Mohammed A.R. Khan, PE

Senior Construction Engineer

Professional Registrations/Certifications

Professional Engineer: CA, no. C49264 (1992); IL (1991)

Education

MS, Civil Engineering, University of Illinois Urbana-Champaign, 1987

BS, Civil Engineering, Jawaharlal Nehru Technological University, India, 1987

Areas of Strength

- Program/Project Management
- Construction Management
- Roadway Design
- Traffic Management
- Bidding/Estimating/proposals
- On Time delivery Improvements
- Change Order Management
- Budgeting & Cost Controls
- Risk Analysis
- Claims Management
- Safety/OSHA Compliance
- Staff Development & Leadership
- Creative and Innovative use of technology
- Strong operational experience in software: Roadway Design System (RDS), Microstation, Primevera P3, P6, Primevera Expedition/Contract Manager, Microsoft Office.

Relevant Experience

Mr. Khan has 36 years of experience overseeing all phases of multimillion-dollar design, construction, and maintenance of major transportation projects for government and private-sector organizations. He has an excellent track record as Construction Manager and Design Engineer with Caltrans District 11 San Diego - California, and the private sector. He demonstrates strong credentials and proven history of on-time, on-budget, and high quality project delivery of major transportation projects with over $750 million in construction costs. He has directed multiple projects to successful completion through effective management and team collaboration, and has the proven ability to train, evaluate, motivate, and lead large and successful teams.

Representative Project Experience prior to CH2M

Senior Construction Engineer; San Diego North County – Major and Minor Projects; Caltrans District 11; San Diego, CA; 2007-2015. Managing projects for new freeway alignment and widening, new and existing bridges widening, 5/805 Viaduct new bridges, new sound and retaining walls, drainage, safety, electrical, utility, and landscaping improvements. Highway Rehabilitation, Maintenance, and Emergency projects under construction (Completed/current project construction costs: $480 million). As a Senior Construction Engineer, Mr. Khan has been principal in charge of the contracts management and supervises five (5) Resident Engineers, a field staff of over 22 engineers and office staff.

Senior Resident Engineer; Route 5/805 Widening Project; Caltrans District 11; San Diego, CA; 2001-2007. Mr. Khan served as a Senior Resident Engineer in charge of complete construction administration of this 5 year $170 million project. The 5/805 widening project included construction of a truck/local traffic bypass roadway system from Mira Mesa Blvd on Route 805 and Sorrento Valley Blvd on Route 5 to Del Mar Heights Rd on Interstate 5. A new interchange on I-5 at Carmel Mountain Road was

constructed. The project included extensive coordination/interaction with Amtrak, NCTD, and BNSF during the construction of the new Viaduct and widening of existing viaduct bridges. The project included construction of 3 new bridges and widening of 13 existing bridges, construction of a mile long Plantable Geosynthetically Reinforced crib wall, 12 new retaining walls, tunneling under the I-5 freeway for drainage, and improvements to existing drainage systems, electrical, utility, safety, and landscape features. The project was completed ahead of schedule, within budget and scope. The project has won numerous appreciation awards. As a Senior Resident Engineer the contract management involved:

- Project Planning and Work Schedule
- Managing and resolving project critical issues
- Storm Water Pollution Prevention and Environmental commitments
- Project communications and reporting
- Project cost control and tracking
- Project team building and partnering alternatives
- Constructability reviews
- Progress payment preparation and processing
- Risk Management, and Quality Management
- Material Design (AC, PCC) and quality control
- Contract documentation
- Site management and work progress
- Project Scheduling and progress monitoring (CPM)
- Contractor Proposal, negotiating and approval
- Manage and direct changes (CCOs, Design changes)
- Project inspections, close-outs and punch lists
- Claims review, analysis, reports, presentations, and resolution meetings
- Project Management
- Leading, training and motivating project personnel
- Coordination with Railroad, MTDB, NCTD, SDRWQB, and other Agencies

Resident Engineer/Construction Management; Caltrans District 11; San Diego, CA; 1995-2001. Projects include:

- Route 75 – Coronado Toll Bridge Retrofit Projects (3) – (Cost: $120 million, 4 years).
- Route 5/56 Interchange Project – (Cost: $65 million, 3 years)
- Route 52 Drainage Improvement and overlay (Cost: $6 million – 6 months)
- Route 5/8 Seismic Retrofit (Cost: $40 million – 2 years)

Mr. Khan served as a Resident Engineer, Highway Representative and Field Engineer in charge of construction administration for Coronado Toll Bridge retrofit projects, and multiple safety and rehabilitation projects in San Diego. As a principal resident engineer on multiple projects the contract administration involved delivery of the projects within scope, budget, and schedule. The challenging aspect of the contract administration has been the oversight of the contractor's work, field staff management, schedule reviews, change orders, delay claims by the prime and sub-contractors, audits by Federal Highway Administration and Caltrans, quality control, and quality assurance. The most challenging field issues for both the Contractor and Caltrans has been compliance with the Regional Water Quality Control Board

permit and traffic management at the 5/805 interchange corridor. In addition, environmental commitments, and permit requirements were met with minimal to no impacts.

Project Design Engineer; Project Development, Caltrans District 11; San Diego, CA; 1988-1995. Projects include:

- Route 5/8 Seismic retrofit, San Diego ($40 million)
- Commercial Vehicle Enforcement Facilities (CVEF) at Otay Mesa and Calexico ($35 million)
- Realignment and widening of State Route 94 at Dulzura and Tecate, San Diego ($12 million)
- Bridge rail replacement at various bridges, San Diego ($9 million)
- Ramp Metering project on Route 8, San Diego ($4.5 million)
- Installation of Changeable Message Signs, fencing and guardrail, San Diego ($5 million)
- Interstate 10 pavement rehabilitation in Imperial County ($11 million)
- Route selection for Route 125 between Route 905 and Route 54, San Diego ($450 million)
- Design and estimate Interstate 10 rehabilitation in Imperial County ($11 million)

Mr. Khan served as a Project Design Engineer in charge of project design, estimating, and preparing the bid package for advertisement for multiple projects for capital improvement. As a principal design engineer it required coordination with all functional units ranging from environmental, traffic, surveys, right of way, hydraulics, storm water pollution (NPDES), HQ and FHWA geometric reviewers, public affairs, external stake holders, and utility owners.

As a Project Design Engineer the project management involved:

- Project Planning and Work Schedule
- Right of Way requirements and assist in acquisition
- Preparation of Project Reports and PSSR
- Design oversight of Consultant projects
- Project presentations to public and other agencies
- Project Scheduling (CPM) for design and construction
- Leading, training and motivating project personnel
- Feasibility studies and prepare reports
- Coordination with Federal, State and Local Agencies
- Project team building and coordination
- Roadway design, draft and estimate (PS&E)
- Project cost control and tracking
- Constructability reviews
- Design support to construction & other departments

Project Engineer; Major Housing Development Project; Los Angeles Department of Public Works; Los Angeles County, CA; 1987-1988. Mr. Khan served as a Project Engineer in charge of plans and specifications review, and field inspection/approval for major housing developments in Los Angeles.

Research Assistant; Stability Analysis of Railroad Networks; Army Corps of Engineers; 1986-1987. As a Research Assistant for the Construction Engineering Research Labs (Urbana Champaign) the research project involved field evaluation, testing, and report preparation of railroad tracks stability at multiple US army camps in various states. The stability analysis involved sub-surface soil conditions,

water table, age of the tracks and operating features. This research project was called "RAILER" and the intent of this research was to avoid failure of the tracks during emergency mobilization of US Army equipment and resources.

Construction Engineer; Major Highway Design-Build and Housing Development Projects; Dammam, Al Khobar, Al Hafuf, and Jeddah Provinces; Saudi Arabia; 1979 -1986. Mr. Khan served as a principal construction engineer in charge of design and construction of local roads, highways, Railroad at Grade Intersections, and causeways in the eastern and western provinces of Saudi Arabia. These projects ($80 million) were turnkey projects wherein the prime contractor was responsible for design alignments, structural sections, railroad crossings, bridge construction, drainage improvements, electrical signals, roadways signs and safety features, material testing (QC/QA), and landscaping. All projects were delivered within scope, schedule and costs. The King Abdul Aziz Sea Port Causeway (Dammam) project received the award for structural design and use of innovative material.