

ATTACHMENT A
STATEMENT OF WORK
Request for Quotes (RFQ)
Structural Analysis – Steel I-Girder and Field Splice Design Training
Solicitation Number: 6100032323

OBJECTIVE -

The objective of this project is to conduct and modify Structural Analysis related training for Highway Administration on behalf of the Pennsylvania Department of Transportation (PennDOT), Business Leadership and Administrative Services Office (BLASO), Technical Training and Development Section (TTDS).

Specifically, **Steel I-Girder and Field Splice Design** will introduce the design of steel I-girder bridges and spliced connections. Topics covered include: general design considerations in accordance with PennDOT specifications and preferences, economic steel design and detailing options, and constructability and fabrication issues. Attendees will participate in an interactive demonstration of the application of the STLRFD (Load Resistance Factor Design Steel Girder Design and Rating Composite Non-compact Section-+++) and BPLRFD (Load Resistance Factor Design Bearing Pad Design and Analysis) software programs in accordance with LRFD (Load Resistance Factor Design) design code.

PennDOT reserves the right to add or delete training courses identified during the period of this Purchase Order (PO).

REQUIREMENTS -

The term of this contract will be from the Notice to Proceed (NTP) date through June 30, 2016.

The awarded Contractor shall implement the following when instructing each course:

- Application of Adult Learning Theory throughout delivery.
- Hands-on activities combined with facilitated discussion of essential learning factors with application to a technical environment providing the opportunity for participants to share experiences and solutions.
- PennDOT-related or other transportation scenarios to stimulate awareness and discussion.

CONTRACTOR RESPONSIBILITIES -

The awarded Contractor shall:

- Not use participant contact information for any reason outside the scope of this project.
- Not subcontract the in-classroom teaching without the expressed knowledge and consent of the TTDS Project Manager.
- Acknowledge that all PennDOT copyright training materials, detailed outlines of program agenda, lesson plans and facilitation aids are property of PennDOT.
- Have the necessary number of instructors available for each class scheduled. This would include a substitute instructor on standby for any unforeseen circumstances.
- For costing purposes, estimate one (1) instructor per course.
- Proofread all necessary course materials for completeness, including all grammatical and punctuation errors.
- Provide in an electronic medium, all the printable materials in a PDF format and a detailed explanation on how the materials shall be put together. PennDOT shall be responsible for all printed course materials, including any publications where applicable.
- The contractor shall be familiar with the software in order for the revisions to be completed to provide acceptable training.
- Provide the TTDS Project Manager with a detailed log of items included in the invoice along with an OS-501 Confirmation of Services form. A copy of receipts shall be provided with the invoice for all direct costs.
- Additional/substitute instructors must be approved by the Project Manager through an add employee letter.

TASKS AND DELIVERABLES COST

TASK A: TRAINING

Contractors shall provide a unit cost per class for Task A as shown in the Cost Matrix, Attachment B. For each course provide:

Presentation: The unit cost per course, all inclusive of the contractors cost to provide the course as described with the exception of materials for students. The presentation cost shall also exclude travel time to the training location, costs incurred for overnight stays, as well as subsistence entitlement, which shall be billed separately in accordance with Task B: Travel.

PennDOT shall provide the awarded Contractor with an instructor packet at each course location. This packet shall consist of name tents, sign-in sheets, student evaluations, an instructor evaluation, copies of all tests for the course being taught, bubble sheets for the answers and an UPS return envelope. The instructor shall administer the associated course test(s) at the end of the class and submit the test results to PennDOT, BLASO, TTDS, 400 North Street, 7th Floor, Harrisburg, PA. PennDOT will be responsible for grading the tests.

PennDOT will provide a standard classroom setting at each course location with a projector, screen, PC or laptop, white board and/or flip charts, markers for both the white board and flip charts.

A brief description and summary of the learning objectives for the course listed below can be found at the PennDOT Technical Training Calendar (www.dot.state.pa.us/tc). Copies of the course materials are available at <ftp://ftp.dot.state.pa.us/BLASO/TTDS>. Please send an email to RA-pdBLASOprocure1@pa.gov no later than 1:00 pm on January 28, 2015 to request a password to the FTP site. Access to the course materials will no longer be available after January 29, 2015.

The awarded Contractor shall be responsible for the following deliverables:

Task A: Steel I-Girder and Field Splice Design (Max 30 students)

This is a two (2) day course (16.0 hours) intended for the design community graduate civil engineers. Upon completion of this course, a participant will be able to specify common materials that are used for steel girder design; identify material and mechanical properties of structural steel used by PennDOT; state the most common guidelines for an economical steel I-girder design; select the most economical steel design options; list the applications and limitations of the STLRFD and SPLRFD programs; identify key input values for the STLRFD and SPLRFD programs; properly interpret key output values for the STLRFD and SPLRFD programs and refine input values to satisfy economic and specification requirements; list the necessary and appropriate final design information needed to fabricate steel I-girders and identify common erection issues to consider in steel I-girder design.

Deliverable: **Two (2) course offerings – July 1, 2015 through June 30, 2016**

When requesting payment for work completed under Task A: Training, the awarded Contractor shall include a list of courses presented along with an OS-501- Confirmation of Services form.

TASK B: TRAVEL

Travel and Subsistence: This task includes travel time to the training location, costs incurred for overnight stays, as well as subsistence entitlement as indicated below.

Travel and subsistence allowances will conform to the requirements of the most current version of Commonwealth Management Directive 230.10, Travel and Subsistence Allowances, available on the U.S. General Services Administration website at:

http://www.portal.state.pa.us/portal/server.pt/community/management_directives/711/management_administrative_support_%28205-260%29/208571

http://www.gsa.gov/portal/content/104877?utm_source=OCM&utm_medium=print-radio&utm_term=HP_01_Requested_perdiem&utm_campaign=shortcuts

The actual location of each course will be determined by the TTDS Project Manager during the validity period of the PO resulting from this RFQ and be based on local need and a rational

“distribution” throughout regions of Pennsylvania. The contractor shall, for costing purposes, estimate that the training classes will be conducted in D 9-0 Hollidaysburg (West and another in D 6-0, King of Prussia (East). PennDOT reserves the right to add or delete travel costs to the PO resulting from this RFQ if PennDOT’s assumptions for the locations of classes are incorrect.

When requesting payment for work completed under Task B: Travel, the awarded Contractor shall include a detailed log of items included in the invoice along with an OS-501- Confirmation of Services form. A copy of the receipts shall be provided with the invoice for all direct costs.

TASK C: MANDATORY PLANNING SESSION

Within three (3) weeks of notice to proceed, the awarded Contractor shall meet with the TTDS Project Manager and other PennDOT assigned attendees to confirm a thorough understanding of the project. The meeting shall take place either via conference call, or at PennDOT’s central office location, as determined by the TTDS Project Manager. The mandatory planning session will last no more than two (2) hours for FY 14 and FY 15. The time allowance is an estimate and is not guaranteed. Cost shall be based on the awarded Contractor’s time of the Project Manager and possibly one (1) instructor. The Contractor shall provide a blended hourly rate in the Cost Matrix, Attachment B.

Topics of the meeting shall include, but not limited to

- Attendance plans, class location plans, and a tentative class roll-out schedule.
- Review any revision or developmental deliverables.
- Deployment of a plan to track actual work completed against scheduled work.

Anticipate one mandatory planning meeting every year in which the Contractor’s principal developer(s) and instructor(s), as appropriate, will meet with PennDOT representatives and others to review progress compared to target schedule, discuss/address new issues, and communicate/resolve concerns or revised goals.

Deliverable: Attendance of awarded Contractor’s Project Manager and possibly one (1) instructor at the mandatory planning meeting. The cost shall exclude travel and subsistence, which shall be billed separately in accordance with Task B: Travel.

When requesting payment for work completed under Task C: Mandatory Planning Session, the awarded Contractor shall include a record of time spent at the meeting along with an OS-501- Confirmation of Services form.

TASK D: COURSE REVISIONS AND UPDATES

With recent enhancements to STLRFD and SPLRFD, the Department has identified topics within the Steel I-Girder and Field Splice Design course that need revisions to the current course materials. The following revisions must be completed to provide acceptable training.

TASK D1: Steel I-Girder and Field Splice Design Instructor Guide, Participant Workbook, PowerPoint Presentation and Exercises Revisions STLRFD Version 2.3.0.0

- The method of calling the engineering program DLL from the Engineering Assistant has been changed for compatibility with EngAsst v2.5.0.0 which uses Microsoft's .NET Framework, version 4.5. Because of this, STLRFD will no longer work with EngAsst v2.4.0.6 or V2.4.0.9 unless the EngAsst "Edit/Run EXE – Command Window" option is selected. STLRFD will no longer work with EngAsst v2.4.0.0 and earlier.
- The calculation of the depth of web in compression when both flanges have stresses of 0.0 has been set to be the depth to the neutral axis less the compression flange thickness.
- The code checks on the WEB CONCENTRATED LOAD CHECK output report have been modified so that on code check A will result in a specification check failure (and have the name of the output report show up on the SPECIFICATION CHECK FAILURES output report at the end of the program output). All other code checks for this output report are informational, and are now treated as specification check warnings.
- Two new tables have been added to the output. One table named "UNFACTORED FLEXURAL STRESSES" has been added to show the individual unfactored flexural stresses that make up the total factored stress reported by the program. The second table named "USER INPUT LATERAL STRESSES" has been added to show the individual unfactored lateral stresses that make up the total factored lateral stress.
- The program has been enhanced to allow the user to enter stresses due to lateral loads for flexural resistance calculations for the girder. Either a single, constant lateral stress can be entered on the CTL command, or more detailed stresses can be entered by span on the LAS command. This enhancement has also resulted in numerous changes in the program output, usually adding new columns of data to existing output tables and moving other columns of data from existing tables to new tables. Additionally, a new example problem with lateral stresses (EX11.DAT) has been added.

BPLRFD - Version 1.6.0.0

- The program has been revised to include the Method B anchorage check for laminated bearing pads for expansion bearings. This check is done in addition to the existing Method A anchorage check.
- The Minimum Live Load Reaction parameter on the LRX command has been revised to only be required for Continuous Spans. For Simple Spans the program will now automatically compute one-half the Maximum Live Load Reaction for this input parameter as per DM-4 14.7.6.4. Previously the Minimum Live Load Reaction was required to be entered for Simple Spans.

All PowerPoint Presentations and exercises associated with the revision topics shall also be updated.

Deliverable: **Instructor Guide, Participant Workbook, PowerPoint Presentation and Exercises Revisions – NTP through June 30, 2015**

TASK D2: Steel I-Girder and Field Splice Design Exam Revisions

- Update and verify exam questions and answers.

Deliverable: Exam Revisions – NTP through June 30, 2015

The awarded Contractor shall be responsible for reviewing and updating the courses. Any proposed updates must be submitted to the TTDS Project Manager for review and approval prior to implementation. The awarded Contractor shall use the developed course materials as a guide for any revisions and/or modifications to the coursework.

When requesting payment for work completed under Tasks D1 - D2: Course Revisions and Updates, the awarded Contractor shall include a summary of the modifications and/or changes completed along with an OS-501- Confirmation of Services form.

OTHER REQUIREMENTS

1. Contractor Submission Package

Submission package should not exceed twenty (20) pages. This excludes table of contents, dividers, supportive Appendices, and resumes. Resumes should be limited to two (2) pages for each individual resume. Submissions should be kept to a reasonable length; however, points will not be taken off for packages that exceed the twenty (20) pages. Your submission package must be emailed to the following email address: RA-pdBLASOProcure1@pa.gov.

2. Suppliers must complete and submit the following documents:

- a. Proposal based on requirements listed in Attachment A
- b. Cost Matrix – Attachment B
- c. Domestic Workforce Utilization Form – Attachment C

3. Insurance:

In accordance with ITQ Contract Number 4400008567, Part IV – Terms and Conditions, Paragraph 27b, Insurance, and the awarded Contractor will be required to provide a current certificate of insurance to PennDOT.

4. Payment:

Payment will be based upon the successful completion and written acceptance of each deliverable identified in the section **Tasks and Deliverables** of this RFQ. Each deliverable payment will be based on the agreed cost in the awarded contractor's **Attachment B, Cost Matrix**, or as agreed to in the final contract. Offeror shall submit to the Project Manager Form OS-501, **Attachment D**, and substantiating documentation as notification of each deliverable completion. PennDOT Project Manager will certify successful completion and acceptance of each deliverable. Invoices must be submitted after acceptance of each OS-501. All invoices must be sent to the following address:

**COMMONWEALTH OF PENNSYLVANIA
PO BOX 69180
HARRISBURG, PA 17106**

Payment to the Offeror will be based on timely completion and acceptance (in writing) of deliverables outlined within **Tasks and Deliverables**.

5. Estimated Quantities:

All quantities are estimated. Estimated quantities may be changed based on the need of the program. PennDOT reserves the right to request a change in quantities for any of the deliverables when anticipated quantities exceed those established. PennDOT also reserves the right to cancel classes due to low enrollment, emergencies, and other reasons important to the technical training program.

6. Award:

Selection will be determined by best value criteria. Please refer to the attached Expedited RFQ Template for Training Services.

Questions:

Direct all questions concerning this contract to Mary Beth Knepp, Issuing Officer, at RA-pdBLASOProcure1@pa.gov. All questions must be submitted by **1:00 PM on Jan. 16, 2015**. All contractors will be notified of the responses to the questions by **Jan. 23, 2015**.