



April 27, 2022

Mr. Mark Bartlett, P.E.
Federal Highway Administration
Alabama Division Administrator
9500 Wynlakes Place
Montgomery, AL 36117

RE: **Special Experimental Project Number 14 {SEP-14}**
I-10 Mobile River Bridge and Bayway Project
Mobile and Baldwin Counties

Dear Mr. Bartlett:

For your review, please find the SEP-14 Workplan and Request for Approval for the Mobile River Bridge and Bayway Project. Please advise if you have any comments or questions.

Sincerely,

/Signed by/

Edwin L. Perry III, P.E.
Mobile River Bridge Project Director

ELP/adw

Attachment

c: File

I-10 Mobile River Bridge and Bayway Project

SEP-14 Workplan and Request for Approval

April 27, 2022

A. INTRODUCTION

This workplan relates to the I-10 Mobile River Bridge and Bayway Project (the Project). This letter constitutes an application to the Federal Highway Administration (FHWA) by the Alabama Department of Transportation (ALDOT) for review and approval of this workplan for delivery of the Project using a progressive design-build delivery model under the provisions of Special Experimental Project Number 14 (SEP-14) for the use of innovative contracting practices.

The Project is of critical importance to Alabama, particularly to Mobile County and to commuters residing or working in the fast-growing Baldwin County. The Mobile River bridge and Bayway improvements are necessary to reduce severe traffic congestion and to provide a more direct route for vehicles transporting hazardous materials, while minimizing impacts to Mobile's maritime industry.

ALDOT is procuring the Project in compliance with relevant federal regulations to qualify the Project for Federal assistance. The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program and Infrastructure for Rebuilding America (INFRA) Grant are two potential sources of funding/financing for the Project and are subject to federal requirements and availability. Additional sources of funding/financing are anticipated to be non-Federal bonds paid back with toll revenues from the Project and State-appropriated funding.

The overall intent of the SEP-14 program is to foster innovation and explore the full range of opportunities to make the project delivery process more efficient. Using progressive design-build delivery for this Project will provide opportunities to streamline project completion and provide a quality, cost-effective project. This Project will influence future Federal-aid policy and procedures, particularly by expediting the procurement process and providing valuable experience for efficient, collaborative delivery of future projects. ALDOT will be responsible for reporting to FHWA how the experimental features contribute to the overall success of the Project. The Project will be composed of two procurements, with the first procurement being for the design and construction of the Mobile River Bridge and the second procurement for the design and construction of the Bayway.

B. PURPOSE

The proposed progressive design-build contracting method is an innovative process that is being increasingly utilized by transportation agencies for the delivery of highway projects. Progressive design-build delivery places the responsibility for design and construction with a single contractor for each procurement. The single contractor is selected based on qualifications or best-value before substantial design work is completed. The owner and the contractor then progress the design together toward authorization of construction work and a final contract price. This contracting method would allow ALDOT to incorporate desired design details and provide for better cost input regarding options under consideration, providing for well-informed decision-making using a collaborative, open-book negotiation approach and aligning expectations up front before completion of final design and execution of construction work.

Under 23 CFR 636.302(a)(1), evaluation of price is required in the selection of a design-builder after the NEPA process is complete. The Final Environmental Impact Statement/Record of Decision (FEIS/ROD) for the Project was signed August 15, 2019. Recent changes in tolling-related aspects of the Project are expected to require a partial, but not complete, reevaluation.

ALDOT also wishes to use the progressive design-build method as a means of exploring innovative contracting methods. Historically, ALDOT has used the design-bid-build method and has limited experience with the design-build method. With increasing demands on available highway funds, ALDOT is actively pursuing delivery methods that optimize tax dollar utilization and provide streamlined project delivery. Because of the collaborative nature of the progressive design-build delivery method, the need for innovation and cooperation to design the Project to budget and meet other Project goals, and the current volatility in construction pricing, ALDOT believes that a competitive negotiation/qualifications-based selection will be the best approach for selecting two competent design-builders to design their respective portions of the Project and develop a fair and reasonable construction price using an open-book, competitive process once the design is further advanced.

C. PROJECT SCOPE AND BACKGROUND

The Mobile River Bridge and Bayway Project is proposed to meet the purpose and need of increasing capacity and reducing congestion along I-10 and providing a more direct route for vehicles transporting hazardous materials, while minimizing impacts to Mobile's maritime industry. After completion, the Project will provide a new six-lane cable-stay bridge over the Mobile River with approaches starting just east of the Virginia Street interchange and ending between the existing westbound and eastbound I-10 Bayway bridges on the east side of Mobile River. From there to the US-90/98 interchange in Daphne, AL, a new Bayway with increased capacity will be constructed above the 100-year storm surge elevation. The Project will require modifications at several interchanges along I-10, including: Broad Street, Virginia Street, Texas/Canal/Water Street, US-90/98 at the East Tunnel Portal, US-90/98 at Midbay, and US 90/98 in Daphne.

ALDOT intends to split the Project into two progressive design-build procurements as described below:

1. Procurement 1 (Mobile River Bridge): Construction of high-level approaches and a cable-stayed bridge across the Mobile River, and modifications to the Broad Street Interchange, Virginia Street Interchange, and Texas/Canal/Water Street Interchanges.
2. Procurement 2 (Bayway): New I-10 Bayway with increased capacity, demolition of the existing Bayway, and improvements to the East Tunnel Portal Interchange, Midbay Interchange, and US 90/98 Interchange in Daphne.



Figure 1: Project Map

Splitting the Project into the two progressive design-build procurements will result in the cost-effective, expedited completion of all the elements of this Project as described above to achieve the following Project objectives:

1. Additional capacity for traffic utilizing I-10 between Virginia Street in Mobile and the US-90/98 interchange in Daphne to alleviate traffic congestion and facilitate economic growth by providing an aesthetically pleasing cable stay bridge at a minimum vertical clearance of 215 feet over the Mobile River ship channel and by ultimately replacing the existing 4 lane I-10 Bayway facility with

- a facility at an elevation above the 100-year storm surge event while maintaining acceptable levels of traffic flow during construction.
2. Provide hazardous materials vehicles a path along I-10 so they do not have to detour through the currently designated route through the Mobile Central Business District and Africatown community, minimize impacts to the maritime industry, and meet all commitments laid out in the environmental documentation and permitting.
 3. Maintain a toll-free route along US-90/98 Causeway, I-10 Wallace Tunnels, Bankhead Tunnel, and Africatown Bridge so that commuters and local communities have a way to cross the Mobile River and Bay without having to pay a toll.

ALDOT will advertise and solicit qualifications for each of the two procurements through a Request For Qualifications (RFQ/RFP). The RFQ/RFP will require each proposer team to submit a proposal (Proposal) demonstrating its qualifications for performing the work required by the particular project scope for the applicable procurement, and outlining its proposed approaches to design, cost estimating, contracting, construction management, and risk management during the design/preconstruction and construction phases. An ALDOT selection committee will be established to review the Proposals in accordance with criteria set forth in the RFQ/RFP, as outlined in Section E (EVALUATION OF PROPOSALS) of this workplan. Based on the proposals received, ALDOT intends to select a minimum of three proposer teams for each procurement to interview before identifying the best qualified team to deliver that portion of the Project.

Once a best-qualified proposer team is identified, ALDOT will negotiate a design-build contract with that team, based on the indicative contract terms that will be set forth in the RFQ/RFP for the procurement. The negotiation will establish the scope and compensation for each portion of the design/preconstruction phase. Compensation for services will be in compliance with FHWA policies and FAR cost principles, including FAR-compliant audited indirect cost rates for engineering and design-related services. If ALDOT and the best-qualified proposer are not able to negotiate a fair and reasonable design-build contract, ALDOT will be able to terminate negotiations with that proposer and undertake negotiations with the next most highly qualified proposer team.

Under each design-build contract, as part of the project scope of work, the selected design-builder will be required to provide a complete set of design computations and plans. ALDOT, in conjunction with FHWA, will approve preliminary and final plans. In addition, the selected design-builder will also be required to obtain competitive pricing for the construction work. Approval of construction activities will be contingent upon a finding of price reasonableness. If ALDOT and the design-builder are unable to come to a fair and reasonable construction price, ALDOT will have rights to award the construction work to a separate contractor through a traditional bidding process using the design-builder's design.

D. SCHEDULE

Each of the progressive design-build procurements will have the following phases:

Phase 1: Preparation of RFQ/RFP (Estimated Time: 1-3 months)

The RFQ/RFP, which will describe the general project scope and provide indicative terms for the design-build contract, will be prepared by ALDOT in consultation with FHWA. The scope will identify the description, location, general design criteria, anticipated items of work, and minimum qualifications of the design-builder. The RFQ/RFP will include the evaluation criteria and identify the relative importance of each criterion.

Phase 2: Selection of progressive design-builder (Estimated Time: 4-10 months)

This phase includes advertising the RFQ/RFP, evaluating Proposals, selecting the best-qualified proposer team, and negotiating and awarding the design-build contract. The following tasks will be completed:

1. ALDOT will hold an industry forum regarding the procurement.
2. ALDOT will advertise the RFQ/RFP.
3. Proposers will submit Proposals setting out their qualifications and proposed project approaches in response to the RFQ/RFP.
4. ALDOT's selection committee will review the Proposals and, based on its evaluation of the Proposals according to the criteria outlined in Part E of this workplan, will identify a shortlist of apparently best qualified proposers for interviews.
5. ALDOT will interview shortlisted teams and thereafter identify the best qualified proposer based on the ALDOT selection committee's evaluation of the Proposals and interviews.
6. ALDOT will negotiate and enter into a design-build contract with the best qualified proposer.

Phase 3: Design and Construction Price Negotiation (Estimated time: 10-12 months)

Phase 4: Construction (Estimated time: 60 months)

ALDOT intends to stagger the two progressive design-build procurements, with the RFQ/RFP for Procurement 2 (Bayway) being released shortly after release of the RFQ/RFP for Procurement 1 (Mobile River Bridge).

E. EVALUATION OF PROPOSALS

ALDOT has developed selection procedures in order to provide a balanced assessment of the experience and qualifications of the proposers and their proposed approaches to the Project. These procedures will be used to determine the selected design-builder for each progressive design-build procurement.

Proposal Evaluation

The Proposal evaluation score will be based upon criteria such as the ability and experience of the design and construction management team members (firms and personnel) to perform the work, approach to design development and preconstruction (including collaboration, cost estimating, and contracting), construction management approach, approaches to risk management, quality, and safety, approach to contracting and participation of disadvantaged business enterprises, and financial condition (the latter on a pass/fail basis).

Interview Evaluation

Proposers shortlisted on the basis of the Proposal evaluation will be required to make an oral presentation of their qualifications and approach to the project and answer any questions ALDOT may have with respect to the Proposal and the team's qualifications. Interviews will be graded qualitatively, resulting in an interview score. The interview scores will be combined with the Proposal evaluation score.

Scoring

All Proposals and interviews will be scored. Scores will be based on the evaluation criteria set out in the RFQ/RFP, which are expected to include the following criteria, or similar criteria:

- a. Applicable Experience of Design and Construction Team Members (Firms)
- b. Experience and Qualifications of Design and Construction Key Personnel
- c. Preconstruction Phase Approach
- d. Construction Phase Approach
- e. Approach to Contracting and DBE Participation
- f. Safety Qualifications
- g. Interview [shortlisted proposers only]

Final scoring criteria and their relative importance will be established in the RFQ/RFP for the procurement.

Selection Committee

The proposers' Proposals and interviews will be evaluated by an ALDOT selection committee which is expected to be composed of individuals from the following offices (changes to the committee may be made at the discretion of the ALDOT Director):

- ALDOT Chief Engineer's Office
- ALDOT Construction Bureau
- ALDOT Design Bureau
- ALDOT Bridge Bureau
- ALDOT Legal Bureau
- ALDOT Southwest Region Office

F. REPORTING

ALDOT will prepare and submit to FHWA initial, interim, and final reports on this Project.

Initial Reporting (Initial Award)

The initial report will be prepared at the approximate time of award of the negotiated design-build contract for Procurement 1 (Mobile River Bridge). The initial report will include industry reaction to the progressive design-build process and procurement, a discussion of the contract negotiation process, and a breakdown of the design-builder's costs for categories of "design" and "preconstruction", including compliance with FAR cost principles.

Interim Reporting (Construction Phase)

ALDOT will prepare an interim report regarding this workplan at the approximate time of "award" of construction work on the first of Procurement 1 (Mobile River Bridge) and Procurement 2 (Bayway) to reach this phase, "award" being finalization of a fair and reasonable construction price and authorization to proceed with construction work. This report will describe ALDOT's experience with the "construction award" process, including with respect to competitive contracting and open book negotiation procedures, ALDOT's approach to determining price reasonableness, and reactions in the subcontractor community, as well as any identifiable effects of the progressive design-build approach on the final pricing. Concurrence in construction price reasonableness will also be sought for each procurement as and when required by FHWA. An interim report will also be submitted approximately at the midway point of the construction of the Project.

Final Report (Final Acceptance)

A final report will be submitted upon completion of the design-build contracts for the Project and final ALDOT acceptance of the work. The final report will contain an overall evaluation of the Project and the progressive design-build delivery model, along with "lessons learned" and any suggestions and recommendations for improving the process.