



Mission Boulevard Bridge Replacement Project Update and Aesthetics

Public Works and Community & Economic Development Departments

City Council
January 23, 2018

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PROJECT LOCATION



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BACKGROUND

1. In April 1997, the County of Riverside initiated a seismic assessment of the existing bridge and determined total replacement was the appropriate alternative;
2. The bridge replacement was approved for funding under the Federal Highway Bridge Program and qualified for funds under the State Seismic Bond Funds;
3. On June 16, 2015, City Council approved a Service Agreement with the County of Riverside and the City of Jurupa Valley for the bridge replacement project (Local Match for Riverside at 57% for \$1,232,910).



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PROJECT OVERVIEW

1. Jurupa Valley and Riverside will own and maintain the new bridge under the service agreement;
2. The total project cost estimated at approximately \$42.7M;
3. Project is currently in PA/ED (environmental) phase with expected completion in the Fall of 2018;
4. Construction start is scheduled for the beginning of 2021;
5. Project is expected to be completed by the end of 2022;
6. The Project Development Team is requesting concurrence from City on the Aesthetics Theme.



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AESTHETICS COLLABORATION

1. Workshop #1 – January 2017
 - a) Present opportunities and constraints
 - b) Obtain City's goals
2. Workshop #2 – June 2017
 - a) Present first draft architectural details
 - b) Obtain City's comments
 - c) Present cost estimate
3. Final Architectural Themes presented
 - a) Details provided to the stakeholders
 - b) Request approval to move forward into final design
 - c) Avoid changes in direction as project advances



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AESTHETICS COLLABORATION

4. Context sensitive project shared by two Cities with distinct character.
5. Goal is to equally represent Cities with bridge aesthetics.
6. Project Development Team (PDT) included the County, the two Cities, and the design consultant headed Kleinfelder of San Diego.
7. Worked together for over one year and included a series of Aesthetics Workshops were held to collect information from Cities on key features representative of bridge location and history including:
 - a) Prior Mission Boulevard Bridge crossings
 - b) Bridge significance for the region
 - c) Historical photographs and archives
 - d) News clippings depicting special events around the site



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AESTHETICS ELEMENTS

1. Abutment Form Finish (Fractured Rib Embossed)
 - a) Preferred due to its linear fractured pattern that deters graffiti vandalism
 - b) Easier to maintain than other patterns
 - c) Specific limits of form liner developed during final design
2. Belvederes (up to 5)
 - a) Overhangs installed at bent locations on south side only
 - b) Serve as a resting and view point for trail
 - c) Includes one bench, two information kiosk plates
 - d) Center belvedere includes colored medallion
 - e) Other belvederes include placeholder medallions TBD by Cities during final design



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AESTHETICS ELEMENTS

3. Standard Solid Concrete Barrier
 - a) Mission Arch design form liner inset;
 - b) Colored concrete with form liners tying into the historical significance of original Mission Bridge and existing railing to the east.
4. Metal Railing
 - a) Arch Design enhancement on standard railing;
 - b) Enhancement applied to the metal railing along the south edge of deck;
 - c) Arch design selected to complement the historic Mission theme
5. Entry Pilasters (Total 4)
 - a) Installed at each corner of bridge approach;
 - b) Standard gray concrete color throughout with board form finish;
 - c) Designed is reminiscent of original Mission Bridge pilasters;
 - d) Scaled down to not compete with original bridge towers residing at Carlson Bark Park east of the River.



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AESTHETICS ELEMENTS

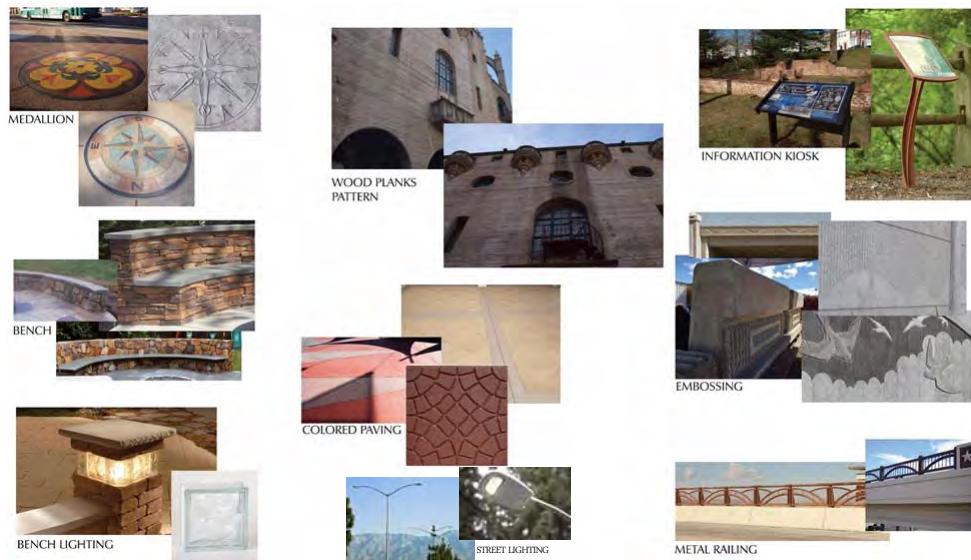
6. Interior Pilasters (Total 6)
 - a) Installed along the south side of multi-purpose trail, midway between belvederes to break up length of metal railing;
 - b) Two alternating designs reflect themes consistent with both Cities and history of the bridge;
 - c) Standard gray concrete color with board form finish;
 - d) Concrete cap molding will complement entry pilasters
7. Multi-Purpose Trail Lighting
 - a) Architectural LED lighting installed along inboard barrier to illuminate walkway;
 - b) Not required for safety but PDT felt lighting was an important enhancement;
 - c) Two lights per belvedere bench will be installed;
 - d) Power source, cost, and maintenance to be included in MOU between the Cities prior to construction.



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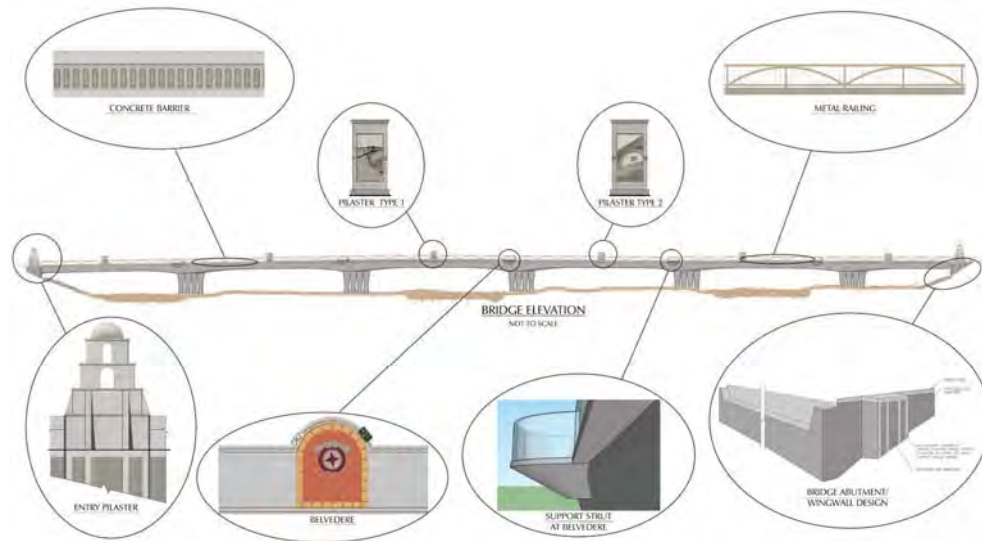
FINAL AESTHETIC FEATURES



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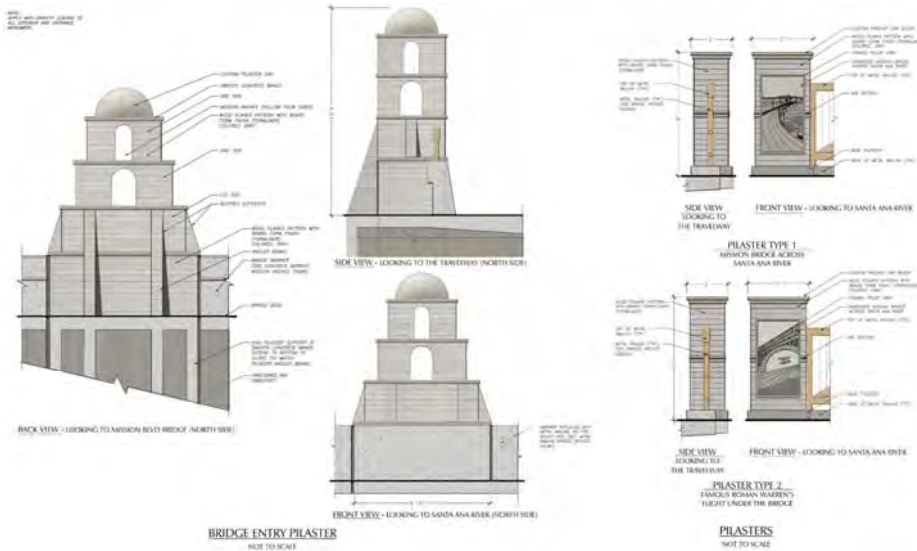
FINAL AESTHETIC FEATURES



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FINAL AESTHETIC FEATURES



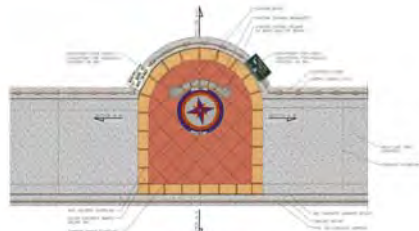
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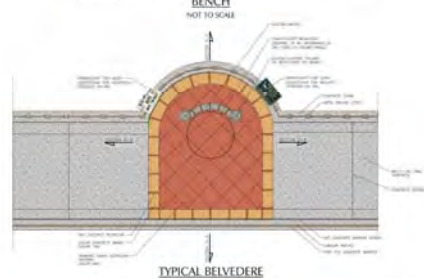
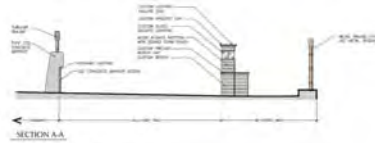
FINAL AESTHETIC FEATURES



CENTER MEDALLION
NOT TO SCALE



CENTER BELVEDERE
NOT TO SCALE



TYPICAL BELVEDERE

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FINAL AESTHETIC FEATURES



SECTION
STANDARD PICKET RAILING



BRIDGE ARCHES THEME

METAL RAILING
NOT TO SCALE



SIDE VIEW (NORTH SIDE)
TYPE 732 CONCRETE BARRIER



BACK VIEW (NORTH SIDE)

CONCRETE BARRIER
NOT TO SCALE



MISSION ARCHES THEME



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AESTHETICS COSTS AND FINAL DESIGN

1. Guidelines allow up to 5% of total bridge cost for aesthetics;
2. Caltrans Local Assistance Procedures Manual identifies the types of architectural elements considered to be participating;
3. Architectural treatment cost estimate is \$1.2 million (< 5% of estimated bridge cost);
4. Bridge cost will be refined at the end of current PA&ED phase and in final design;
5. Caltrans may identify certain elements as non-participating resulting in some elements being reduced in quantity, removed altogether, and/or Cities may choose to pay for them separately;
6. Refinement of some features is anticipated during final design.
7. Design team will continue collaborative approach to all decisions.



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RECOMMENDATION

That City Council:

1. Receive a project update and the proposed aesthetic concepts for the Mission Bridge replacement over the Santa Ana River; and
2. Authorize the Community and Economic Development Director, or his designee, to sign the Concurrence Letter for the Aesthetic Theme.



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