

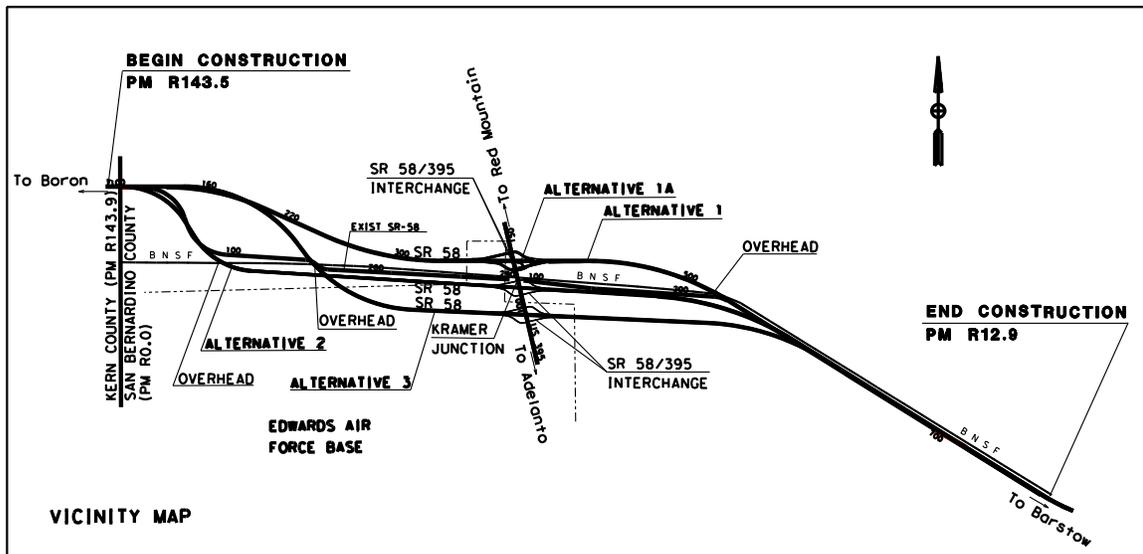
CMGC
NOMINATION FACT SHEET
Dist 08-SBD-Rte 058-(PM) Kern County 143.5/143.9&SBD 0/12.9
Project EA 34770

Project Description

This project will upgrade a section of State Route (SR) 58 from a two-lane conventional highway to a four-lane expressway in San Bernardino County. This gap closure project will provide route continuity for SR-58 from Kern County line to 7.5 miles east of US-395. This project includes widening and realigning the roadway and eliminates an at-grade BNSF railroad (RR) crossing and an at-grade crossing of US-395. It will add a mixed-flow lane in each direction and will include shoulder construction, drainage improvements, median widening and will add grade separation structures for US-395 and BNSF railroad.

This project will address the need to safely accommodate the increase in large truck and recreational vehicle traffic, and will reduce current delays being encountered by the traveling public. The project will reduce traffic congestion, provide limited access control, improve traffic safety, improve operational efficiency and reliability of goods movement, and reduce people/goods movement conflict as well as extend the life of the pavement.

Include project location map



Project Proposal

The project is currently in the Project Report and Environmental (PA&ED) phase. The anticipated level of Environmental document will be one of an Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The anticipated completion milestone for this activity is December 31, 2013. The

Project Development Team (PDT) presently has four design alternatives under study. A Public Hearing for this project is scheduled for July 18, 2013. It is anticipated that the final project alternative should be selected by the PDT in September 2013.

This project has been identified as a “Gateway” High Emphasis route improvement for goods movement and it is also on the Intermodal Corridor of Economic Significance (ICES) system. SR-58 provides intermodal access to commercial centers between Bakersfield and Barstow from I-5 to I-15.

This project is fully funded out of the 2012 State Transportation Improvement Program (STIP) with construction programmed in the 2016/17 fiscal year. This project represents about 50% of a two-year STIP capacity available for new Interregional Transportation Improvement Plan (ITIP) projects and is therefore a critically important project to deliver under the STIP.

Schedule

The project Schedule is as follows:

PA&ED –	12/31/13
RTL –	10/26/16
R/W Certification -	09/12/16
CCA-	05/01/20

The project is currently on schedule to meet the PA&ED milestone. Right of way (R/W) acquisition and utility relocations are critical issues on this project. This project will require relocation of SCE transmission towers.

The project design will be no more than 30% at completion of the PA&ED phase. It is anticipated with Construction Manager General Contractor (CMGC) that the Construction Manager (CM) will be on-board at the time full design phase commences. It would be advantageous for the CM to provide input from the very beginning of the Design Phase. The benefit of having a CM on-board early is that significant portions of this project can be constructed where utility relocations or railroad workarounds are required.

The goal for this project is to have the CMGC in place by January 1, 2014.

Cost/Funding

The project is currently estimated as follows:

	Programmed
-Support	
PA&ED	- \$ 8,800,000
R/W	- \$ 4,756,000
PS&E	- \$ 8,000,000
Construction	- \$15,668,000
TOTAL	- \$37,224,000
-Capital	
Construction	- \$139,427,000
R/W	- \$ 18,387,000
TOTAL	- \$157,814,000
 TOTAL COMBINED	 - \$195,038,000

Permits/Agreements

This project proposes to construct an overcrossing bridge structure for BNSF which will require a PUC approval along with a Construction and Maintenance Agreement (C&M). An encroachment permit will also be required from BNSF for any work within the railroad R/W. This project will also require the California Transportation Commission (CTC) to approve a new Route Adoption and Freeway Agreement. The District will also be required to perform a Section 7 Environmental consultation with U.S Fish & Wildlife Service.

Public/Political Support of Project

A Public Scoping Meeting was held in June 2007 at Kramer Junction. The community supported the project and has expressed support for the northerly alignment alternative 1-A. A freeway agreement will be required from the County of San Bernardino. The County has indicated that it supports the project and will maintain local/access roads and any relinquishments of existing SR-58.

Right of Way and Utilities

R/W acquisition and utility relocations are critical to this project. This project will require relocating SCE transmission towers. It is anticipated that the transmission towers will need to be relocated and replaced with taller towers to provide for adequate vertical clearances over the SR-58 and US-395 grade separations.

There are approximately 126 partial takes and five full take properties under Alternative 1-A. Easements will be needed from Edwards Air Force Base for the construction of the expressway through their property.

Why is this project a good CMGC candidate?

- The benefit of having a CM on-board early is that significant portions of this project can be constructed where utility relocations or railroad workarounds are required. The use of CMGC will help expedite delivery of this critical project, given the lengthy R/W acquisition timelines calling for durations of the order of 2 years and 4 months.
- It is anticipated that utility relocations of the SCE transmission towers could take as long as three years to complete.
- Improved design and better staging of construction activities. Given the critical staging of this project, it would be a benefit to have a Construction Manager to oversee and coordinate those portions of the project impacted by R/W constraints.
- The portions of this project on new alignment both east and west of US-395 interchange lend themselves to early construction while the utility relocations are on-going.
- Savings in innovation and constructability

The Construction Manager's tasks should be evaluated by the project team with input from the appropriate functional units. Select the tasks for which the Construction Manager's assistance will be needed and discuss its benefits to delivering the project. (Note: This initial selection will be used to assist in understanding how the district intends to the construction manager and can be modified prior to release of the RFQ).

	DESIGN RELATED		Preliminary soil and geotech studies
X	•Validate Department/Consultant design		Right of Way Demolition
X	•Assist/input to Department/Consultant design		Preliminary Surveying
X	•Design reviews		SCHEDULE RELATED
X	•Design charrettes	X	•Validate agency/consultant schedules
X	•Constructability reviews		•Prepare and manage project schedules
X	Operability reviews	X	Develop sequence of design work
	Regulatory reviews	X	• Construction phasing
X	Market surveys for design decisions	X	•Schedule risk analysis/control
X	•Verify/take-off quantities		ADMINISTRATION RELATED
X	Assistance shaping scope of work	X	Prepare Document Control
X	Feasibility studies	X	Coordinate contract documents
X	•Encourage innovation	X	Coordinate with 3rd party stakeholders
	COST RELATED	X	•Subcontractor bid packaging
X	•Validate agency/consultant estimates	X	Attend public meetings
	•Prepare project estimates	X	•Bidability reviews
X	•Cost engineering reviews	X	Subcontractor bid packaging
	Early award of critical bid packages	X	•Prequalifying Subcontractors
	Life cycle cost analysis	X	Assist in right-of-way acquisition
X	•Value analysis/engineering		Assist in permitting actions
X	•Material cost forecasting		Study labor availability/conditions
X	•Cost risk analysis		•Prepare sustainability certification application
	Cash flow projections/Cost control	X	Follow environmental commitments
X	Shape the project scope to meet the budget	X	Follow terms of Federal Grant
	PRECONSTRUCTION WORK RELATED	X	•Coordinate site visits for subcontractors
X	Utility Relocation	X	•Teamwork/Partnering meetings/sessions
X	Potholing	X	•Develop Quality and Safety plans

Glossary of Preconstruction Services Terms

Design-Related Preconstruction Services

- **Validate agency/consultant design**—Construction Manager evaluates the design as it is originally intended and compares it to the scope of work with both the required budget and schedule to determine if the scope can be executed within those constraints. A validated design is one that can be constructed within the budget and schedule constraints of the project.
- **Assist/input to agency/consultant design**— Construction Manager will offer ideas/cost information to the designer to be evaluated during the design phase. Ultimately, the designer is still responsible for the design.
- **Design reviews**—done to identify errors, omissions, ambiguities, and with an eye to improving the constructability and economy of the design submittal.

- **Design charrettes**—Construction Manager would participate in structured brain-storming sessions with the designer and owner to generate ideas to solve design problems associated with the project.
- **Constructability reviews**—review of the capability of the industry to determine if the required level of tools, methods, techniques, and technology are available to permit a competent and qualified construction contractor to build the project feature in question to the level of quality required by the contract.
- **Operability reviews**—bringing in the agency’s operations and maintenance personnel and providing them with an opportunity to make suggestions that will improve the operations and maintenance of the completed projects.
- **Regulatory reviews**—a check to verify that the design complies with current codes and will not have difficulty obtaining the necessary permits.
- **Market surveys for design decisions**—furnish designers with alternative materials or equipment along with current pricing data and availability to assist them in making informed design decisions early in the process to reduce the need to change the design late in the process resulting from budget or schedule considerations.
- **Verify/take-off quantities**—Construction Manager verifies the quantities generated by the designer for the engineer’s estimate.
- **Assistance shaping scope of work**— Construction Manager generates priced alternatives from the designer and owner to ensure that the scope of work collates to the constraints dictated by the budget and/or schedule.
- **Feasibility studies**— Construction Manager investigates the feasibility of possible solutions to resolve design issue on the project.

Cost-Related Preconstruction Services

- **Validate agency/consultant estimates**—Construction Manager evaluates the estimate as it is originally intended and determines if the scope can be executed within the constraints of the budget.
- **Prepare project estimates**—Construction Manager provides real-time cost information on the project at different points in the design process to ensure that the project is staying within budget.
- **Cost engineering reviews**—review that includes not only the aspects of pricing but also focuses on the aspect that “time equal’s money” in construction projects.
- **Early award of critical bid packages**— Construction Manager determines which design packages should be completed first to ensure that pricing can be locked in on the packages.
- **Life-cycle cost analysis**— Construction Manager provides input to design decision that impact the performance of the project over its lifespan.
- **Value analysis**—process that takes place during preconstruction where the CMGC contractor identifies aspects of the design that either do not add value or whose value may be enhanced by changing them in some form or fashion. The change does not necessarily reduce the cost; it may actually decrease the life-cycle costs.
- **Value Engineering**—systematic review by a qualified agency and/or contractor personnel of a project, product, or process so as to improve performance, quality, safety, and life-cycle costs.

- **Material cost forecasting** – Construction Manager utilizes its contacts within the industry to develop estimates of construction material escalation to assist the owner and designer make decisions regarding material selection and early construction packages.
- **Cost risk analysis**—furnishing the agency with information regarding those cost items that have the greatest probability of being exceeded.
- **Cash flow projections/Cost control** – Construction Manager conducts earned value analysis to provide the owner with information on how project financing must be made available to avoid delaying project progress. This also may include an estimate of construction carrying costs to aid the owner in determining projected cash flow decisions.

Schedule-Related Preconstruction Services

- **Validate agency/consultant schedules**— Construction Manager evaluates if the current scope of work can be executed within the constraints of the schedule.
- **Prepare project schedules**— Construction Manager prepares schedules throughout the design phase to ensure that dates will be met, and notify the owner when issues arise.
- **Develop sequence of design work**— Construction Manager sequences the design work to mirror the construction work, so that early work packages can be developed.
- **Construction phasing** – Construction Manager develops a construction phasing plan to facilitate construction progress and ensure maintenance of traffic.
- **Schedule risk analysis/control**— Construction Manager evaluates the risks inherent to design decisions with regard to the schedule and offers alternative materials, means and/or methods to mitigate those risks.

Administrative-Related Preconstruction Services

- **Coordinate contract documents** – Construction Manager evaluates each component to the construction contract against all other components and identifies conflicts that can be resolved before award of the construction phase contract.
- **Coordinate with third-party stakeholders**— Construction Manager communicates with third parties involved in the project including but not limited to utilities, railroads, and the general public.
- **Public information-public relations** – Construction Manager implements a program to identify public relations issues and solve them to ensure the project is not delayed by public protest.
- **Attend public meetings** — Construction Manager can organize and attend public meetings to answer questions from the public about the construction of the project.
- **Biddability reviews** — Construction Manager reviews the design documents to ensure that subcontractor work packages can be bid out and receive competitive pricing. This action reduces the risk to the subcontractors because they are given the specific design product they need for their bids; not just told to find their work inside the full set of construction documents.
- **Subcontractor bid packaging** — Construction Manager coordinates the design work packaging to directly correlate with subcontractor work packages so that early packages can be easily bid out and awarded.
- **Prequalifying subcontractors** – Construction Manager develops a list of qualified subcontractors that are allowed to bid on packages as they are advertised.