



ARILD ORSLEIE, PE SENIOR PROJECT ENGINEER

Arild Orsleie, Senior Project Engineer, has been a structural engineer since 1975, including extensive experience in the design of prestressed I-girders, CIP post-tensioned box girders, voided slab bridges, segmentally-erected prestressed concrete bridges, seismic retrofit of prestressed concrete bridges and the design of light rail/rapid transit prestressed concrete guideway structures. He has been involved in LRFD design projects since 2002.

EDUCATION

Master of Engineering (Structural) –
University of California, Berkley, CA
Bachelor of Science – Civil Engineering,
University of Birmingham, England

PROFESSIONAL ENGINEERING REGISTRATIONS

- Arizona Civil – 42660
- Arizona Structural – 50086
- California – C 44886
- Florida – 54513

- ***I-19 East Frontage Rd: Canoa Rd to Continental Rd-widening of Via Rio Fuerte Bridge (ADOT)/Pima County DOT, Pima County.*** Senior Bridge Engineer for a single span reinforced concrete slab bridge supported on drilled shafts. Utilized AASHTO LRFD Specs and ADOT's current LRFD Bridge Practice Guidelines to prepare the design of superstructure and substructure. Coordinated reviews by both ADOT and Pima County Bridge Engineers.
- ***19th Avenue and Greenway Pedestrian Bridge, Phoenix, Arizona.*** Senior Structural Engineer providing structural and architectural design and project management of a six-span, 574-foot long steel pedestrian bridge to cross 19th Avenue and 1800 feet of multi-use path to link a gap in the Sun Circle Trail System. Responsible for coordinating Civil, Landscape Architecture, Geotechnical and Structural disciplines with the City of Phoenix as well as integrating the design with the project artist.
- ***Cordes Junction TI, Ramp S-S & Ramp N-N (ADOT), Yavapai Co.*** Senior Bridge Engineer for the new 180-ft long 2-span bridges Ramp S-S and Ramp N-N. Responsible for structural design of the superstructure, piers and foundations, including spread footings and drilled shafts. This project is being performed by the Alternate Delivery Method of CM@Risk.
- ***I-10 Widening over Bullard Wash (ADOT), City of Goodyear, Arizona.*** Senior Structural Engineer for a new 120-ft long, 3-span reinforced slab bridge supported on pile bents. Responsibilities included: structural design of the superstructure, pier caps, drilled shaft foundations, coordination with prime consultant, shop drawing and submittal reviews and responding to RFI's.
- ***US 60 Grand Avenue Widening, 83rd Avenue to 99th Avenue (ADOT), Maricopa Co.*** Senior Structural Engineer provided structural design and construction documents for three structures on the US 60/Grand Avenue Widening project: the widening of the Eastbound Grand Avenue Bridge over New River; the widening of the Westbound Grand Avenue Bridge over New River; and the relocation of the eastbound bridge barrier on the existing SR101L Grand Avenue Underpass. The widening of the EB and WB bridges consisted of providing Type III AASHTO I-girders with a reinforced concrete slab, and connecting the new slab to the existing slab. Separate wall type piers on spread footing foundations support the widening part for both the EB and WB bridge. The new wall piers are structurally separate from the existing piers. Separate abutments on drilled shaft foundations support the widening part for both the EB and WB bridge. The new abutments are structurally separate from the existing piers.
- ***El Mirage Road – Beardsley Road to Loop 303 Bridge (MCDOT/FCDMC), Maricopa County.*** Senior Bridge Engineer responsible for the design of two proposed wash crossing bridges as part of new roadway construction downstream of McMicken Dam in western Maricopa County. The El Mirage Road Bridges, Bell Road to Beardsley Road and Beardsley Road to Loop 303, would utilize multi-span, precast-prestressed concrete I-girder superstructures and were designed using the AASHTO LRFD method. These bridges would have been the first in Maricopa County to implement the bridge architectural standards developed by Structural Grace, Inc. for Maricopa County under a separate contract. Structural Grace, Inc. contracted with Kiewit Construction to perform a value-engineering/constructability review and prepare construction cost estimates to provide MCDOT the assurance that the architectural details were economical and could be easily constructed. The deep foundations were designed to resist 25 to 30 feet of scour.