

## **January 23 Constructability Meeting**

### **Attendees on Skype/Phone:**

Jordan Muller, PCI

Krista Taylor and Jeff Yoder, Taylor Construction

Jim Siegel

Ryan Schock, Davis County

Ryan Cheeseman, Jensen

Jeff Koudelka

Melissa

Stuart Oden, Oden Enterprises

Tom Rockwell, Brandt Construction Co

Greg Nault, LafargeHolcim

Phil Rossbach, HDR

### **Attendees in Person:**

Brian Moore, Secondary Road Research Engineer, ICEA

Vanessa Goetz, IOWA DOT

Nicole Moore, IOWA DOT

Brian Jacob, Cramer and Associates

Brady Carter, Cunningham-Reis

Jason Duncan and Fred Larson, Midstates Precast

Andy Stone, United Contractors

Mahbub Khoda, IOWA DOT

Chris Cromwell, FHWA Iowa Division

Kyle Frame, IOWA DOT

Dean Bierwagen, IOWA DOT

Ahmad Abu-Hawash, IOWA DOT

Gary Novey, IOWA DOT

Jeff Butler, Forterra

Dave Dixon, Dixon Construction

Todd Culp, Coreslab Structures

Danny Stokes, IOWA DOT

Dan Graves, Graves Construction

Mark Dunn, IOWA DOT

#### AID Grant History & Objectives

IHRB helped develop standards for box beams. Vanessa gave an overview of the grant application process. The objectives of this project are to use the Federal grant funding to help with an initial large investment to demonstrate the new standards across the state for LPA's to use, accelerate the adoption of using ultra high-performance concrete, and utilize added options to maximize the number of structures built with the available \$1.25M in funding. The State DOT is the award recipient, with the counties benefiting as sub-recipients to the award. Because FHWA required that the grant be spent under one contract with one contracting authority, the project was developed for the Iowa DOT to let one project that will cover the costs of fabrication of the box beams and supply and place the UHPC. This would allow the Iowa DOT to maximize the use of the grant.

#### Box Beam Standards

<http://www.iowadot.gov/erl/current/BR/Navigation/B30.htm>

All bridges in this contract are the same. 50' long, 32' wide, 0 degree skew. The Iowa DOT is the contract authority and the Marshalltown RCE office will be handling payments. These bridges will be built by counties under separate contract and are located on gravel roads.

IOWA DOT awarded the grant in September of 2018. Have one year to get the Box Beam and UHPC supply under contract. Currently targeting the April/May 2019 state IOWA DOT letting. Individual county bridge projects are being developed now. One is projected to be ready for letting and construction in 2019. Majority are targeting a fall 2019 letting with 2020 construction. All bridges to be completed and all UHPC joints to be done by November 15<sup>th</sup>, 2020

Danny Stokes discussed the prequalification of contractors to be a prime. The precast/pre-stress industry reps expressed that it would be challenging to take on the role as a prime, since they are normally sub-contractors supplying materials to bridge contractors. One company expressed that due to company policy, they would not be able to provide their private financial data.

A question was asked about prequalification from a materials standpoint of doing precast work. To do work as a contractor building these in their yard or on site would not require materials pre-qualification. Those would be inspected by a construction inspector. The pre-qualification would be for precastors and pre-stress plants per normal requirements.

The group discussed the requirement for the prime contractor to do 30% of the work on the contract. For a bridge contractor, it would be difficult unless they cast their own slabs. One option is a joint venture, but that would severely limit the number of bids, since a materials supplier cannot submit multiple joint ventures.

Question: Can a contractor bid, for example, bridge #1-3 as precast to meet the minimum 30% as a prime contractor and then sub the rest of the box beams to a prestressor/precaster? We will discuss at IOWA DOT about this possibility. Initially, the group had decided against due to complexities in setting up the letting correctly. IOWA DOT will review feasibility of mixing types of work to overcome the limitation of 30% minimum work needed to be done by a prime.

Question: Do the bid items for the slabs need two items? Pay for fabrication and stockpile of beams, and pay for delivery? Standard specifications cover pay for stockpile materials when requested by a contractor. Changing bid items will be discussed at IOWA DOT.

Davis Bacon Wages – Biggest question raised was whether Davis Bacon Wages apply to this project if the box beams are cast someplace other than where the bridge projects are located. Precast industry reps are currently not required to pay Davis Bacon wages when they are a sub-contractor. If now as a prime contractor, and Davis Bacon applies, they feel they will not be able to bid on this project. IOWA DOT will consult with FHWA to clarify requirements. One question is if UHPC installation is not involved in this contract, and it is only a materials supply, does Davis Bacon apply?

IOWA DOT asked if it were to be separate contracts, one for the Box Beams and one for UHPC placement and materials, would it improve the project's success? Industry feedback was that the difficult part with the UHPC is still the fact of each individual bridge contractor dealing with a separate sub-contractor not under their own contract. Discussion was had about requirement for UHPC to be placed within 14 days of beam placement. This could possibly mean the county contractor has to send crew home if nothing else to work on.

One suggestion was made to move the UHPC placement to the individual bridge contracts. Leave the UHPC materials, mixers and site rep with the materials contract. Doing this would make it only a materials supply. It would then place the control on UHPC joint work under the same contractor responsible for setting the beams on the individual projects. This would be a better option than splitting the IOWA DOT project into two separate contracts. Overwhelming consensus from industry was to not have the UHPC placement in the IOWA DOT contract. The IOWA DOT will seek FHWA guidance on this possibility.

The IOWA DOT inquired if the base bid number seemed high? Currently the project is being developed with a base bid of 8. Not much discussion was provided by industry. One comment was that perhaps 5 bridges should be the base bid, and the rest as added options to ensure the contract meets the base bid. Award would be given still to the bidder with the highest number of structures included up to the award amount. IOWA DOT will continue this discussion with industry to get a feel for the appropriate number of bridges in the base bid.

Question: Camber on box beams – if they do all interior beams and then weeks later do the exterior beams and the camber is different, who's responsibility is that to correct camber on the job site? IOWA

DOT will review this information and include instructions on both the IOWA DOT supply contract and the individual county bridge contracts.

Meeting attendees would like a copy of the bridge location map and schedule of lettings. IOWA DOT will send this information to those who supplied an email address.

### **January 30<sup>th</sup>, 2019**

A follow up on a few questions from the Box Beam constructability meeting last week. After consultation with and concurrence from FHWA the following will be applied to this Box Beam Aid Grant IOWA DOT contract.

**1) Davis-Bacon wages:**

“The sites of work for this project are the individual bridge sites in which the beams are to be delivered and incorporated. The site of the work definition **ALSO** includes material or supply sources, tool yards, job headquarters, etc., at the site of the work only when that location is dedicated to this construction project and adjacent or virtually adjacent to the location where the project is being constructed”

FHWA concurs that the “Site” for Davis-Bacon wages to apply is the individual bridge sites or nearby. So if the box beams are made at a prestress/precast plant or a contractor yard away from the bridge sites then Davis-Bacon does not apply.

**2) Labor/placement component of the UHPC joints will NOT be included in the IDOT Aid Grant contract but instead be transferred to the individual county bridge contracts:**

IOWA DOT contract will include box beams and UHPC material and related consultant fees. Individual county contracts will include bid items for placement of beams and placement/labor of UHPC joint fill material.

With the removal of the UHPC placement, the IOWA DOT contract can be designated Materials Only, which will allow the waiver of the prequalification aspects. However, we will still require bidders to request approval to bid and would review their work experience in similar work. The financials would not be reviewed however. This allows for anyone who is qualified to build box beams to be a prime contractor and perform 30% of the contract.

**3) Regarding joint ventures, we currently allow contractors in joint ventures to submit bids both with the joint venture and individually. A precaster/prestresser that wanted to joint venture could do so with more than 1 contractor.**

Hopefully this information will ease your minds on some of the major topics from our meeting. These decisions allow for the most possible bidders, makes it simpler for them to bid, and hopefully will make

our project a success by getting the most bridges replaced. We are moving forward. Please look for this project in the April or May IowaDOT letting.