DONALD MACDONALD, FAIA

PRINCIPAL, PROJECT MANAGER/DESIGNER

Owner and principal of Donald MacDonald Architects, MacDonald has more than 40 years of architecture experience. He is a specialist in bridge design with extensive experience in multidisciplinary projects involving conceptual planning, architectural enhancements, public participation, landscaping, and environmental studies. Well-versed in government procedures, public review process and public consultation requirements, MacDonald specializes in project implementation from basic research to construction document coordination. MacDonald lectures on architectural design worldwide and is the author of numerous articles on aesthetics and design, as well as the book Democratic Architecture. Chronicle Books has just published his latest book, The Golden Gate Bridge: History and Design of an Icon.

EDUCATION

Master of Science in Architecture - Columbia University
Wade Memorial Fellow

CERTIFICATION

California - C-4935	Nevada - 0765
South Carolina - SC-6343	New Mexico - 589
Colorado - ARC-300782	NCARB - 12268

PROJECT EXPERIENCE *(PARTIAL LIST)*

Cooper River Bridge, *Charleston, SC* *(Cabled Bridge)*
The new Cooper River Bridge stands as the longest cable-stayed bridge in North America. In cooperation with engineers, Mr. MacDonald was responsible for the design conceptualization and architectural detailing for the following bridge structures/features: the main tower, bicycle/pedestrian pathways, cantilever pier arms, lighting, handrails, auto barriers, colors and material surfaces. Mr. MacDonald participated in presentations with the SCDOT, the mayors of Charleston and Mount Pleasant, local bicycle coalitions and design review committees. (This bridge has won 15 national design awards).

San Francisco-Oakland Bay Bridge East Span, *San Francisco, CA* *(Cable Bridge)* (Under construction till 2013)
As part of the suspension bridge team, MacDonald Architects developed six initial suspension bridge concepts- producing built study models, architectural computer renderings and hand-drawn sketches. MacDonald Architects worked in close collaboration with the engineers to achieve the winning design. The engineers' experience with steel suspension bridges proved essential in expediting the physical design of all elements of the bridge. Work on this bridge involved participation and coordination with Caltrans (California Department of Transportation), MTC (Metropolitan Transportation Commission), Bicycle Coalitions, the City of San Francisco and BCDC (San Francisco Bay Conservation and Development Commission).

Indian River Bridge, *Dover, DE* *(Design/Build - Cable Bridge)*
Donald MacDonald was part of a successful design/build team that won the lowest bid providing architectural aesthetics for Delaware's signature bridge competition. In collaboration with Buckland & Taylor, PCL, MacDonald Architects presented the winning cable-stayed design as a replacement bridge. Although, MacDonald Architects won the first competition, the project was never executed.

Golden Gate Bridge, *San Francisco, CA* *(Cable Bridge)* (Various contracts since 1980)
MacDonald Architects has provided design criteria, coordination and review of the final seismic retrofit measures engineered by the participating engineering firms, T.Y. Lin International, Imbsen, Sverdrup Inc., for historic and aesthetic compatibility with the existing structure. Under design supervision by MacDonald Architects, the seismic retrofit and placement of new elements of this structure was engineered without compromising the initial integrity of the architectural design.

Carquinez Bridge, *Carquinez, Vallejo, & Crockett, CA* *(Cable Bridge,* Various details, color and texture)
MacDonald Architects provided aesthetic analysis and historical evaluation for the steel truss bridge on an on-call basis for the retrofit project overseen by our client, Caltrans. Our firm provided renderings and other graphics. On the new suspension span, MacDonald designed the handrails, pedestrian way / bike path and auto barriers.

Interstate 80 Bicycle/Pedestrian Overpass, Berkeley, California
MacDonald Architects worked on the preliminary design development, the architectural detailing, including color, texture, lighting and materials, computer renderings and the creation of presentation materials for public meetings. MacDonald Architects designed the overpass at a skewed angle (not perpendicular with I-80) which aligns with the midspan of the Golden Gate Bridge, in order to maximize viewing opportunities.

Anacostia Pedestrian Bridge Competition Washington, D.C.
MacDonald Architects, along with the participating engineers, combined landscape design, innovative engineering and public art to reflect on the natural and urban environments of the Washington D.C area. The design captured the movement through and the essence of time experienced in the space. This bridge sought to express the energy of this site where different neighborhood and transit modes come together.

Iron Horse Pedestrian/Bicycle Overcrossing, Pleasant Hill, California *(Cable Bridge)*
MacDonald Architects provided the design services in conjunction with the engineers for the selection of an appropriate bridge that addresses the many needs of this site. The Bridge is part of the new Pleasant Hill Bart Station Specific Plan. The design's specific features address the needs of bicyclists and pedestrians in the major transportation and commercial hub of Pleasant Hill.

Diestelhorst Bridge, Redding, California
MacDonald Architects provided aesthetic design assistance to the participating engineering firm, on the Diestelhorst Replacement Bridge; a reinforced concrete five-span arch over the Sacramento River in Redding, California. The new bridge's design will compliment the adjacent old bridge in its form and detail vocabulary. MacDonald Architects coordinated with bridge design engineers during the Construction Documents phase for lighting, materials, color, roadway and bridge profiles. The Diestelhorst Bridge spans a public park and salmon breeding grounds in the Sacramento River. (This bridge won the 1998 National American Concrete Institute Design of Excellence Award.)

San Francisco Oakland Bay Bridge West Span Pedestrian Bicycle Path *(Cable Bridge)*
This addition will continue the pedestrian bicycle path that will be constructed to match the New East Span bike pathway. MacDonald Architects worked on the design concept and cost estimates with the engineers including design features such as air foils to protect the bridge from the negative impact of wind currents. Computer renderings, physical models, and animations were prepared for public hearings. The work involved participation and coordination with Caltrans (California Department of Transportation), MTC (Metropolitan Transportation Commission), Bicycle Coalitions, the City of San Francisco and BCDC (San Francisco Bay Conservation and Development Commission).

Maxwell Bridge, Napa, California
Replacing an existing steel truss lift bridge over the Napa River with a new concrete structure that spans flood plains and public parks. The form of the bridge mimics the hill silhouettes of the surrounding environment. Working closely with engineers, MacDonald provided design conceptualization and architectural detailing, including: lighting, color, texture, finishes and other elements important to bridge aesthetics. The design process included active involvement with the public hearings including the citizens review boards, Department of Public Works for the City of Napa, the Army Corp of Engineers, the City and County of Napa, Caltrans, United States Fish and Game Agency.

Third Street Bridge, Napa, California

MacDonald Architects provided aesthetic design assistance to the participating engineering firm on the Third Street Bridge, an arched reinforced concrete box girder over the Napa River. The design was built on a consensus of community participation with the city and our firm to assure that the end result would be a beautiful bridge that was pleasing to the community at large and very pedestrian and bicycle friendly.

Sixth Street Replacement Bridge*, Los Angeles, CA* *(may go Design/Build - Cable Bridge)*
MacDonald Architects has been developing the final 7 designs for the new 6th Street bridge, part of the LA River family. MacDonald Architects has participated in concept development, produced study and final models, compiled all final photos, renderings, and produced all necessary construction documents and models for the final presentation. MacDonald Architects is working with the City of L.A., CH2M HILL, HNTB and DEA, and all other consultants involved.

Folsom Dam Bridge, *Folsom, CA*
The Folsom Dam Bridge is a newly constructed high-traffic bridge which replaces the original dam crossing. This four-lane bridge, with a new two mile connector road will be a welcomed addition to the Folsom landscape. MacDonald Architects designed the pedestrian/bike path to cross over Lake Folsom.

La Loma Footbridge, *Berkeley, CA* *(Prime Consultant)*
The project goal was to connect two existing University Buildings across a major City of Berkeley thoroughfare, directly above the Hayward fault line. It not only served as an accessible connector for students, but a conduit for data, electrical and plumbing between the two structures as well. MacDonald Architects produced all of the design development drawings and renderings, and architectural construction documents for this project.

Riverside Bridge*, Riverside, CA* (in construction drawings phase)
MacDonald Architects has worked on the development of a new Riverside Bridge, and it's surrounding planning. MacDonald Architects has been responsible for all the final architectural renderings and drawings that have been presented to the stakeholders and client. One scheme for the bridge is of an aesthetic vocabulary of the other Los Angeles bridges, reflecting the City Beautiful Movement of the 1930s.

Alexander / Bon Air / Doherty Bridges, *Larkspur, CA* *(may go Design/Build)*
MacDonald Architects has provided the bridge design concepts for three sister bridges in Larkspur, CA. MacDonald Architects made strong contributions to the design team working on the renderings of each bridge and the construction documents. Mr. MacDonald has participated in public outreach meetings and has worked alongside the community in order to integrate public feedback into the design concept.

Mid-Hudson Long Span Suspension Bridge, Poughkeepsie, New York *(Cable Bridge)*
The historic Mid-Hudson Long Span Suspension Bridge in Poughkeepsie, New York was designed by the master engineer Ralph Modjeski and opened in August of 1931 by Franklin D. Roosevelt. MacDonald Architects provided researched and respectful modifications that preserve the integrity of the bridge. A cable strengthening investigation was performed by T.Y. Lin International and Bettigole, Andrews & Clark, Inc. and concepts for achieving rehabilitation were created. Generating new saddles to be placed on existing saddles, adding an additional cable, and using its support, replacing the old cable. The end result will succeed in strengthening the bridge as it is; and also make it possible, in the future, to build an additional deck. All of these changes will maintain the present character and appearance of the bridge.

Ninth Street Bridge, Modesto, California
MacDonald Architects provided aesthetic design assistance to the participating engineering firm and to the City of Modesto for a modified haunch girder bridge. This bridge type was used, as a result of Caltrans bridge replacement budget, and this design was accredited by the community of the City of Modesto. This bridge has received two city design awards.

I-35 Replacement Bridge Competition, Minneapolis, MN (Design/Build – Replacement)
Standing tall over St. Anthony Falls in Minneapolis, the design for the city's new bridge would mimic the city's skyline with its vertical/horizontal lines creating a bridge that would blend into the terrain. The bridge design was a collaboration between MacDonald Architects, CH2MHill Engineers, Jacobs Engineering, and CSM Contractors. Breaking down the scale of this large bridge mass allows light that goes between the decks down to the surface of the water and the public park below. Allowing users to enjoy compelling views from all vantage points. This design was a finalist in the Design/Build competition for the replacement of the collapsed bridge.