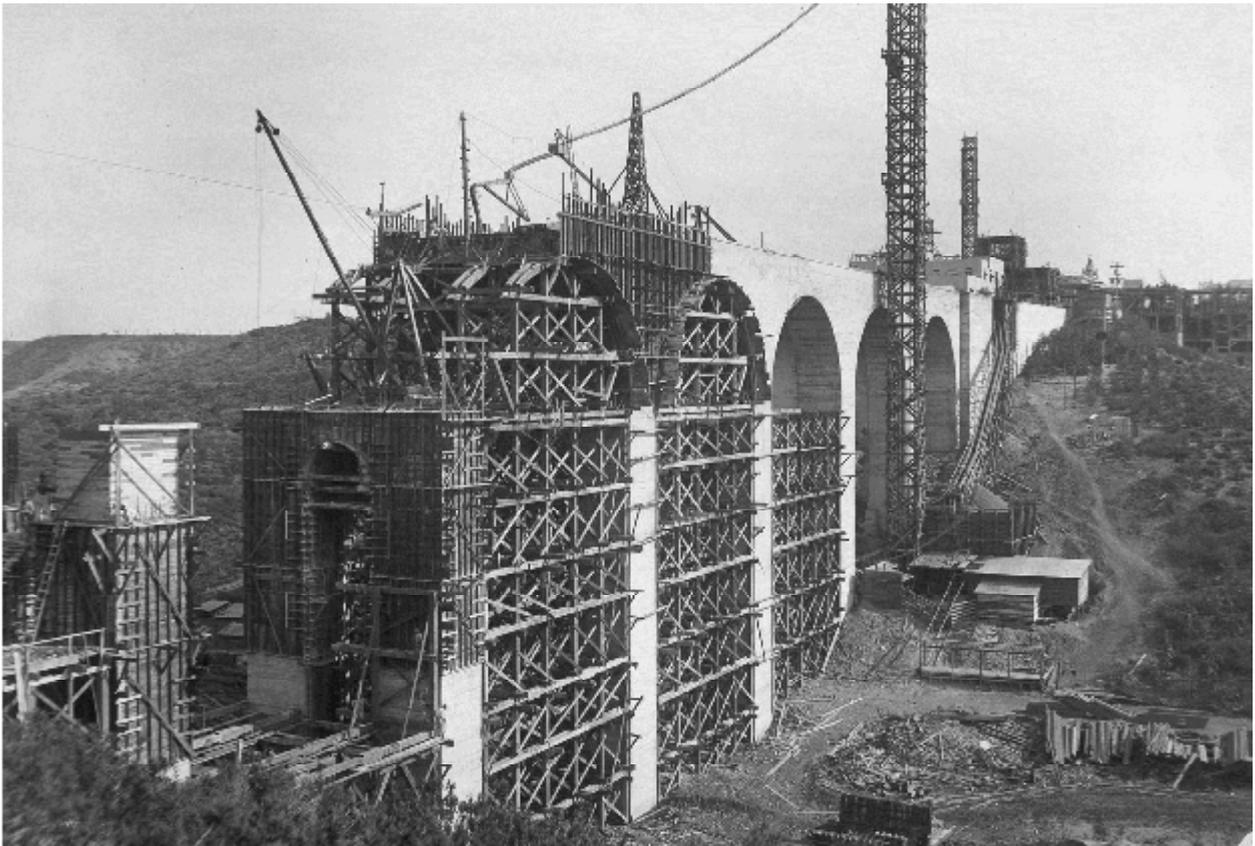


THE CABRILLO BRIDGE, CALTRANS AND BALBOA PARK

Richard W. Amero

At the outset, the Panama-California Exposition Corporation established a maximum cost of \$150,000.00 for a bridge that would span Cabrillo Canyon and extend Laurel Street east through Balboa Park. Goodhue's plan was for a three arch bridge with a wide 200 feet diameter single span, two supporting columns, and two smaller arches. The plan was inspired by the wide single span Alcantara Bridge in Toledo, Spain that crossed the River Tagus and led to a medieval gate. Costing \$157,000.00 at the lowest bid. Goodhue's proposal exceeded the Exposition's cut-off by \$7,000.00. Frank P. Allen, Jr., Panama-California Exposition Director of Works, who, unlike Goodhue, was present at the Exposition site, came up with an alternate plan for the bridge, while Goodhue was preparing his plans or shortly thereafter. Since, as Director of Works, he was not obliged to seek cost estimates from outside contractors, Allen was able to put a price tag on his bridge of \$150,000.00.



Allen's scheme was for a bridge that looked like a Roman-style aqueduct, a view expressed by many observers, though this was not Allen's. He said the bridge "emulated" old Spanish bridges. Though he did not name sources, the most likely source for Cabrillo Bridge was the bridge in Alcantara, Spain (not to be confused with the Alcantara Bridge in Toledo) that dates to Roman times. ("El Kantara" is an Arabic word meaning "bridge.") Six arches follow one another in increasing and decreasing stages on the bridge at Alcantara, seven on the Cabrillo Bridge. Buttressing, modeling, triumphal arch above a center pier, granite blocks without cement, and horizontal extension on the bridge at Alcantara differ from the plain concrete walls, elongated lines, and hidden steel piers on the Cabrillo Bridge. A better comparison would be to the aqueduct at Queretaro, Mexico whose plain pink sand stone, cement piers, semi-circular arches, and vertical lines echo features on the Cabrillo Bridge. Allen had seen a photograph of the aqueduct at Queretaro in Sylvester Baxter's book, *Spanish-Colonial Architecture in Mexico*. (Photographs of the Alcantara Bridges in Toledo and Alcantara and the Queretaro aqueduct follow so that the reader may judge which structure most resembles the Cabrillo Bridge.)

Allen relied on the expertise of Thomas B. Hunter, an engineer from San Francisco, to supply specifications and designs for his bridge.(1) At this late stage it is idle to speculate which of the two, Allen or Hunter, contributed the most to the design of Cabrillo Bridge.

Allen's placing himself as a rival to Goodhue was the beginning of friction between the two parties responsible for the overall construction of the Exposition. A third party, John Charles Olmsted, of Brookline, Mass., had previously withdrawn as landscape architect for the Exposition, because Allen had persuaded Exposition officials to reject Olmsted's layout for the Exposition at a southern end of Balboa Park in favor of his layout on a western central mesa. At that time Goodhue supported Allen's plan because it offered him an opportunity to create the straight axis wide span bridge that was later rejected.(2)

In his letters, Goodhue had many unpleasant things to say about Allen, particularly as to how he was always eager to take personal credit for architectural achievements at the Exposition, thus placing craftsmen under him and Carleton Monroe Winslow, who was Goodhue's representative on the grounds, in the shadows. Undoubtedly, Goodhue thought his design for a bridge was more historically accurate and better looking than Allen's and Hunter's. But Goodhue was not blind to the aesthetic success of the bridge, and, except for grousing to architectural writers, he abstained from publicly denigrating the bridge. He pointed out, however, that Allen had underestimated the construction cost by \$75,254.98. If Goodhue's design had been chosen, he would have come in only slightly over the Exposition's limit. Goodhue had

chosen Mr. Mueser, designer of the Galveston Sea Wall and Portland Bridge , to work with him on specifications for his bridge. But, it was too late.(3)

The most detailed description of the structure of the Cabrillo Bridge was published in *Engineering News*, May 13, 1915. While an engineer today might find Allen's words of self-praise to be offensive, the statistics he supplied were reliable. They can be taken as authoritative despite many subsequent guesses by reporters. Quoting from *Engineering News* , Cabrillo Bridge is a concrete and steel bridge consisting of seven “hollow, box-like pedestals with the upper part cantilevering out to form arched openings.... The bridge, including its approaches, is 916 feet long. Its main 450 feet long portion comprises seven semicircular 56 feet arches, with a maximum height of 120 feet to the roadway.” To relieve stress and to carry a uniform load of 100 pounds per square inch, the roadway cantilevers, were set in reinforced concrete columns. As the stress on sidewalk arcades was not as severe, sidewalk cantilevers did not need such reinforcement. Concrete curtain walls, covering and connecting the columns, extended to the level of the roadway.(4) Though not mentioned in the article, the roadway under the bridge was an extension of 11th Street to the north end of the park that passed through the third of its seven arches on the eastern side.(5)

Construction of the bridge began in December 1912. The exact date when the bridge was completed is hazy though historians have taken to placing the date on April 13, 1914, the date Franklin Delano Roosevelt, then Assistant Secretary of the Navy, was driven across Cabrillo Bridge—not “drove” as myth has it (6)— as part of a welcoming party including San Diego Mayor Charles F. O'Neill, G. Aubrey Davidson, Colonel Fred Jewell and Lieutenant Commander G. C. Sweet. Roosevelt was fascinated by the entire spectacle of the Exposition, that is, the bridge, the entrance portal, the plazas, and the permanent and temporary Exposition buildings.(7)

The bridge was one of four permanent structures—the Cabrillo Bridge, the California Quadrangle, the Botanical Building, and the Spreckels Organ Pavilion—that were to outlive the Exposition and provide service for “as long as eyes can see and rivers run.” Naturally, such poetic language was left out of agreements. Whether the designated bridge and buildings are vulnerable to earthquake stresses or have a life-span has yet to be determined. Despite patch-ups and re-dos, they are still standing. (More about the corrosive effects of time later.)

Functioning as a pedestrian artery, the bridge was filled with people on many occasions during the Exposition's two-year run. On the few occasions when Exposition officials threw open the gates free, the number of people crossing was greater than at others. Days of most public attendance, as given in the newspapers, were opening evening, December 31, 1914,(8) Madame Schumann-Heink Day, March 23 1915,(9) Catholic Day, October 25, 1915,(10) Henry Ford and Thomas A. Edison

Day, October 30, 1915,(11) and Pied Piper Day, May 28, 1916.(12) More visitors may have alighted at the San Diego Electric Railway Company's eastern peristyle, but this is doubtful. At any rate, the eastern entrance was not on a par aesthetically with the western, as design critic, Eugen Neuhaus pointed out.(13) The few automobiles that were allowed over Cabrillo Bridge during the Exposition were for invited guests or for public officials, who were not hesitant in asking for the privilege.

On April 1, 1917, shortly after the closure of the Exposition the following item appeared in the newspaper: "From as early as 9 o'clock there was a constant procession of automobiles crossing the Cabrillo Bridge The park commissioners announced that as long as automobiles did not abuse the privilege or endanger pedestrians they will be welcome."(14) The vague suggestion that problems caused by automobiles, traffic and parking might become staggering was ominous. Much of the history of Balboa Park and of the bridge since the close of the 1915-16 Panama-California Exposition has dealt with predicaments caused by expanding traffic.

The advent of World War I created a hiatus in the development of Balboa Park as a park and/or cultural center, words that were applied to the legacy of the Exposition. Public access to a U.S. Naval Training Center was not entirely forbidden; however, it was controlled by guards who were stationed at gatehouses on the western approach to Cabrillo Bridge . A similar situation existed during World War II, only this time El Prado and the Palisades had been converted to a U.S. Naval Hospital.(15)

Major developments in intervening years before the opening of the 1935-36 California-Pacific International Exposition, once more in Balboa Park, were: special events that brought about the temporary closure of the bridge to automobiles;(16) the discovery by suicides that the bridge was an excellent jumping off place;(17); the laying out of a bowling green on an old rose garden north and west of the approach to the bridge in 1931-32,(18) and the annual blooming of water lilies in a spacious lagoon beneath the bridge, a source of delight to flower lovers.(19)

Little of an extraordinary nature affected the bridge during the second Exposition. Gates at the west approach to the bridge admitted visitors who occasionally packed the bridge from side to side and end to end. Parades of all descriptions crossed for reviews and celebrations on the Plaza de Panama. Franklin Delano. Roosevelt, this time as President of the United States , crossed the bridge on October 1, 1935. He was greeted officially at the steps of the California Building and wined and dined in the House of Hospitality's Café del Rey Moro.(20)

In July 1924, Mr. and Mrs. George W. Marston donated to Balboa Park approximately 11.73 acres of irregularly shaped land at the northwest border of the park.(21) This section of Balboa Park is little known or visited by most San Diegans.

Following the death of Mary Marston, daughter of Mrs. and Mrs. George W. Marston on July 24, 1987, 4.81 acres comprising the George W. Marston residence and grounds were bequeathed to the City. The City Council, on September 15, 1987, confirmed this gift as parkland.(22) . The original donation, the subsequent gift, and land owned by the State of California immediately to the north straddle the Cabrillo Freeway. The entire section is planted with acacia and eucalyptus trees, some of which have been on site since the 1900s. Pedestrians can access the 1924 portion that extends from Cabrillo Canyon to Richmond Street , by crossing Cabrillo Freeway on a footbridge.

Unlike the Marstons' donation, the 1948 opening of the 7.1 mile U.S. 395 or State Highway 163 through Balboa Park, popularly known as the Cabrillo Freeway, was too decisive to be overlooked. In compliance with a City Charter provision that required a vote of the people to set aside Balboa Park land for other than park purposes, the people of San Diego had voted, by a margin of 8 to 1, March 25, 1941, to set aside a 200-foot right-of-way through Cabrillo Canyon to serve as a State highway. To allow access from State 163 north and from ramps, within Cabrillo Canyon changes were made to the contours and landscaping of the Canyon. The Freeway's four traffic lanes passed under Cabrillo Bridge, two between the third arch on the east and two between the third arch on the west. A landscaped median passed under the fourth or center arch. Wonderfully, the bridge's 56 feet openings were wide enough to permit an easy flow of traffic. Signs of congestion on Freeway and Bridge, not immediately evident, were to become aggravatingly so as City growth quickened. (23)

As a state highway now ran through Balboa Park , the State became involved not only with the maintenance and future expansion of the highway, but with the stability of cross-over-bridges at Richmond , Quince and Laurel Streets as they affected the flow of traffic. A compromise was worked out that spelled out the obligations of City and State. The City was to be responsible for the upkeep of Cabrillo Bridge on the above deck surfaces and for the upkeep of span sections to the east and west of the State's right-of-way. Pedestrian, bicyclists and automobile used the upper deck to get to the cultural heart of Balboa Park . The State was to be responsible for everything under the deck in the three central span sections. Looking at these provisions from the outside, the State appears to have the greater responsibility for the structural integrity of Cabrillo Bridge was now a State concern.(24)

Considering its importance as a climatic event and as an omen, a fire beneath the easternmost span of Cabrillo Bridge on the night of July 17, 1951 received little notice in the newspapers. For months, if not years, before the fire, children had found the interior of the bridge to be an inviting play place. Redwood lumber, used as concrete forms in 1913, and rubbish inside were tempting. The inevitable blaze consumed the oxygen in the confined interior and emitted a blinding smoke. Increasing the

difficulties, the bridge's easternmost slope, which followed the contours of the canyon, caused fire fighters to fall. Water mains and electrical conduits within the structure would have to be repaired; otherwise, damages were found to be minor. After three hours, police reopened the bridge to traffic. Following the fire the City decided to keep children out by padlocking a door 75 feet down the east slope. Because of the lack of publicity or because of apathy, nothing further was done to reduce the likelihood of future fires.(25)

A *San Diego Union* account, October 17, 1960 bore out the differentiation of State and City responsibilities when it reported the State Division of Highways had agreed to construct a bridge over Cabrillo Freeway that would cross Richmond Street and connect with Robinson Street. The article implied that bridges could not be built across Cabrillo Freeway without the concurrence of the Division of Highways.(26)

The creation of the Crosstown Freeway in 1960-61 and its interchange with U.S. 395, State Highway 163, broadened the State's responsibilities. In answer to these challenges, the State sought solutions for problems caused by multiplying traffic and by deterioration of bridges. Among the solutions was a plan to open to traffic Cabrillo Bridge arches on the east and west sides of the existing 4-lane freeway, thus making a grand total of 8 lanes and obliterating the lily pond below the two west arches.(27) Actions taken by the State Division of Highways to fulfill its responsibilities were:

- the undertaking of a massive freeway and landscaping project in 1961 in conjunction with the building of the Crosstown Freeway and State 163 four-level interchange.(28)
- the assertion in 1962 by Jacob Dekema, of the Division of Highways, that the landscaped median between the north and southbound lanes of Cabrillo Freeway would have to be removed to make way for widening the Freeway to 8 lanes.(29)
- the request to the City Council, in July 1968, by W. R. Dotson, of the Division of Highways, for an 8-lane widening project for Cabrillo Bridge . (Dotson had rejected a Council compromise plan for 6 lanes and warned that Cabrillo Bridge might have to be rebuilt with two arches spanning two four-lane roadways or torn down and replaced with a single span). (30)
- the repairing in 1969 of damages to Cabrillo Bridge caused by salt air and fog and by water running through the deck joints and down the metal piers and concrete columns into the ground beneath.(31)
- the retrofitting of Richmond ramp and Quince Street bridge in 1997 by Caltrans, successor to the Division of Highways. (32)

- the closing of the Richmond Street Bridge and on ramps from Quince and Richmond Streets in May 2002 to reduce traffic on Cabrillo Freeway. (33)
- the notification by Caltrans, April 2000, that they will not replace trees along their route through Balboa Park as the trees die off; existing trees do not meet a safety standard that requires 30 feet of clearance between the roads and trees unless a barrier is installed.(34)
- the announcement by Caltrans, September 20, 2001, that they will begin removing about 35 dead and dying eucalyptus trees along the shoulders of Route 163 in Balboa Park because of infestation by the Red Gum Lerp Psyllid.(35)
- the retrofitting of Cabrillo Bridge by Caltrans in 2004; the project to include cleaning and patching the bridge, repairing a wooden walkway inside the bridge, and repairing the sidewalk.(36)
- the decision by Caltrans, as reported in May 2004, to plant trees and add a 1.7 mile safety barrier made of timber and strapped steel to State 163 in Balboa Park.(37)

The City was not quiescent in so far as the bridge was concerned for it too was reaping the consequences of introducing automobile traffic into the center of Balboa Park. Like the State, study followed study and recommendation followed recommendation with the only result being the magnification of problems the recommendations were meant to ease. Some City actions and the controversies they evoked follow:

- the putting up of barricades on Cabrillo Bridge in 1950 to prevent suicide leaps.(38)
- the beginning of public discussion in 1950 to close Cabrillo Bridge to automobiles and to open a parking lot in Florida Canyon.(39)
- the putting up of Christmas lighting on the bridge for the first time in 1953.(40)
- the proposal in October 1954 of a plan for through roads north and south of Cabrillo Bridge to lighten jams on the bridge. (41)
- the endorsement by a Citizens' Park Study Committee of a loop road through the central portion of Balboa Park in May 1957 in order to close El Prado to traffic from the bridge to Park Boulevard.(42)
- the recommendation of the 1960 Harland Bartholomew Balboa Park Master Plan for building roads north and south of El Prado to eliminate traffic; the south road to curve under the bridge.(43)
- the rejection in April 1961 of a ballot proposition that would have given voters the final say in building roads in Balboa Park; an initiative placed

on the ballot by the Balboa Protective Association February 16, 1961.(44)

- the approval by the City Council on December 3, 1964, after 7 years of heated debate, of a road through Maple Canyon from State and Laurel Streets to Park Boulevard that would cross Cabrillo Freeway at Quince Street and connect with Robinson Street via Richmond Street. The purpose of the road was to speed traffic to Hillcrest from downtown with the closure of Laurel Street and Cabrillo Bridge to automobiles as an additional benefit. Lack of funding and of approval from the Division of Highways for an interchange with Cabrillo Freeway unless the Freeway was widened made the plan moot.(45)
- the City Council approval September 27, 1973 of the partial closure of El Prado to automobiles from the Plaza de Panama on the west to the Plaza de Balboa on the east.(46)
- the nomination in December 1975 of Cabrillo Bridge with its approaches and guardhouses for inclusion in the National Register of Historic Places.(47)
- the City Council closure of Cabrillo Bridge during the summer months of 1978.(48)
- the circulation of a proposal in 1975-78 for a parking structure on the slopes of Cabrillo Freeway to keep automobiles off the bridge.(49)
- the closure of Cabrillo Bridge for repairs by the City Council from September 28, 1981 to January 31, 1982, repairs to be a joint City/State undertaking. (50)
- the opposition of park institutions in October 1981 to the closing of Cabrillo Bridge to traffic.(51)
- the renewal of a 1960 Harland Bartholomew Balboa Park Master Plan proposal by landscape architect Ron Pekarek in 1983 to close Cabrillo Bridge, El Prado and the Palisades to automobiles.(52)
- the proposal by Pekarek in 1983 to build a multi-level garage for 600 vehicles in Archery Canyon beneath Cabrillo Bridge.(53)
- the proposal of the 1989 Balboa Park Master Plan, prepared by Estrada Land Planning, to permit one-way eastbound traffic across Cabrillo Bridge and El Prado; with the westbound lane being reserved for trams, shuttles, bicyclists and pedestrians; exceptions to be granted patrons of theaters and special events.(54)
- the reaffirmation of a Central Mesa Precise Plan for Balboa Park, prepared in 1992 by Estrada Landscaping, of 1989 Cabrillo Bridge and El Prado traffic recommendations.(55)

- the drive-by shooting of John Lentz, actor, on Cabrillo Bridge April 30, 1994 and the ensuing controversy over preventing crime in Balboa Park.(56)

Currently (2003-04) a Jones & Jones and Civitas plan to ease traffic circulation and parking problems in Balboa Park has revived many of the proposals of previous plans. Chief among these is a proposal to build a multi-level 700 to 750 vehicle parking structure "just north of Cabrillo Bridge," a modification of a proposal by Pekarek in 1983 that was rejected by Estrada in 1989. The recommended approach from the west, by way of a modified or replaced Quince Street overpass, would connect to a lane running parallel to State 163 on the east.(57) While not addressed by Jones & Jones, Caltrans must approve the construction of bridges over their right-of-way.(58)

A fire on June 17, 2004 has focused attention on the capabilities and durability of Cabrillo Bridge. The fire, a sequel to the fire of July 17, 1951, began under an outside western column, burned wooden scaffolding being used in a retrofitting project, ignited old form lumber inside the structure, and spread to the span above. The now surplus lumber had been put in place when concrete was poured in 1913. Despite the speed with which old form lumber burned in 1951 and despite repeated recommendations by State inspectors to remove the forms, the work had been perpetually postponed because of difficulty and expense. Temperatures inside the bridge reached 1,000 degrees, giving rise to fears that metal supports inside the concrete structure would melt. Unlike 1951 fire fighters fought the blaze from the outside. To get water, salt and, ultimately, expandable foam on the fire, they opened 12 manhole covers on top of the span. When this was shown to be ineffective, they jack-hammered 22 holes into the span. Unlike the fires of 1925, and 1978, that led to the destruction of perishable park buildings, but like the fire of 1951, the integrity of the bridge appears not to have been affected. As two small fires were discovered at the base of the piers earlier in the day, fire fighters believe the fire was set (possibly by homeless persons who were trying to keep warm or who were too drunk to know what they were doing).(59)

It would be well to pinpoint some of the structural problems of the bridge as disclosed by State inspections. Aside from the prospect of fires caused by arsonists or stupidity, the chief factors leading to the weakening of the bridge are water at the base of the piers, water underneath the pavement of the surface deck, and salt in the seaborne air of San Diego. The water problem at ground level was noted in 1914 before the bridge was built, which is hardly surprising for as early as 1871 artesian wells were dug in Cabrillo (then Pound) Canyon to supply a thirsty city with water.(60) Water retention in the upper cement deck was caused by lack of drainage holes. To handle the water encountered beneath three center piers in 1914 coffer-dams, excavated to 23 feet, were built and pumps installed. The salt air problem may

not have been foreseen in 1914, but it was certainly seen over and over as concrete expanded and cracked and as rust accumulated.

This brings this writer to an evaluation of Cabrillo Bridge as it exists today. As Goodhue grudgingly conceded, the aesthetic aspects of the bridge are not negligible. They have been praised by many writers and visitors and they are protected to a degree by the United States Department of the Interior because the bridge is now listed as part of the El Prado complex in the National Register of Historic Places. The Cabrillo Freeway as it runs through Balboa Park was declared a State of California scenic highway on May 16, 1992.(61) Assurances of protection are not as strong on the state as on the national level, still future plans to change the traffic patterns of Cabrillo Freeway will, at least, be noted and, perhaps, protested and prevented. Proposals to create additional lanes of traffic under the bridge and a parking structure in or near Archery Canyon, as endorsed by Jones & Jones, will be reviewed by the California Department of Transportation (Caltrans) as well as by proponents of natural beauty.

No Hart Crane has emerged to write an epic poem praising Cabrillo Bridge and, perhaps, none ever will. It is not the marvel of John A. Roebling's Brooklyn Bridge or even of the breathtaking Golden Gate Bridge, designed by Joseph Baerman Strauss, that spans San Francisco Bay. It will always look like an aqueduct. Its possible derivation from the Roman bridge at Alcantara, Spain or from the aqueduct at Queretaro, Mexico will intrigue scholars. As countless drawings by talented, if not world-famous artists, have demonstrated the bridge is a great asset. It supplies San Diego with a beautiful, clean and rhythmic picture, which taken by itself has the "unfinished" shortcomings noted by Eugen Neuhaus,(62) but, taken as part of an assemblage leading through the Oceanic Gate and into the California Quadrangle with the dome and tower of the California Building in the background it is without peer. Toledo Spain has nothing to fear from the enchantment of Cabrillo Bridge in Balboa Park, for Toledo will always have its authentic appeal. Balboa Park, on the other hand, possesses, as park lover George W. Marston wrote many years ago, "the simulacrum of an old Spanish city." He went on:

"It may be a phantom in many respects, but it looks like the real thing.... You can cross the great bridge; pass through the stately portal; and find yourself in another world—that is partly the charm of it. It's the grand emotion and it's founded, I think, on something real and vital."(63)

1. *The Architecture and the Gardens of the San Diego Exposition* by Carleton Monroe Winslow, introduction by Bertram Grosvenor Goodhue, Paul Elder & Co., San Francisco, 1916, pp. 22-26.

2. Letter. Bertram Grosvenor Goodhue to John Charles Olmsted. May 27, 1915.
3. Letter, Bertram Grosvenor Goodhue to Christian Brinton, August 17, 1915.
4. "The Cabrillo Bridge and the San Diego Exposition," *Engineering News*, May 13, 1915, pp 926-928.
5. Minutes of Park Commissioners, March 9, 1923.
6. *San Diego Union-Tribune*, June 18, 2004, A-1.
7. *San Diego Union*, April 13, 1914, 1:1, 2:5-6.
8. *San Diego Sun*, January 1, 1915, 1:1-2.
9. *San Diego Union*, March 23, 1915, 1:3-8, 3:3-4.
10. *San Diego Union*, October 25, 1915, 1:4, 3:1-4.
11. *San Diego Union*, October 30, 1915, 1:3-4, 2:2-3.
12. *Los Angeles Times*, May 28, 1916, 11:2-3.
13. Eugen Neuhaus, *The San Diego Garden Fair*, Paul Elder & Company, San Francisco, 1916, p. 26. Originally the east entrance was intended to be the main entrance, owing to its superior transportation facilities, connecting it directly with the city over a very interesting tree-lined route. But now this main entrance, curiously enough, has become the main exit, and the great Cabrillo Bridge over the canon by the same name, has become the well-established principal entrance of the Exposition. The reasons for this change are purely aesthetic, since nobody cares to be introduced into the circle of a charming family by way of the kitchen and utility end of the house.
14. *San Diego Union*, April 2, 1917, 1:5, 4:6.
15. Letter, March 17, 1942 from the Commandant's Office, 11th Naval District, to the Commanding Officer, Naval Training Station.
16. *San Diego Union*, December 16, 1923, Society-Club, 1:8, 3:1; February 26, 1926, 28:2.
17. *San Diego Union*, August 30, 1925, 1:7; September 7, 1929, 5:6; October 9, 1934, 10:3-4.

18. *San Diego Union*, December 7, 1930, II-1:7.
19. *San Diego Union*, January 1, 1924, Park Section, 3:1-4; July 18, 1932, II-1:1.
20. *New York Times*, October 3, 1935, 1:5, 14:2-8
21. *San Diego Union*, July 17, 1924, 20:1
22. *San Diego Union*, August 7, 1987, D-1
23. E. E. Wallace, District Engineer, "Six Lane Divided Freeway Planned Through Balboa Park, San Diego," *Street and Highways*, May 1941; *San Diego Union*, February 27, 1948, B-1:7
24. Letter, D. B. Jennings, Assistant Structural Maintenance Engineer, California Division of Highways, to J. B. Dekema, December 21, 1979; Freeway Maintenance Agreement between the City & State, February 20, 1980.
25. *Evening Tribune*, July 18, 1951, 1:1-2.
26. *San Diego Union*, October 17, 1960, A-15:6-8.
27. *San Diego Union*, July 12, 1959, A-11:1-8; Richard Pourade, *City of the Dream*, Chapter 4: "The City—the End of One Civic, Dream," Copley Press, 1977.
28. *San Diego Union*, January 16, 1961, A-19:3, A-20:4.
29. *San Diego Union*, May 18, 1962, A-25:1-3.
30. *San Diego Union*, July 27, 1968, B-1:8, B-4:1.
31. R. W. Borgan, District 11, Highway Maintenance Supplementary Bridge Report, October 30, 1967; *San Diego Union*, October 8, 1969, B-1:6.
32. Park & Recreation Board Minutes, January 16, 1997.
33. Letter, M. McManus, Deputy District Maintenance Manager, to Michael Uberuago, City Manager, May 22, 2002.
34. Minutes of the Park & Recreation Board, May 1, 2000.
35. Caltrans News Release, September 20, 2001 on www.dot.ca.gov/dist11.

36. *North Park News*, August 2004, 3:1-3.
37. Thomas K. Arnold, Ed., "The deadly Cabrillo Freeway Median is finally getting a makeover," *San Diego Magazine*, May 2004.
38. *San Diego Union*, January 22, 1950, A-11:6-7.
39. *San Diego Union*, August 5, 1950, A-4:2-3.
40. *San Diego Union*, November 21, 1953, B-1:1-2.
41. James Britton, "Two Modest Proposals for Balboa Park," *San Diego & Point Magazine*, November 1955.
42. *San Diego Union*, May 28, 1957, A-17:1-9, A-28:1-3.
43. Harland Bartholomew *Master Plan for Balboa Park*, 1960.
44. *Evening Tribune*, April 7, 1961, B-1; San Diego Register of Voters tabulation of votes for election April 18, 1961.
45. *San Diego Union*, December 4, 1964, A-17:8, A-23:2; December 15, 1964. A-15:7-8.
46. *Evening Tribune*, September 28, 1973, C-3.
47. National Historic Register for Historic Places Nomination Form, December 1, 1975.
48. *Evening Tribune*, June 1, 1978, A-2.
49. *San Diego Union*, January 28, 1979, F-1.
50. *San Diego Union*, September 18, 1981, B-3.
51. *San Diego Union*, October 10, 1981, B-1:4.
52. *San Diego Tribune*, December 22, 1983, B-10.
53. *San Diego Tribune*, December 22, 1983, B-10.
54. Estrada Land Planning, *Balboa Park Master Plan*, adopted July 25, 1989.

55. *San Diego Union-Tribune*, March 22, 1992, E-6.
56. *San Diego Union-Tribune*, May 3, 1994, A-1, A-15.
57. Jones & Jones, *Balboa Park Land Use, Circulation and Parking Study, Preliminary Draft Plan*, October 2, 2003.
58. *San Diego Union*, July 27, 1968, B-1:8, B-4:1.
59. *Hillcrest News*, June 26-July 10, 2004, 1:1-5; *Firehouse News and Features*, Copyright 2004 by TheSanDiegoChannel.com.
60. *San Diego Weekly Union*, July 13, 1871, 3:1; Richard Pourade, *The Glory Years*, Chapter 7: "The Day the Town Went Wild," Copley Press, 1964)
61. *San Diego Union-Tribune*, May 19, 1992, B-1.
62. Eugen Neuhaus, *The San Diego Garden Fair*, Paul Elder & Company, San Francisco, 1916.... pp. 26-28. I feel the engineer should have yielded his work to the architectural designer, who might have enlivened the somewhat cold and untemperamental viaduct more than one way without disturbing its big feeling. From below the top seems unfinished—no evidence of a railing or balustrade, nothing to indicate the scale of the many human beings who traverse daily this seven-arched span.... While I respect constructive charm above everything else, a trace of ornament, even of color, would have gone a long way towards tying bridge and exposition proper together. It is a little naked, and only the warm sun of San Diego will save it from monotony with the fine play of strong cast shadows within its arches.
63. *San Diego Union*, March 11, 1922, 1:2-5.

NOTE: Copies of articles, memos and letters cited above can be found in the Cabrillo Bridge binders, San Diego History Center Research Library.

APPENDICES

(Topographical Series Map, U.S. Geological Survey, 1940, Point Loma Quadrangle, showing Cabrillo Canyon and Marston's Addition before the construction of the Cabrillo Freeway.)

(Topographical Series Map, U.S. Geological Survey, 1953, Point Loma Quadrangle, showing Cabrillo Canyon and Marston's Addition after the construction of the Cabrillo Freeway.)

(Street Map, San Diego Area, Southwest Map Company, circa 1957 showing bridges and ramps on Cabrillo Freeway before the construction of the Crosstown Freeway.)

(Topographical Series Map, U.S. Geological Survey, 1967, Point Loma Quadrangle, showing Cabrillo Freeway after the construction of the Crosstown (U.S. 101) Freeway.)

(Aerial Photo Map Book, Aerial Graphics, San Diego County, 1986-87 showing Cabrillo and Crosstown Freeway together with U.S. 101 – U.S. 395 Interchange.)

(Map of Aerial Photo, Aerial Photo Map Book, Aerial Graphics, San Diego County, 1986-87.)

(Topographic Series, U.S. Geological Survey, 1996, Point Loma Quadrangle, showing Cabrillo Freeway and Expansion of Balboa Park in the northwest quadrant.)