15 days prior to the initiation of disturbance. For least Bell's vireo surveys, guidelines provided in the Least Bell's Vireo Survey Guidelines (USFWS 2001) would be followed.
    - If the pre-construction surveys do not identify any nesting raptors or other nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting raptors or other nesting bird species within areas that may be affected by site construction, nest avoidance measures shall be implemented as described below.
- *Implement Avoidance Measures for Active Bird Nest Sites.* If nesting passerine birds (i.e., songbirds) are detected near (e.g., within 50 feet of) disturbance areas, or raptors are detected within 150 feet, a no-work buffer area should be established around active nests. The final size

and dimensions of the buffer area should be determined by an experienced biologist in coordination with CDFW. Buffers should remain in place until nesting is completed.

*Bat Species*

The following measure should be implemented to avoid potential impacts to nesting birds during vegetation clearing and site construction activities:

- *Conduct Pre-Construction Survey for Bat Species.* A bat survey shall be conducted by a qualified biologist to establish the presence or absence of roosting bats prior to May 1st in order to put exclusionary measures into place before the active season of these species (no exclusionary efforts should be conducted during May 1st to August 31st of the construction year) and to prevent bats from utilizing the bridge structure. If no roosting bats are found, no further mitigation would be necessary.

- *Implement Bat Species Exclusion Measures Prior to Active Season.* If big free-tailed bats, Townsend's big-eared bat or other bat species are detected within the roost at the time of implementation of preconstruction surveys, excluding any bats from roosts will be accomplished by a qualified biologist prior to the removal of roost trees and the bridge. The timing and other methods of exclusionary activities will be developed by the qualified biologist in order to reduce the stress on the bats to while taking into account project schedule. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, can be used to allow for bats to exit but not re-enter any occupied roosts. Expanding foam and plywood sheets can be used to prevent bats from entering unoccupied roosts.

*Riparian Habitat and Protected Trees*

The following measure should be implemented to minimize impacts to riparian habitat and protected trees:

- Prior to removal of any trees, an ISA Certified Arborist will conduct a tree survey in areas that may be impacted by construction activities. This survey will document tree resources that may be adversely impacted by implementation of the proposed project. The survey will follow standard professional practices.

- Current riparian vegetation and oaks will be retained as shown on the project plans. A Tree Protection Zone (TPZ) will be established around any tree or group of trees to be retained. The TPZ will be delineated by an ISA Certified Arborist. The TPZ will be defined by the radius of the dripline of the tree(s) plus one foot. The TPZ of any protected trees will be demarcated using fencing that will remain in place for the duration of construction activities.

- Construction-related activities will be limited within the TPZ to those activities that can be done by hand. No heavy equipment or machinery will be operated within the TPZ. Grading will be prohibited within the TPZ. No construction materials, equipment, or heavy machinery will be stored within the TPZ.

- Wetlands, riverine and associated riparian habitats located in the vicinity of the project site will be protected by installing protective fencing. Protective fencing will be installed along the edge

of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). The location of fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs will be erected along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs will state: "This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment." The signs will be clearly readable at a distance of 20 ft, and will be maintained for the duration of construction activities in the area.

- Where riparian vegetation occurs along the edge of the construction easement, the project proponent will minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire plant. Trimming will be conducted per the direction of a biologist and/or Certified Arborist.

- Impacts to riparian habitat within the Action Area shall be mitigated by replacement at a 2:1 ratio, or at a similar ratio as appropriate in consultation with CDFW, USFWS, and NOAA Fisheries. Where avoidance of riparian vegetation is not shown on the project plans, a revegetation plan and a five-year monitoring plan to restore native riparian habitat in the project vicinity to a self-sustaining, ecologically functioning plant community, in coordination with the CDFW shall be implemented. This action would be sensitive to the habitat needs of the California red-legged frog and southern steelhead, and thus would require input from the USFWS and NOAA Fisheries.

- The revegetation plan may include plant salvage, seeds, and seedlings obtained from local native sources and irrigation, as necessary. The following performance standards are suggested for the revegetation plan:

    - vegetation should have no less than 80 percent survival rate;
    - there should be no excessive rills, gullies, or other erosion features;
    - there should be no noxious or invasive species; and
    - a properly functioning temporary irrigation system should be installed providing hook-up to a water truck

- The annual five-year monitoring program shall be implemented and shall employ standard ecological methods to estimate plant cover and to document survival rates and growth characteristics and should be reviewed by appropriate agencies. At the end of this period, the success of the restoration effort will be assessed against the restoration goals (e.g., at least 80 percent survival of plantings, 75 percent vegetative cover by desirable species, absence of substantial cover of invasive species, and a viable, self-sustaining plant community). Based upon final restoration performance, a determination will be made in coordination with the CDFW as to whether or not the project achieved the final mitigation goals.

**References**: Request For Qualifications To Provide Engineering Design Services For Montecito Street Bridge Replacement and Pedestrian Improvements, City of Santa Barbara, 2014-Aug-14

# CITY OF SANTA BARBARA

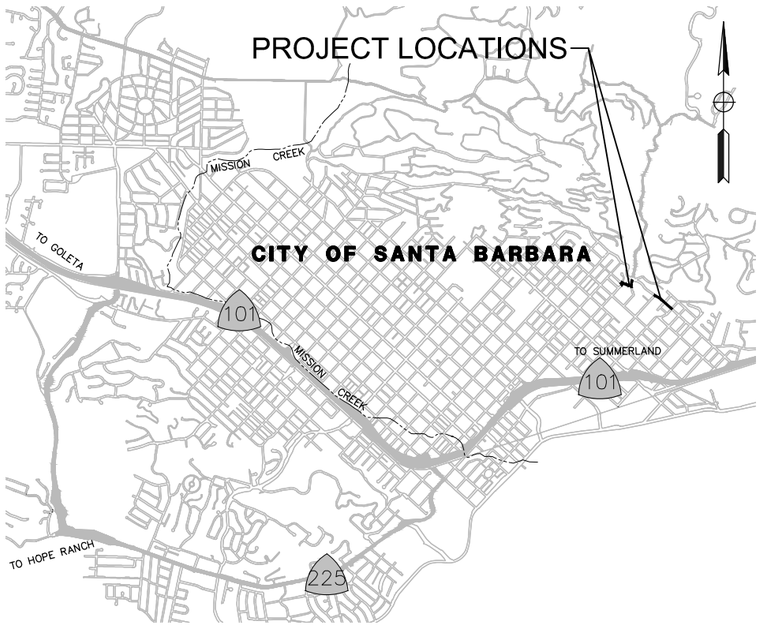
## MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS PROJECT

BRIDGE NO. XXX-XXXX

ATP PROJECT NO. ATPL-5007(067)

TO BE SUPPLEMENTED
BY THE CALTRANS STANDARD PLANS AND STANDARD SPECIFICATIONS DATED 2010
AND THE MOST CURRENT CITY OF SANTA BARBARA STANDARD PLANS

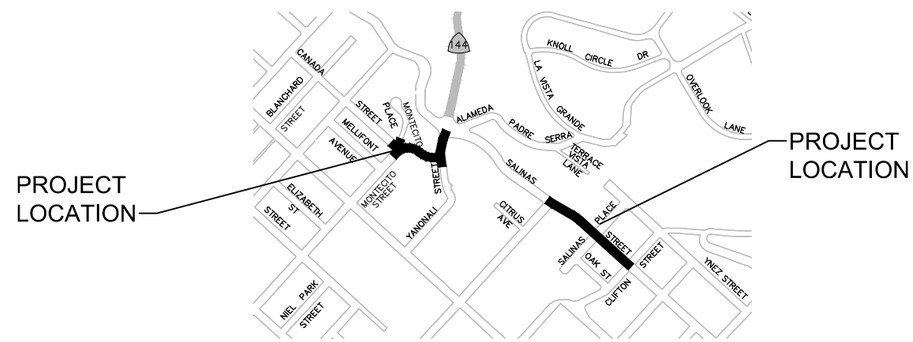

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670


VICINITY MAP
NTS

SHEET INDEX

| SHEET # | SHEET DESIGNATOR | TITLE | DESCIPTION |
|---|---|---|---|
| 1 | T-1 | TITLE SHEET | TITLE SHEET |
| 2 | X-1 | TYPICAL CROSS SECTIONS | TYPICAL CROSS SECTIONS |
| 3 | L-1 | LAYOUT | MONTECITO STREET LAYOUT |
| 4 | L-2 | LAYOUT | SALINAS STREET LAYOUT |
| 5 | L-3 | LAYOUT | SALINAS STREET LAYOUT |
| 6 | P-1 | PROFILE | MONTECITO BRIDGE PROFILE |
| 7 | S-1 | GENERAL PLAN | BRIDGE GENERAL PLAN |




SITE MAP
NTS

SYMBOL LEGEND

- EXISTING WATER
- EXISTING GAS
- EXISTING SEWER
- PROPOSED SEWER
- PROPOSED STORM DRAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING WATER METER
- EXISTING TELEPHONE MANHOLE
- EXISTING ELECTRIC PULL BOX
- EXISTING POWER POLE
- EXISTING STREET SIGN
- EXISTING STREET LIGHT

ABBREVIATION LEGEND

| | | | | | |
|---|---|---|---|---|---|
| AB | AGGREGATE BASE | G | GAS | T | TELEPHONE |
| AC | ASPHALT CONCRETE | HMA | HOT MIX ASPHALT | TBC | TOP BACK OF CURB |
| AD | ALGEBRAIC GRADE DIFFERENCE | LF | LINEAR FEET | TCE | TEMPORARY CONSTRUCTION EASEMENT |
| APN | ASSESSOR'S PARCEL NUMBER | LRG | LOCKING RETAINER GLAND | | |
| BC | BEGIN CURVE | MH | MANHOLE | TMH | TELEPHONE MANHOLE |
| BCR | BEGIN CURB RETURN | MJ | MECHANICAL JOINT | VC | VERTICAL CURVE |
| BM | BENCHMARK | N | NORTHING | W | WATER |
| BOW | BACK OF WALK | NO. | NUMBER | | |
| BVC | BEGIN VERTICAL CURVE | NTS | NOT TO SCALE | | |
| C,G&SW | CURB, GUTTER & SIDEWALK | OG | ORIGINAL GROUND | | |
| CL | CENTERLINE | OH | OVERHEAD | | |
| C&SW | CURB & SIDEWALK | OHU | OVERHEAD UTILITY | | |
| CTV | CABLE TELEVISION | PCC | PORTLAND CEMENT CONCRETE | | |
| DI | DUCTILE IRON | PE | PLAIN END | | |
| E | EASTING | PG | PROFILE GRADE | | |
| EC | END CURVE | POB | POINT OF BEGINNING | | |
| ECR | END CURB RETURN | PRC | POINT OF REVERSE CURVE | | |
| ESA | ENVIRONMENTALLY SENSITIVE AREA | PVC | POLYVINYL CHLORIDE | | |
| ESL | ENVIRONMENTALLY SENSITIVE LIMIT | R/W | RIGHT OF WAY | | |
| EVC | END VERTICAL CURVE | S | SEWER | | |
| FH | FIRE HYDRANT | SCH | SCHEDULE | | |
| FL | FLOW LINE | SD | STORM DRAIN | | |
| FOC | FACE OF CURB | SF | SQUARE FEET | | |
| FOW | FRONT OF WALK | SW | SIDEWALK | | |

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DATE

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
APPROVED: CITY ENGINEER DATE
ORIGINAL SIGNED DATE

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| | | |

REVISIONS

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS
MONTECITO STREET AT YANONALI STREET
TITLE SHEET

30% SUBMITTAL - NOT FOR CONSTRUCTION

2015-XXXX PBW. NO.
XXX BID NO. | T-1 SHT. DES.
C-X-XXX DWG. NO.
SHT. 1 OF 7

U:\14019 – Montecito Ave. Bridge – City of SB\400 Project Design Files\420 Roadway & Civil\Submittal 30%\Plans\MYB-R-T.dwg, 9/17/2015 9:41 AM, Amber Castle-Keane

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

## NOTES

1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR EXACT LOCATIONS OF PAVEMENT TRANSITIONS, DRIVEWAYS, CURB AND GUTTERS, CURB, GUTTER TRANSITION, FENCES AND RETAINING WALLS, SEE LAYOUTS.
3. SUBGRADE TO BE THE SAME AS TYPICAL SURFACE SLOPE UNLESS OTHERWISE NOTED.
4. SEE LAYOUT SHEETS FOR INTERSECTIONS.

## STRUCTURAL SECTIONS

1 — 0.5' HMA (TYPE A)
1.0' CLASS 2 AGGREGATE BASE

2 — 0.33' PCC
0.33' CLASS 2 AGGREGATE BASE
SEE CITY STANDARD DETAIL H-06.1

3 CURB AND GUTTER PER CITY STANDARD DETAIL H-02.0

4 PARKWAY

5 CURB WITH VARIABLE GUTTER PER CITY STANDARD DETAIL H-02.1

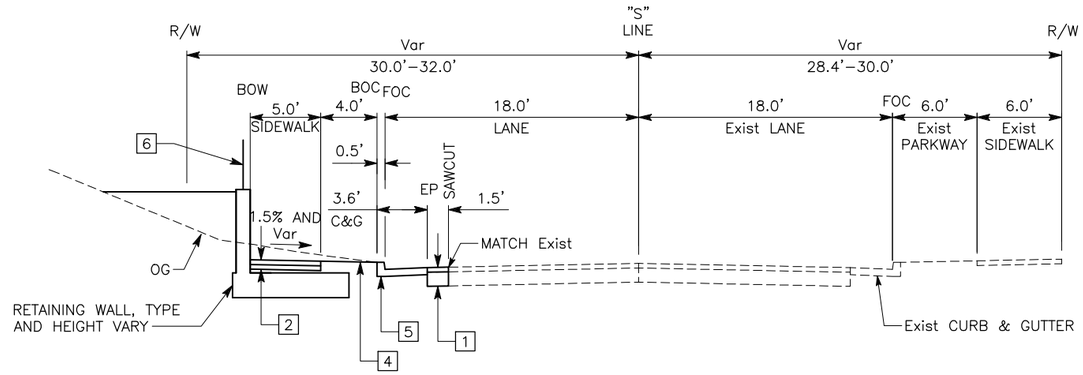
6 FALL PROTECTION FENCE (WHERE REQIRED)

## SALINAS STREET DESIGN DESIGNATION

| | |
|---|---|
| ROAD CLASSIFICATION | MINOR ARTERIAL |
| ADT | 7500 |
| DESIGN SPEED | 30 MPH |
| R-VALUE | – |
| TI | – |
| TRUCKS | – |

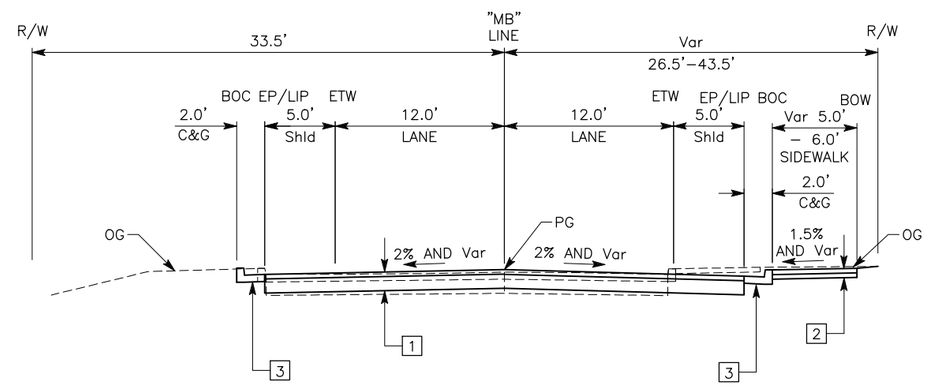
## MONTECITO STREET DESIGN DESIGNATION

| | |
|---|---|
| ROAD CLASSIFICATION | MAJOR COLLECTOR |
| ADT | 5800 |
| DESIGN SPEED | 25 MPH |
| R-VALUE | – |
| TI | – |
| TRUCKS | – |



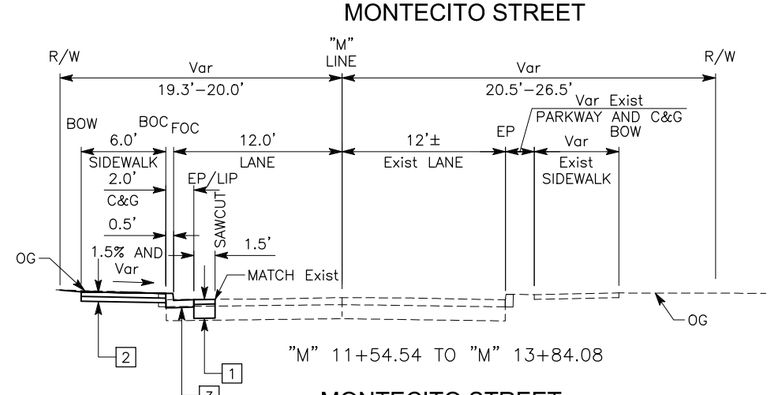

"S" 60+89.99 TO "S" 67+92.31

SALINAS STREET




"MB" 30+00.00 TO "MB" BB 30+45.68
"MB" EB 30+91.68 TO "MB" 31+61.63

MONTECITO STREET




"M" 11+54.54 TO "M" 13+84.08

MONTECITO STREET

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
APPROVED: CITY ENGINEER DATE
ORIGINAL SIGNED DATE

| | | |
|---|---|---|
| DESIGN | MKM | |
| DRAWN | ACK | |
| CHECKED | MKM | |

| NO. | DATE | APPROVED |
|---|---|---|
| | | |

REVISIONS

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS
MONTECITO STREET AT YANONALI STREET
TYPICAL CROSS SECTIONS
30% SUBMITTAL - NOT FOR CONSTRUCTION

2015-XXXX
PBW. NO.
XXX BID NO. | X-1 SHT. DES.
C-X-XXX
DWG. NO.
SHT. 2 OF 7

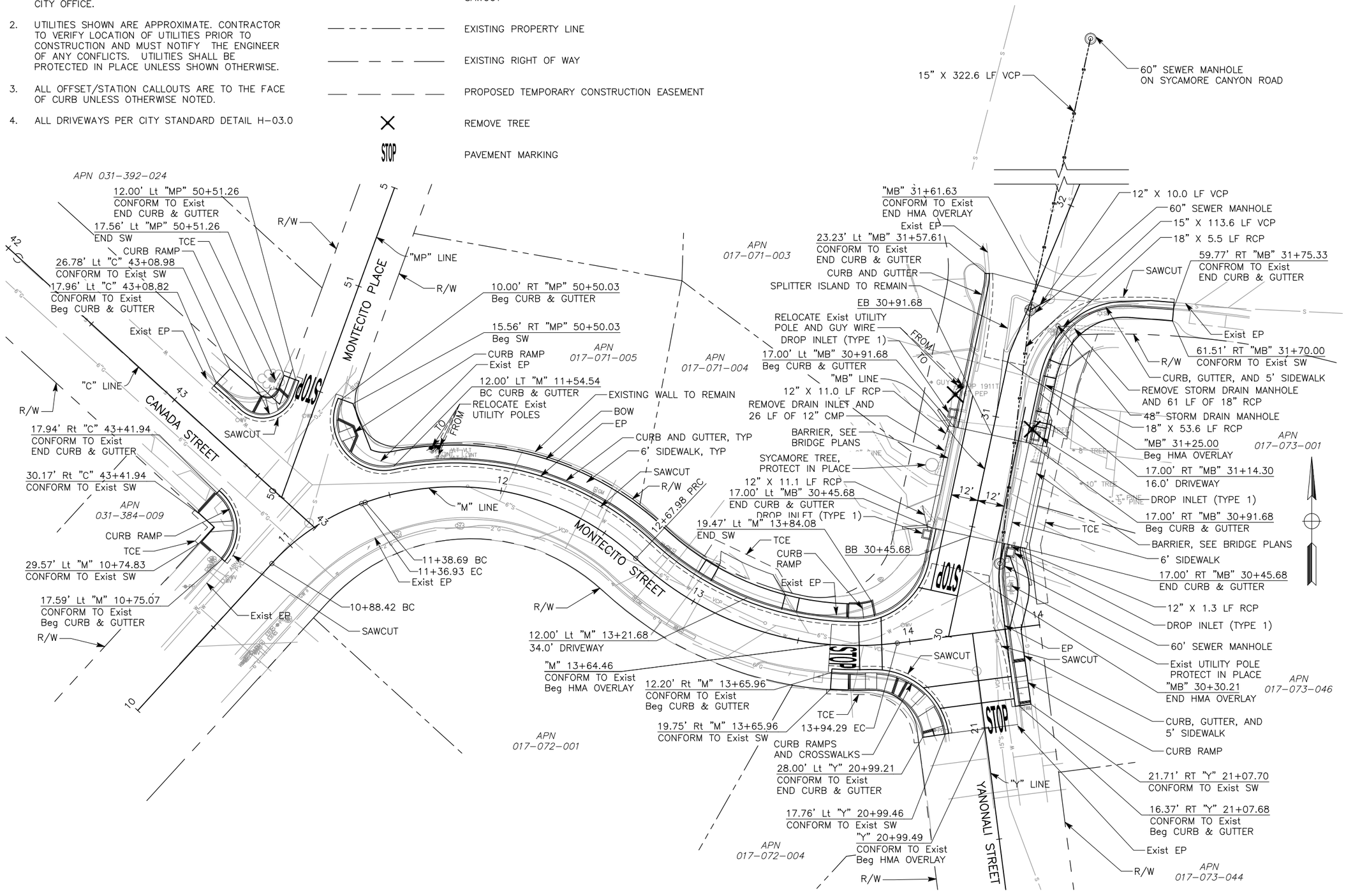
U:\14019 – Montecito Ave. Bridge – City of SB\400 Project Design Files\420 Roadway & Civil\Submittal 30%\Plans\MYB-R-X.dwg, 9/17/2015 9:42 AM, Amber Castle-Keane

## NOTES

1. FOR ACCURATE RIGHT-OF-WAY DATA, CONTACT CITY OFFICE.
2. UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION OF UTILITIES PRIOR TO CONSTRUCTION AND MUST NOTIFY THE ENGINEER OF ANY CONFLICTS. UTILITIES SHALL BE PROTECTED IN PLACE UNLESS SHOWN OTHERWISE.
3. ALL OFFSET/STATION CALLOUTS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. ALL DRIVEWAYS PER CITY STANDARD DETAIL H-03.0

## LEGEND

- SAWCUT
- EXISTING PROPERTY LINE
- EXISTING RIGHT OF WAY
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT
- REMOVE TREE
- PAVEMENT MARKING




## PLAN

SCALE: 1"=20'

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: CITY ENGINEER ORIGINAL SIGNED DATE DATE

DESIGN MKM
DRAWN ACK
CHECKED MKM

| NO. | DATE | APPROVED | REVISIONS |
|---|---|---|---|

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS

MONTECITO STREET AT YANONALI STREET
LAYOUT

30% SUBMITTAL - NOT FOR CONSTRUCTION

2015-XXXX
PBW. NO.

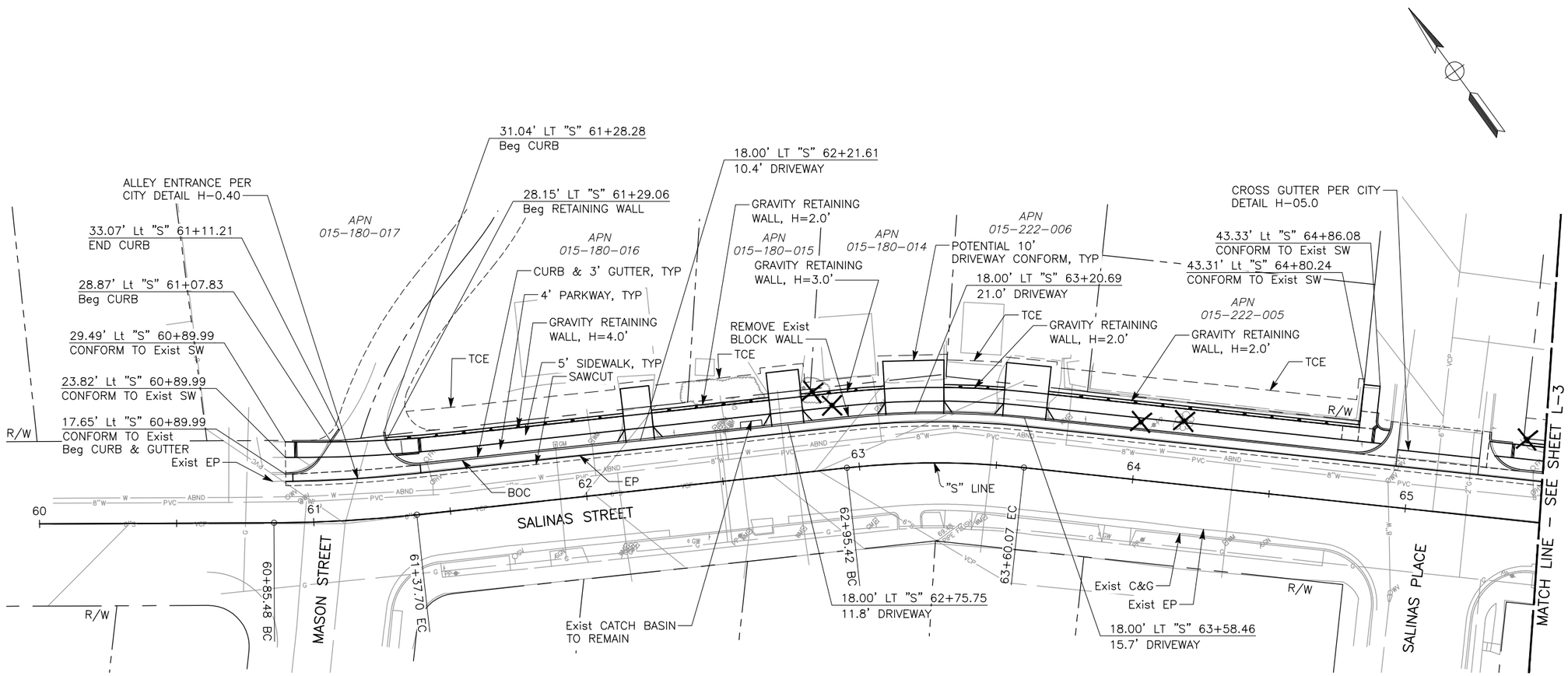
XXX BID NO. | L-1 SHT. DES.

C-X-XXX
DWG. NO.

SHT. 3 OF 7

U:\14019 – Montecito Ave. Bridge – City of SB\400 Project Design Files\420 Roadway & Civil\Submittal 30%\Plans\MYB-R-L1.dwg, 9/17/2015 9:42 AM, Amber Castle-Keane

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670




## PLAN

SCALE: 1"=20'

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: DATE
CITY ENGINEER
ORIGINAL SIGNED DATE

DESIGN MKM
DRAWN ACK
CHECKED MKM

| NO. | DATE | APPROVED | REVISIONS |
|---|---|---|---|

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS

# MONTECITO STREET AT YANONALI STREET
# LAYOUT

30% SUBMITTAL - NOT FOR CONSTRUCTION

2015-XXXX
PBW. NO.

XXX BID NO. | L-2 SHT. DES.

C-X-XXX
DWG. NO.

SHT. 4 OF 7

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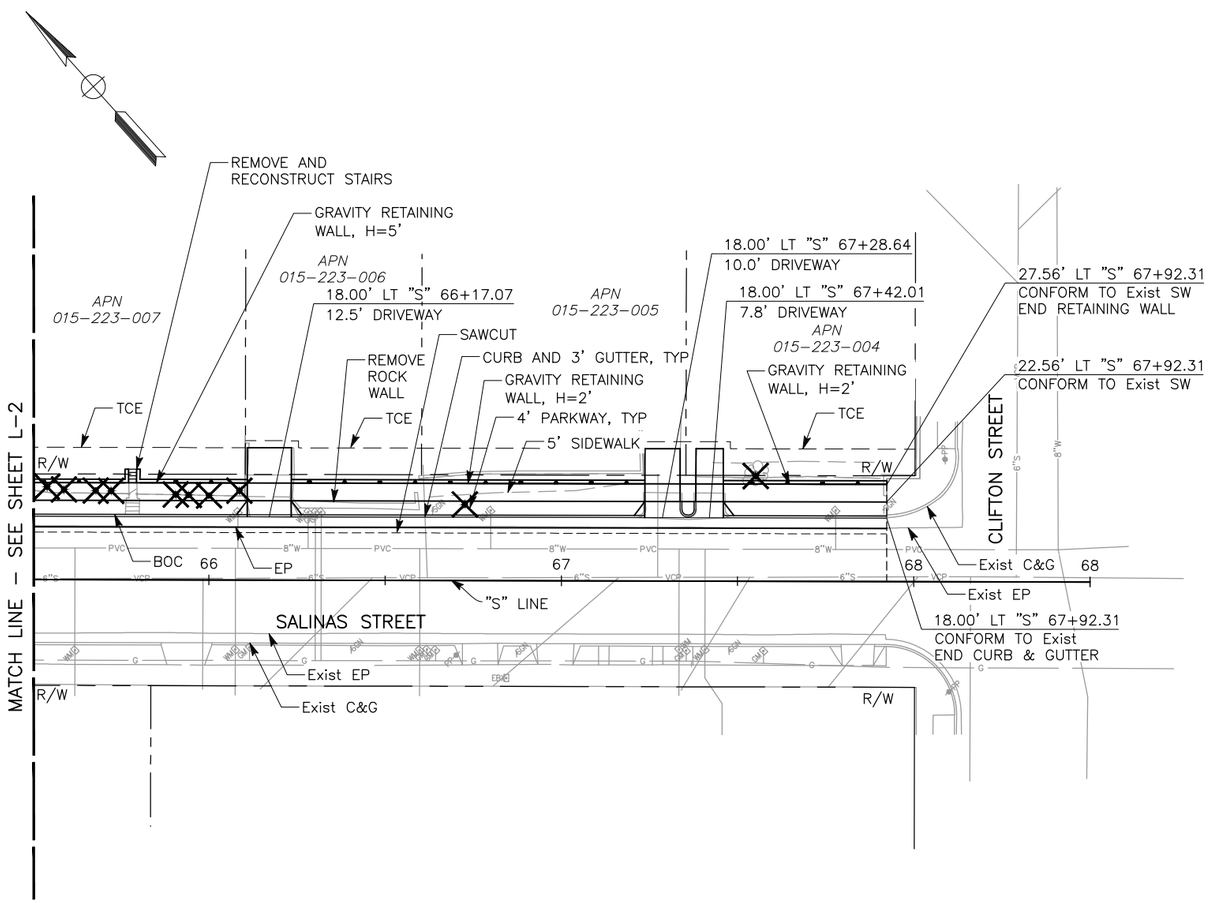



## PLAN

SCALE: 1"=20'

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER
ORIGINAL SIGNED DATE _____

DESIGN MKM
DRAWN ACK
CHECKED MKM

| NO. | DATE | APPROVED | REVISIONS |
|---|---|---|---|

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS

MONTECITO STREET AT YANONALI STREET

# LAYOUT

30% SUBMITTAL - NOT FOR CONSTRUCTION

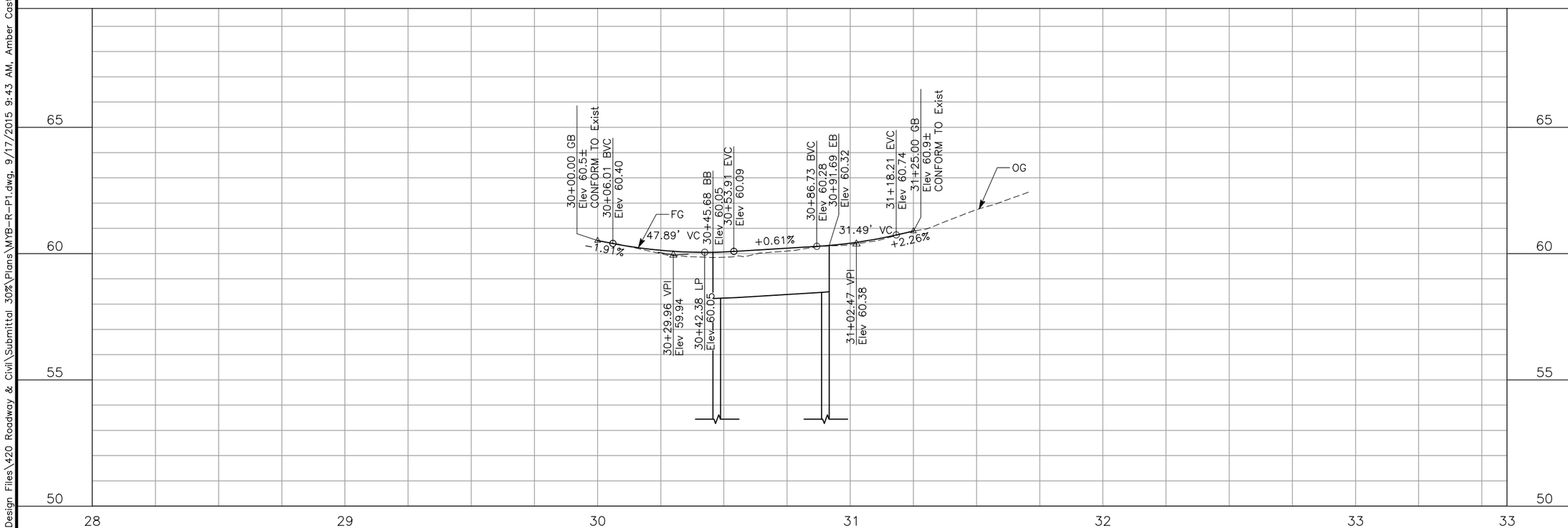
2015-XXXX
PBW. NO.

XXX BID NO. | L-3 SHT. DES.

C-X-XXX
DWG. NO.

SHT. 5 OF 7

U:\14019 - Montecito Ave. Bridge - City of SB\400 Project Design Files\420 Roadway & Civil\Submittal 30%\Plans\MYB-R-L2-SAL.dwg, 9/17/2015 9:43 AM, Amber Castle-Keane




## MONTECITO STREET

"MB" LINE

SCALE: Horiz 1"=20'
Vert 1"=2'

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED:

CITY ENGINEER DATE

ORIGINAL SIGNED DATE

DESIGN MKM
DRAWN ACK
CHECKED MKM

| NO. | DATE | APPROVED | REVISIONS |
|---|---|---|---|

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS

# MONTECITO STREET AT YANONALI STREET
# PROFILE

30% SUBMITTAL - NOT FOR CONSTRUCTION

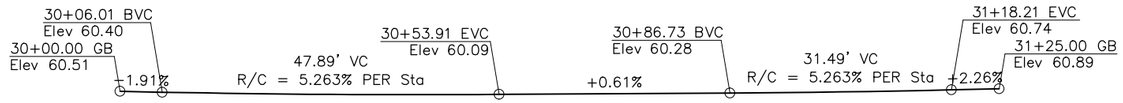
2015-XXXX
PBW. NO.

XXX BID NO. | P-1 SHT. DES.

C-X-XXX
DWG. NO.

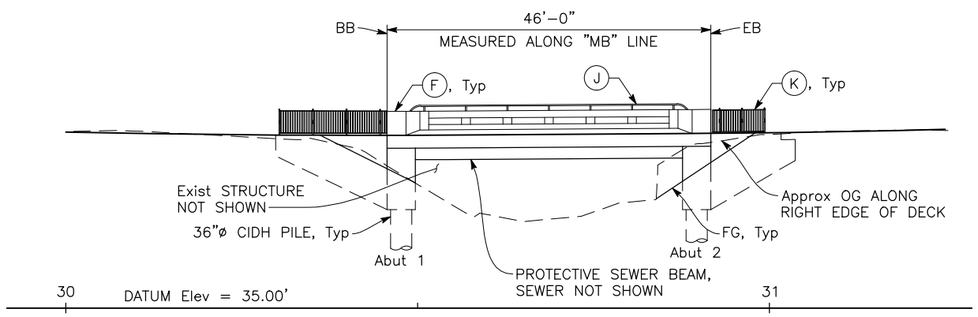
SHT. 6 OF 7

U:\14019 – Montecito Ave. Bridge – City of SB\400 Project Design Files\420 Roadway & Civil\Submittal 30%\Plans\MYB-R-P1.dwg, 9/17/2015 9:43 AM, Amber Castle-Keane



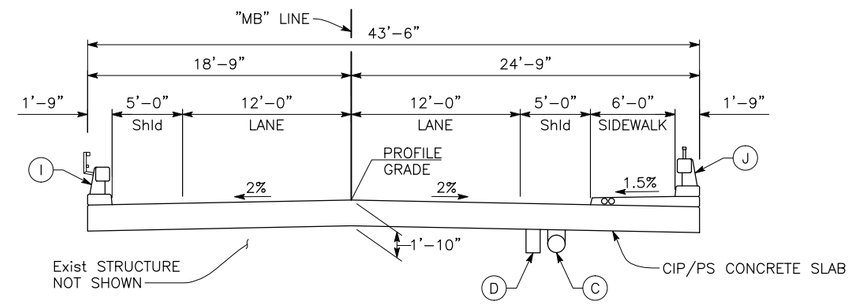

## PROFILE GRADE

1" = 10'



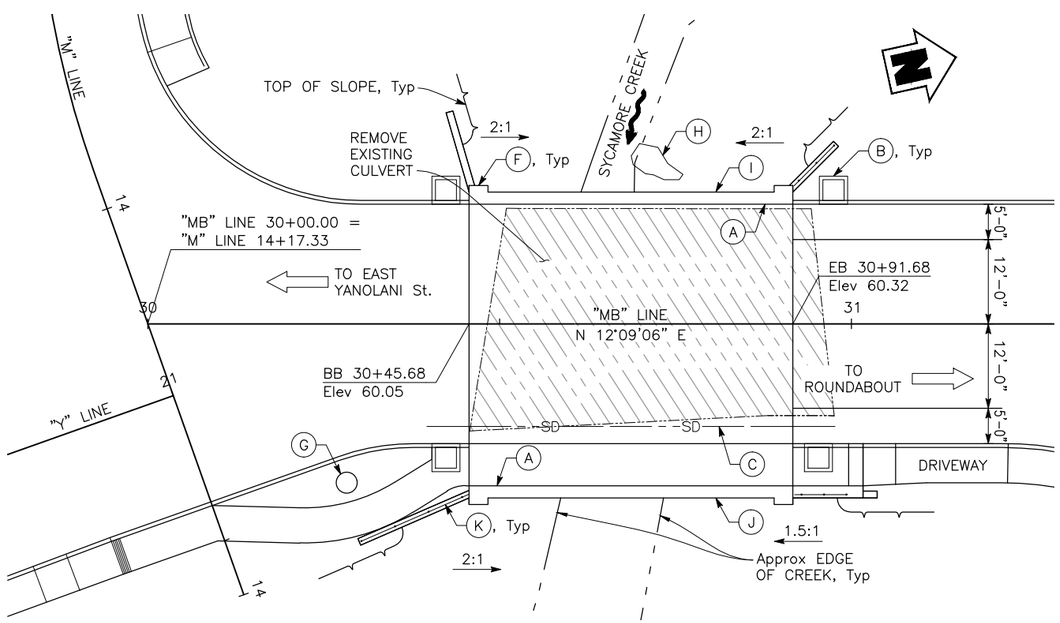

## ELEVATION

1" = 10'




## TYPICAL SECTION

1" = 5'"




## PLAN

1" = 10'

## LEGEND:

- Indicates Direction of Water Flow
- Indicates Direction of Traffic
- Indicates Existing Culvert removal
- Indicates Existing Bridge
- Indicates New Structure

## NOTES:

- (A) Paint Bridge Number (###-####), year completed and "Bridge Name"
- (B) Drainage Inlet, see "Road Plans"
- (C) 1'-3" Sewer Line to be relocated onto new bridge
- (D) Removable Protective Sewer Beam
- (F) Aesthetics End Block
- (G) SCE Pole (Southern California Edison)
- (H) Existing Sycamore Tree at Deck Level
- (I) Concrete Barrier Type 80 with Tubular Bicycle Railing
- (J) Concrete Barrier Type 80SW with Tubular Hand Railing
- (K) Metal Railing (Ornamental)

ORIGINAL UNITS IN INCHES
SCALE ACCORDINGLY
0 1 2 3

DATE

drake haglan AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: CITY ENGINEER ORIGINAL SIGNED DATE DATE

DESIGN JG
DRAWN AH
CHECKED --

| NO. | DATE | APPROVED | REVISIONS |
|---|---|---|---|

30% PLANS - NOT FOR CONSTRUCTION

MONTECITO STREET BRIDGE REPLACEMENT AND PEDESTRIAN IMPROVEMENTS

# MONTECITO STREET AT YANONALI STREET
# GENERAL PLAN

2015-XXXX
PBW. NO.

XXX BID NO. | S-1 SHT. DES.

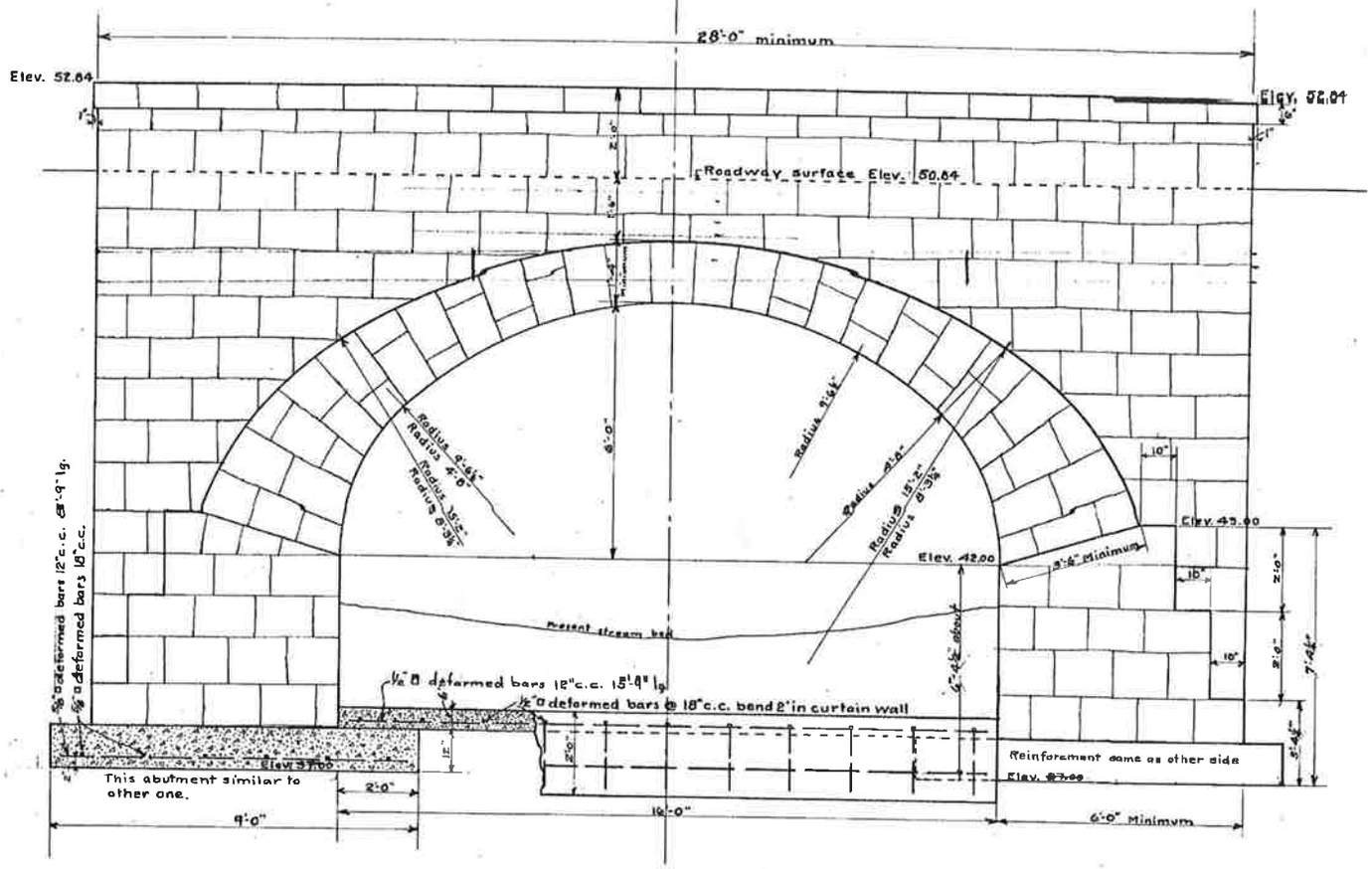
S-X-XXX
DWG. NO.

SHT. 7 OF 7

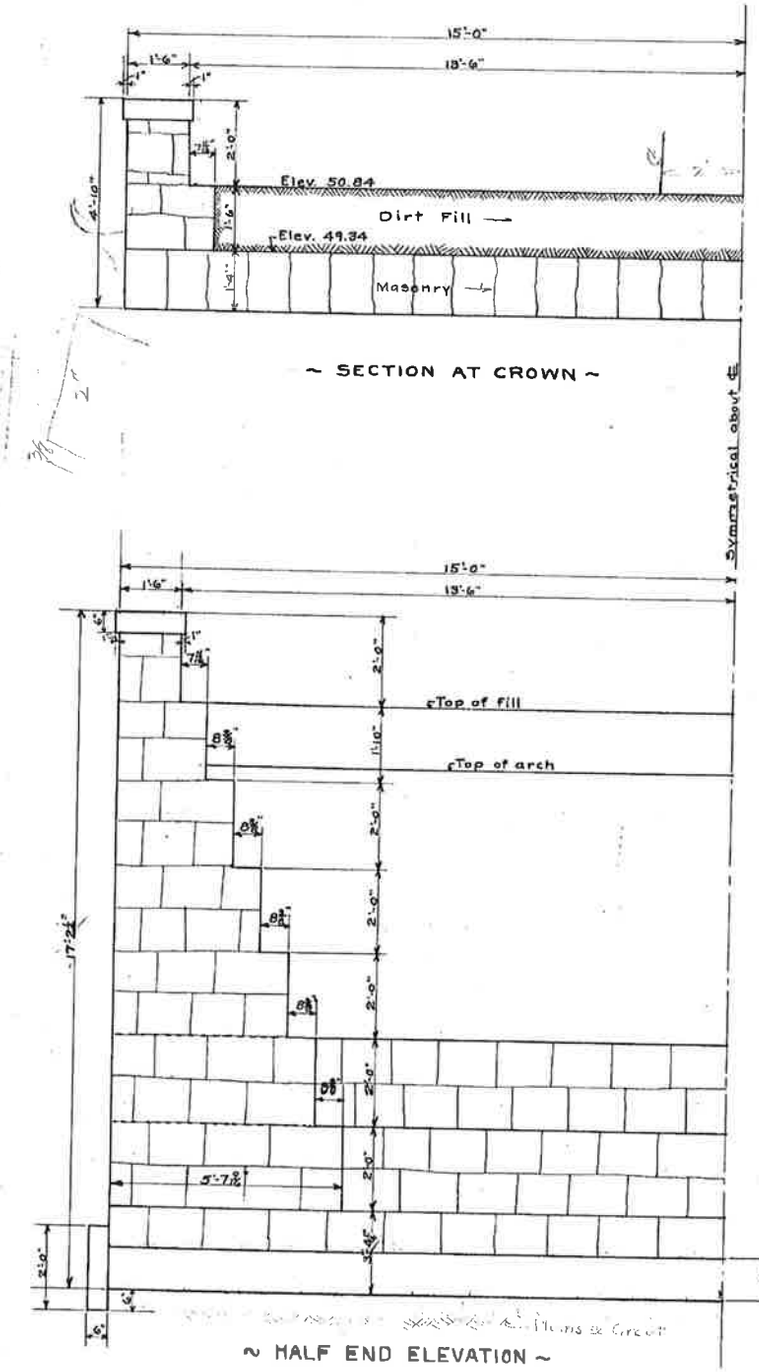
U:\14019 – Montecito Ave. Bridge – City of SB\400 Project Design Files\430 Bridges & Structures\Submittal 35%\Plans\MYB-S-GP.dwg, 9/17/2015 11:28 AM, Alan Hyde

# APPENDIX B

# 1923 Drawing of the Culvert

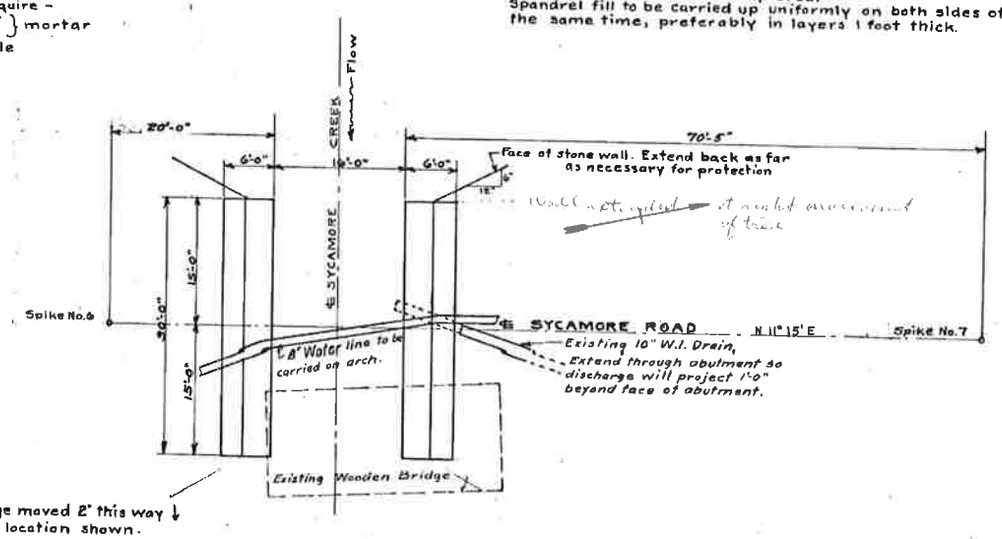



~ ELEVATION ~




APPROXIMATE QUANTITIES
150.8 Cu.Yds. Rubble Masonry
Assuming mortar occupies ¼ of volume, this will require –
128 Bbls. cement } mortar
35 Cu.Yds. sand }
112 Cu.Yds. rubble

Note:- Abutments, arch and spandrel walls to be made of rubble masonry set with mortar composed of 1 part portland cement and 2 parts sand.
Arch centering shall remain in place for a period of not less than 10 days after arch is completed.
Spandrel fill to be carried up uniformly on both sides of arch at the same time, preferably in layers 1 foot thick.




Note:- Bridge moved 2' this way ↓ from location shown.

~ SETTING PLAN FOR ABUTMENTS ~

Approved 1923 City Engineer

Filed 1923 City Engineer

# BRIDGE
FOR
# SYCAMORE CANYON ROAD CROSSING SYCAMORE CREEK

CITY OF SANTA BARBARA CALIF.

| | |
|---|---|
| Geo. D. Morrison | City Engineer |
| Width of street | 60 feet |
| Field work by Gleason | July 25, 1923 |
| Field book | |
| Designed by Walker | July 26, 1923 |

Scale: ½" = 1'-0"

Built Sept. 1923 L.R.W.



C-3-79

# APPENDIX C

## California Department of Parks and Recreation Forms for the Montecito-Yanonali Street Culvert

| State of California — The Resources Agency<br>DEPARTMENT OF PARKS AND RECREATION<br>**PRIMARY RECORD** | Primary #<br>HRI #<br>Trinomial<br>NRHP Status Code 5S3 |
|---|---|
| Other Listings<br>Review Code Reviewer Date | |

 **Resource Name:** Montecito-Yanonali Street Culvert

**P1. Other Identifier:**

***P2. Location: a. County:** Santa Barbara ☐ **Not for Publication** ☒ **Unrestricted**

**b. USGS 7.5′ Quad:** Santa Barbara, CA **Date** 1995 **T** 4N, **R** 27W; Unsectioned

**c. Address: n/a**

**d. UTM:** NAD , 83 Zone 11N ; 253970 **mE /** 3812417 **mN**

**e. Other Locational Data:** The Montecito-Yanonali Street Culvert is in the Eastside Neighborhood of Santa Barbara between Soledad Street and Alameda Padre Serra in the 1300 block of East Montecito Street.

***P3a. Description:** The Montecito-Yanonali Street Culvert is a closed spandrel masonry arch structure. The locally quarried stone is rectangular cut and laid in regular courses. The structure is trapezoid in shape measuring 43.3 feet long on the upstream (north) spandrel wall and 51.6 feet long on the downstream (south) spandrel wall. The structure is 30 feet wide accommodating two 12-foot-wide traffic lanes and two 3-foot-wide shoulders with concrete curbs and steel rails. The arch span is 16 feet and the rise from the creek bed to the keystone is 9 feet. A stone layer rests between the reinforced concrete abutments and board-formed concrete arch. The south wall carries a large main sewer line on triangular metal brackets. A single wing wall is present at the northwest corner of the culvert. The wing wall measures 16.5 feet long and 10.5 feet high. A small pipe passes through the spandrel wall to the other side. The original stone parapet railings on each side of the bridge were removed prior to 1963, creating the open shoulder between the subsequent steel rails and concrete curbs.

***P3b. Resource Attributes:** HP19 Bridge/Culvert

***P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other:

***P5a. Photograph**

**P5b. Description of Photo:** Upstream (north) elevation illustrating the culvert arch, spandrel wall, steel rails, and concrete curbing on the deck.

***P6. Date Constructed/Age and Sources:** 1923 Santa Barbara Public Works
☐ Prehistoric ☒ Historic ☐ Both

***P7. Owner and Address:**
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93102

***P8. Recorded By:** Aubrie Morlet, M.A.
Applied EarthWorks, Inc.
515 East Ocean Avenue, Suite G
Lompoc, CA 93436

***P9. Date Recorded:** September 15, 2015

***P10. Survey Type:** ☒ Intensive
☐ Reconnaissance ☐ Other
**Describe:**

***P11. Report Citation:** Morlet, Aubrie
2015 *Historic Structures/Sites Report for the Montecito-Yanonali Street Bridge Replacement and Pedestrian Improvements Project, Santa Barbara, California.* Applied EarthWorks, Inc., Lompoc, California. Prepared for the City of Santa Barbara Department of Public Works.

***Attachments:** ☐ NONE ☒ Building, Structure, and Object Record ☐ Photograph Record ☐ Location Map ☐ Archaeological Record ☐ Milling Station Record ☐ Other (list): ☐ Site/Sketch Map ☐ District Record ☐ Rock Art Record ☒ Continuation Sheet ☐ Linear Feature Record ☐ Artifact Record

**P5c. Description of Photo:** Detail view of the interior abutment, stone course, and board-formed concrete arch.

**P5d. Description of Photo:** Main sewer line attached with triangular brackets to the south spandrel wall.

**B1. Historic Name:** Sycamore Canyon Bridge

**B2. Common Name:** Montecito-Yanonali Street Culvert

**B3. Original Use:** Culvert **B4. Present Use:** Same

***B5. Architectural Style:** Closed spandrel masonry arch

***B6. Construction History (construction date, alterations, and dates of alterations):** According to the structure drawing on file at the City of Santa Barbara Public Works Department, the masonry structure was designed in July 1923 and completed in September 1923. The masonry parapets were removed and replaced with an iron pipe railing at an unknown time. Based on engineering drawings for a nearby structure, the parapets were replaced before 1963. The structure does not appear to have any other alterations.

***B7. Moved?:** ☒ No ☐ Yes ☐ Unknown Date:

***B8. Related Features:** None

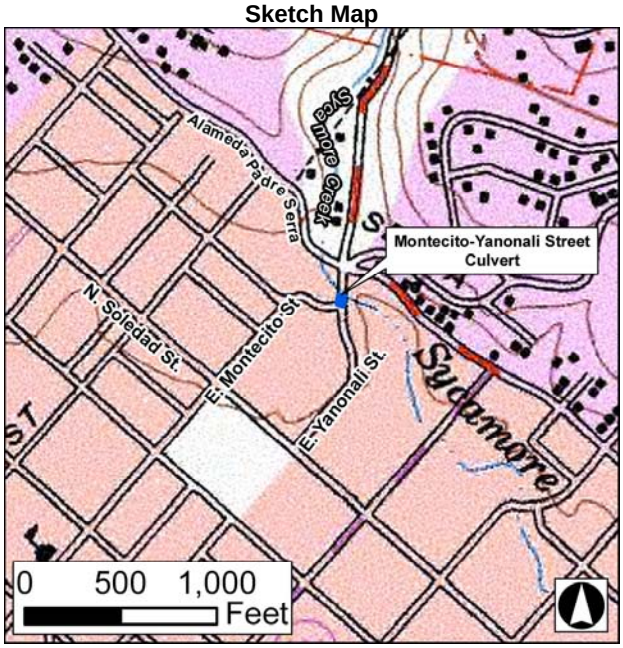
**B9. a. Architect:** Civil engineer Leland Ross Walker **b. Builder:** Unknown

***B10. Significance:** Theme: Public Works Area: City of Santa Barbara
Period of Significance: 1923–1925 Property Type: Masonry Culvert Applicable Criteria: Local only

Constructed in 1923, the Montecito-Yanonali Street Culvert is a rectangular cut sandstone, closed spandrel arch structure with stones laid in regular courses. Construction details, including the mason selected to construct the culvert, were not located in the City of Santa Barbara Council Minutes as is normally the case for public works projects. It is possible that the culvert was constructed by the Street Department and as such, a construction contract was not issued. It is also possible that the culvert was constructed as part of another public works project and therefore is not specifically identified in the City Council Minutes. The Montecito-Yanonali Street Culvert appears to be one of only two masonry structures built by the City of Santa Barbara. The second structure, replaced in 1963, was upstream of the subject culvert on Alameda Padre Serra. All of the known masonry bridges currently located within the city limits were constructed by Santa Barbara County and brought into the city limits through subsequent municipal expansions. Prior to the construction of the masonry culvert, a wood bridge carried traffic across Sycamore Creek.

Based on the culvert drawing on file at the City of Santa Barbara Public Works Department, the culvert was designed by civil engineer Leland Ross Walker during his first year of employment with the City of Santa Barbara. Prior to his arrival in California, Walker worked as a draftsman for structural steel companies in St. Louis, Missouri; engineer/designer at the City of Tucson, Arizona; and as a designer for the Trussed Concrete Steel Company in Youngstown, Ohio. From 1918 to 1921, he was employed at the Imperial Irrigation District in Calexico, California. At the City of Santa Barbara, Walker served as a civil engineer from 1923 to 1926 and as the Assistant City Engineer from 1927 until his death in 1933. No significant biographical information was located for Walker.

**Sketch Map**




**This space reserved for official comments.**

***B10. Significance (cont.):** The criteria for evaluating significance and eligibility of Historic Structures/Sites are found in the *Master Environmental Assessment Guidelines for Archaeological Resources and Historic Structures and Sites* (MEA; City of Santa Barbara 2002). The MEA includes locally designated criteria in addition to the eligibility criteria for the NRHP and CRHR.

**Criterion 1.** The structure is not significant under Criterion A as it is not designated on any of the identified lists.

**Criterion 2.** The Montecito-Yanonali Street Culvert is representative of a masonry architectural style important to the city of Santa Barbara and embodies outstanding attention to architectural design, detail, materials, and craftsmanship. The culvert is a rare example of masonry arch architecture in an urban setting and the only extant masonry culvert constructed by the City of Santa Barbara. **The structure is significant under Criterion 2.**

**Criterion 3a.** The Montecito-Yanonali Street Culvert adds value as a significant part of the heritage of the City as it is the only extant masonry arch constructed by the City of Santa Barbara. **The structure is significant under Criterion 3a.**

**Criterion 3b.** The structure is not significant under Criterion 3b as it is not the site of a significant historic event.

**Criterion 3c.** The structure is not significant under Criterion 3c as it is not associated with a person or persons who significantly contributed to the culture and development of the city, state, or nation.

**Criterion 3d.** The Montecito-Yanonali Street Culvert is a rare example of a masonry culvert in an urban setting and exemplifies an architectural style important to the city of Santa Barbara. **The structure is significant under Criterion 3d.**

**Criterion 3e.** The Montecito-Yanonali Street Culvert is the best remaining architectural type in its neighborhood. **The structure is significant under Criterion 3e.**

**Criterion 3f.** The structure is not significant under Criterion 3f as it is not the creation, design, or work of a person or persons whose effort has significantly influenced the heritage of the city, the state, or the nation.

**Criterion 3g.** The Montecito-Yanonali Street Culvert is the embodiment of elements demonstrating outstanding attention to architectural design, detail, materials, and craftsmanship. **The structure is significant under Criterion 3g.**

**Criterion 3h.** The structure is not significant under Criterion 3h as it is not located near any other landmark and is not located in a potential historic district or landscape.

**Criterion 3i.** Due to vegetation and a lack of pedestrian access, the structure is not clearly visible to the public. The structure is not significant under Criterion 3i as it is not located in a unique location nor is it an established and familiar visual feature of a neighborhood.

**Criterion 3j.** The structure is not significant under Criterion 3j as it does not possess the potential of yielding significant information of archaeological interest.

**Criterion 3k.** The structure is not significant under Criterion 3k as the culvert does not strongly contribute to the well-being of the people of the city, the state, or the nation.

**Criterion 4.** The construction of the Montecito-Yanonali Street Culvert appears to be associated with municipal maintenance. As the current culvert is not the first structure at the location and no significant information was discovered regarding the culvert or surrounding area, it does not appear that the construction of the culvert significantly influenced transportation or economic development in the city. As such, the culvert does not appear to be associated with events that have made a significant contribution to the broad patterns of our history and does not appear to be significant under NRHP Criterion A or CRHR Criterion 1. Little information is available regarding the culvert, and the names of individuals who might have been involved with the development and construction of the culvert are not known. As the culvert does not appear to be associated with a significant person(s), the culvert does not appear to be significant under NRHP Criterion B or CRHR Criterion 2. Although masonry culverts are very common in rural California, masonry culverts in urban areas such as the city of Santa Barbara are rare. The subject culvert is simple in design and does not exhibit innovative engineering characteristics. While the masonry arch culvert does display the distinctive characteristics of a type, period, and method of construction, the removal of the

masonry parapets diminishes the culvert's ability to convey its architectural detailing. Further, the engineer does not appear to be significant and the culvert does not represent the work of a master. As such the culvert does not appear to be significant under NRHP Criterion C or CRHR Criterion 3. The culvert is common in construction, materials, and design, and the scaled drawing of the culvert is digitally archived at the City of Santa Barbara Public Works Department. As information about this structure and other similar structures is amply available from both published and unpublished sources, the culvert does not appear to be significant under NRHP Criterion D or CRHR Criterion 4.

Based on the research conducted for this investigation, the Montecito-Yanonali Street Culvert does not appear to be eligible for listing on the NRHP or CRHR.

**Criterion 5.** The structure is not significant under Criterion 5 as it is not associated with a traditional way of life important to an ethnic, national, racial, or social group, or to the community at large; nor does it illustrates the broad patterns of cultural, social, political, economic, or industrial history.

**Criterion 6.** The structure is not significant under Criterion 6 as it does not convey an important sense of time and place, nor contribute to the overall visual character of a neighborhood or district.

**Criterion 7.** The structure is not significant under Criterion 7 as is does not possess the ability to yield information important to the community, nor is it relevant to historical, historic archaeological, ethnographic, folkloric, or geographical research.

**Criterion 8.** The structure is not significant under Criterion 8 because it has not been determined by the City to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the City's determination is based on substantial evidence in light of the whole record [Title 14, California Code or Regulations (CCR), Chapter 3, Section 15064.5(a)(3)].

The Montecito-Yanonali Street Culvert is significant under MEA Criteria 2, 3a, 3d, 3e, and 3g for its exemplification of masonry architecture. The period of significance is 1923–1925. In 1925, the City of Santa Barbara passed a new bond measure that initiated a city-wide bridge replacement program that facilitated the construction of many reinforced concrete girder bridges. Masonry architecture would not be utilized again for city-funded waterway crossings.

The Montecito-Yanonali Street Culvert remains in its constructed location in the Eastside Neighborhood. The structure is surrounded by creek vegetation and residential neighborhoods dating from circa 1920 to 1960. The structure retains integrity of location and setting. Based on field measurements and observations, the structure matches the original designed drawing. The sandstone blocks are in good conditions and the spandrels and arch ring illustrate negligible mortar separation. Although the sandstone rails have been removed and replaced with incompatible iron pipe railing, the culvert still retains more than 75 percent of its original sandstone and concrete materials. The structure retains integrity of design, materials, and workmanship. The structure continues to convey its historical character through its architectural features and urban residential setting. The property retains integrity of feeling and association.

As the Montecito-Yanonali Street Culvert meets MEA Criteria 2, 3a, 3d, 3e, and 3g and retains integrity, the structure appears to be eligible for listing as a Structure of Merit for the City of Santa Barbara and is a historical resource for the purpose of CEQA.

**B11. Additional Resource Attributes (list attributes and codes):** None.

***B12. References:** City of Santa Barbara Council Minutes, City of Santa Barbara Public Works Department Engineering Archives.

**B13. Remarks:**

***B14. Evaluator:** Aubrie Morlet, M.A.
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