



JORGE A. MONTOYA, PE, SE

SENIOR PROJECT ENGINEER

Jorge Montoya, PE, SE has been in the civil and structural engineering industry since 1987. He has been responsible for the design and preparation of contract plans for highway bridges, earth retaining structures, roads, and highways. He is experienced in the design of new transportation-related structures as well as the rehabilitation of and modifications to existing structures.

- **Houghton Road Bridge, Tucson, Arizona.** Project Manager providing structural design services for a replacement bridge carrying Houghton Road over the Union Pacific Railroad (UPRR) as part of the Houghton Road Improvement Project. Assisted the roadway engineer in determining constructible span arrangements, structure depth and adequate horizontal and vertical clearances as well as estimated construction costs as part of the Design Concept Report. Prepared a structure selection report that presented structure concepts and the recommend structure type for the new bridge. Will perform final design of this three span pre-cast AASHTO Girder Bridge upon completion of the DCR phase. Project requires extensive coordination with the roadway engineers, City of Tucson, UPRR, geotechnical engineer and Pima County DOT.
- **Cushing Street Bridge Over Santa Cruz River, Tucson, Arizona.** Senior Project Engineer responsible for designing and preparing construction documents for the Cushing Street Bridge. The 320-ft long, two-span bridge will include two traffic lanes, two modern streetcar tracks, two bicycle lanes and pedestrian ways. Extensive multi-stakeholder consensus building, public involvement and coordination with the Rio Nuevo Design Team / Steering Committee was conducted during the conceptual design phase of this unique structure that will serve as the first major infrastructure element of the Rio Nuevo program and one of the gateways to the Cultural Plaza on the west bank of the Santa Cruz.
- **I-19 East Frontage Road, Continental Road to Canoa Road, Pima County, Arizona.** Project Manager in charge of the preparation of Structure Selection Reports and final structural design and construction documents for the following bridges on the I-19 East Frontage Road, Continental to Canoa Project: Esperanza Wash Bridge, Wash Bridge, NB I-19 Off Ramp Bridge and Via Rio Fuerte Wash Bridge. These structures were designed utilizing the AASHTO LRFD Bridge Design Specifications, 4th Edition and are the first bridges in Pima County to be designed using the LRFD method. Also provided the structural analysis and retrofit detailing of the existing Continental Road TI bridge abutments to facilitate the widening of Continental Road by implementing a micro pile group to stabilize the soil mass behind the abutments, and design and detailing of cast-in-place retaining walls.
- **Value Engineering/Redesign Structures at Clark Street, Tucson, Arizona.** Project Manager responsible for providing value engineering design services to Kiewit/Sundt JV, contractor, for the Clark Street Overpass and Clark Street West Bound Ramp structures on I-10 in Tucson. Responsibilities included replacing the previously designed cast-in-place post-tensioned box structures with pre-cast girders thus reducing traffic control needs and constructability issues.
- **I-10 Corridor Study: I-8 to Tangerine Road, Pima & Pinal County, Arizona.** Lead Structural Engineer responsible for preparation of Bridge Concept Reports for 13 structures on the I-10 Corridor Study, Junction I-8 to Tangerine Road. Responsibilities included coordination with the prime consultant and ADOT Bridge Group, preparing alternative replacement structures, and preparing the Bridge Concept Reports. Jorge is currently providing final design of the Jimmie Kerr Blvd bridge.
- **Tucson International Airport Blast Walls & Junction Structures, Tucson, Arizona.** Senior Structural Engineer responsible for structural design and construction documents for new blast walls and junction structures at the Tucson Airport as part of the Apron Expansion Project. The design included provisions for shallow utilities crossing the foundation perpendicular to the wall. The intermediate pilasters and footings are cast-in-place concrete. Also designed three junction box structures as part of the Apron Expansion Project. Each structure has a manhole opening in the top slab and the specified manhole cover will support aircraft loading. The top slab is located at grade and the aircraft loading is for a Boeing 757.

EDUCATION

Bachelor of Science – Civil Engineering,
Universidad Autonoma de Guadalajara

PROFESSIONAL ENGINEERING REGISTRATIONS

- Arizona – Structural - 51264
- Arizona – Civil - 40178
- California – 54807
- Montana – 15576
- Mexico