

# *Evaluation and Updating of the AASHTO LRFD Bridge Construction Specifications*

## *Scope of Work*

### *AASHTO Committee on Bridges and Structures*

#### Purpose

- A. Conduct a comprehensive review and restructuring of the AASHTO LRFD Bridge Construction Specifications (“the Specifications”). Identify how they are used by stakeholders (primarily State Transportation Agencies), what areas of the Specifications are working well, and what aspects could be improved. Consider how the organization of the Specifications compare to the organization of other AASHTO publications (including the AASHTO LRFD Bridge Design Specifications). This effort is anticipated to occur in two phases. Phase I: Provide recommendations and a plan to restructure and reorganize the Specifications based on the findings. Develop a prioritization for which sections should be rewritten. Phase II: Implementation of recommendations of Phase I in order to complete the re-write and restructuring the Specifications.Background

The AASHTO LRFD Bridge Construction Specifications have a history that takes them back to the 1920’s. Development of a combined set of design and construction specifications began in 1921, and was published in 1931 as the *Standard Specifications for Highway Bridges and Incidental Structures* by the American Association of State Highway Officials (AASHO), the predecessor to AASHTO. This was eventually renamed the *Standard Specifications for Highway Bridges*, and was published through 2002 with the 17<sup>th</sup> Edition. Division I covered design specifications, while Division II covered construction specifications.

A significant update to bridge design and construction specifications got underway in 1986. The most notable update included adoption of load-and-resistance factor design (LRFD), a philosophy which had been gaining ground in other areas of structural engineering and in other parts of the world. As part of the development of the LRFD specifications, a decision was made to separate out the design and construction specifications into separate manuals. Design specifications are covered in the LRFD Bridge Design Specifications, and construction specifications are located in the LRFD Bridge Construction Specifications, first published in 1998. The Specifications are now up to the 4<sup>th</sup> Edition which was published in August 2017.

When these specifications were first published in 1931, there was a nationwide need for standard construction specifications to build bridges and other transportation structures. At that time, it was unlikely that many STA’s had developed their own specification language; being able to use standard contracting language would have been an efficient way to reduce the cost of specification development. Over the years, it appears most STA’s have developed their own specifications, reducing the use of the Specifications as standard contracting language. The ultimate goal of this project is to insure the Specifications are structured to meet the needs of today’s STA’s.

## B. Key Work Activities and Deliverables

### Phase I

1. Conduct a comprehensive survey of State Transportation Agencies (STA's) and other public owners to understand how they are currently using the Specifications and how they feel about them. Examples of possible survey questions include:
  - a. How are the Specifications used in your construction contract administration (select all that apply)?
    - i. Exact language from the Specifications is used as contract requirements.
    - ii. Language is used as a reference in contract requirements.
    - iii. Language is frequently used to develop STA contract language.
    - iv. Language is occasionally used to develop STA contract language.
    - v. The Specifications are not used by the STA.Please provide more details about how you use the Specifications, especially if you selected more than one response.
  - b. What parts of the Specifications are the most useful?
  - c. What parts of the Specifications are the least useful or are not used?
    - i. Measurement and payment sections in particular?
  - d. Are there areas that the Specifications don't currently cover that you would recommend adding?
  - e. Are there areas currently covered by the Specifications that you would recommend removing?
  - f. The Specifications are currently written in a "contract language" format. Do you find this format helpful? Would it be better to rewrite these as more of a guidance document that STA's and public owners can reference when developing their own specifications?
  - g. Currently, the organization of the Specifications do not necessarily align with the AASHTO LRFD Bridge Design Specifications (chapters don't align, etc.) Would you find it helpful to reorganize the Specifications so that they match up with the AASHTO LRFD Bridge Design Specifications? For example, the LRFD Bridge Design Specifications currently cover drilled shaft design in Chapter 10, Section 10.8. This realignment would move drilled shaft construction guidance to Chapter 10, Section 10.8 of the Specifications.
2. Taking feedback from the survey, and in conjunction with an independent review of the Specifications, develop a prioritized scope of work to align the Specifications with the desires of the STA's. This scope should not include significant re-writing efforts or significant additions of new content. Instead, the effort should focus on reorganizing, restructuring, possible deletion of content that is not useful, etc.
3. Provide recommendations on how to prioritize rewriting of the Specifications. Using feedback from the STA's, identify the highest-priority sections that should be addressed first, and the lower-priority sections that can be delayed.

4. Present findings and recommendations to the AASHTO Committee on Bridges and Structures (the Committee) at their July 2021 Annual Meeting. Include a proposed scope, schedule and budget to implement all of the recommendations covered under Item 2 above. The Committee will review these recommendations, and may negotiate an increase in scope, schedule and budget to implement some or all of the recommendations.

#### Phase II

Implementation of Phase I recommendations.

#### C. CONTRACT ADMINISTRATION DATA

These provisions will be made a part of the contract when it is fully executed.

#### Payment and Progress Reports

The Contractor shall prepare and submit monthly invoices for each calendar month indicating labor charges (including dates worked, hours worked billed in half hour increments, and hourly totals for the month), other direct costs as approved, and travel as approved. The Contractor must submit supporting cost detail, including receipts, to receive reimbursement for costs incurred. Invoices received by AASHTO more than 90 days after the work completion date may not be paid. It is the Contractor's responsibility to ensure that all work completed is invoiced within the allowed billing period.

The invoice shall be accompanied by a written progress report indicating:

- A clear and complete account of the work performed each month that is organized by Task number,
- An outline of the work to be performed the next month,
- A description of any problems incurred or anticipated that will affect completion of the work within the time and fiscal constraints set forth in this agreement with recommended solutions to such problems; or, a statement that no problems were encountered, and

- A tabulation of the current and cumulative costs expended by month versus budgeted costs, including cost share if applicable.

All invoices and expense vouchers shall be submitted to Ms. Patricia Bush at [pbush@ashto.org](mailto:pbush@ashto.org) and formally addressed to AASHTO, attention of Patricia Bush, Program Manager for Bridges and Design, at 555 12<sup>th</sup> Street NW, Suite 1000, Washington, DC 20004. In addition, progress reports shall be submitted electronically to Ms. Bush at [pbush@ashto.org](mailto:pbush@ashto.org). Payment to the Contractor in fulfillment of this agreement shall be subject to acceptance of all assigned services by AASHTO, and shall be subject to final audit by AASHTO of the time sheets and expense records reflecting services rendered. If accepted, AASHTO will remit payment within 60 calendar days of receipt of each invoice or voucher. If final audit has not been conducted within 90 days of delivery of the entire performance required by this agreement, AASHTO shall make final payment.

#### Travel and Per Diem

Travel and Per Diem authorized under this subcontract must be invoiced in accordance with the Government Travel Regulations currently in effect. Current per diem rates are listed at <http://www.gsa.gov/portal/category/21287>.

Travel requirements under this contract shall be met using the most economical form of transportation available. If economy class transportation is not available, higher class transportation shall be approved in advance by the AASHTO Contracts Manager, and the request for payment voucher must be submitted with justification for use of higher class travel indicating dates, times and flight numbers. All travel shall be scheduled sufficiently in advance to take advantage of offered discount rates, unless authorized by the AASHTO Contracts Manager.

#### D. CONTRACTOR TECHNICAL PROPOSAL CONTENT

The contractor's technical proposal shall be no more than 10 pages (Size 12 Font and 1" Margins) and include the following information:

1. Introduction- Firm's name and contact information. Description of the firm's interest and commitment to provide the services being requested.
2. Personnel- Listing and one paragraph biographies of personnel with a focus on their knowledge and experience. Table delineating the roles and responsibilities of personnel.
3. Approach- Description of the contractor's approach to performing each task.
4. References- Contact information for two appropriate transportation sector references familiar with your work.

#### E. COST PROPOSAL

The contractor's cost proposal shall be no more than 2 pages (Size 12 Font and 1" Margins) and include the following information:

1. Introduction- Firm's name and contact information, cost summary and principal's signature.
2. Labor and Other Direct Costs- Excel spreadsheet for each task showing breakdown and totals for person hours, labor costs (including base salary, overhead, fringe and profit, if any), and any anticipated other direct costs.
3. Cost Control and Invoicing- Firm's approach for controlling cost and insuring timely submission of invoices.

## Schedule and Budget

Items 1-4 above are anticipated to be completed by July 2021, with a budget not to exceed \$100,000. If the COBS elects to implement some or all of the recommendations, this will be negotiated as Phase II, after Phase I is complete.

As part of cost proposal, provide phasing schedule and estimated cost for phase one.

## F. PROPOSAL RANKING/SELECTION CRITERIA

The following criteria will be used to make award to the successful bidder in descending order of importance:

1. Technical Approach
2. Qualifications and Experience of Managers and Professionals
3. Cost

## G. QUESTIONS AND SUBMISSIONS

AASHTO invites offerors (bidders) to submit offers (bids) in response to this Request for Proposals for LRFD Construction Specification Support Services with anticipated performance from November 1, 2020 to October 31, 2021.

Questions of a technical or contractual nature about the contents of this RFP are due no later than 4 pm August 21 to the attention of Mr. Strat Cavros, AASHTO Manager, Acquisitions, Contracts & Business Development at [scavros@aaashto.org](mailto:scavros@aaashto.org). AASHTO will strive to answer questions and post those answers on the AASHTO website (and by email to prospective offerors) as an Amendment to the RFP by COB August 28.

Offers (proposals) must be sent by email to Mr. Strat Cavros NLT 12PM EDT, September 25, 2020. It is expected that AASHTO, will make an award to the selected bidder by October 30, 2020.

AASHTO contemplates entering into a time and material contract for acquiring services on the basis of direct labor hours at specified fixed hourly rates that include wages, fringe, overhead, profit (if any) and actual other direct costs for travel and materials.