March 13, 2008

Mr. Jerry C. Lenzi
Chief Engineer, Assistant Secretary of
Engineering and Regional Operations
Washington State Department of Transportation
MS 47323

Ms. Pat Serie, Principal
EnviroIssues
101 Stewart Street, Suite 1101
Seattle, Washington 98101
Co-Chair WSDOT/ACEC Executive Committee

Subject: WSDOT/ACEC Structures Team Process Change Recommendation
Design-Build Contracts *"Clarify the term Engineer in the Standard Specifications"*

Dear Sponsors:

The Washington State Department of Transportation/American Council of Engineering Companies (WSDOT/ACEC) Structures Team has identified an opportunity for process improvement that will result in more effective use of WSDOT, consultant, and contractor workforces during Design-Build Contracts. Specifically, our team has determined that clarifying the term "Engineer" in the WSDOT Standard Specification for Design-Build contracts will remove ambiguous references. This action will ensure that the Engineer of Record and Design-Builder are following RCW's for engineering design, and establish a reliable basis for competitive bids on Design-Build contracts.

The current language of the Standard Specifications is structured for Design-Bid-Build contracts and makes approximately 2000 references to "Engineer". These references are primarily used to describe WSDOT's authority for contract administration and technical issues. During Design-Build contracts, this same authority must be divided to engineers representing the Owner, the Engineer of Record, and the Design-Builder.

Proposal
Our team recommends producing a pdf (only) version of the WSDOT Standard Specifications for Design-Build contracts that change instances of the term "Engineer" to Design-Build Engineer-of-Record or the Design-Build Quality Assurance Manager, as appropriate.

A detailed description of the problem statement and proposal are attached for your review.

We ask for your support and guidance to move these recommendations to implementation as standard practice.

The WSDOT/ACEC Structures team consists of members from the WSDOT State Construction Office, WSDOT Plans Office, Bridge Design Office, NW Region Construction, CH2M Hill, HDR, T. Y. Lin International, HNTB, Parametrix, Jacobs Engineering, and Parsons Brinkerhoff.

Sincerely,

Richard B. Stoddard
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WSDOT Bridge & Structures Office

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RBS:rbs
Attachments

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Process Change Recommendation

Clarify Term "Engineer" in the Standard Specifications for Design-Build Contracts

WSDOT/ACEC Structures Team

Problem Statement

The Standard Specifications for Road, Bridge, and Municipal Construction (Standard Specs) anchor highway construction contracts in Washington. Language of the Standard Specs is structured for Design-Bid-Build (DBB) contracts, which have been the primary contracting mode of the Washington State Department of Transportation (WSDOT). Throughout the Standard Specs, authority for contract administration and technical issues resides with the Owner through a designated Engineer (Project Engineer, PE) per section 1-05.1.

In Design-Build (DB) contracts, the PE retains authority for some aspects of contract administration while the Contractor (Design-Builder) has authority for many technical and administrative issues. This authority shift in DB contracts makes use of the Standard Specs problematic. There are approximately 2000 instances of Engineer in the Standard Specs. These fall into 3 categories.

Category 1. Terms of advertisement and termination, use of State property, interpretation of contract requirements, payments, and final acceptance.
Category 2. Decisions on performance or acceptance of work, materials and workmanship.
Category 3. Technical decisions on site condition and design detail conformance to the contract.

Within current WSDOT DB contracts, authority for Category 1 is reserved for the Owner, while categories 2 and 3 are typically assigned to the Design-Builder. However, since decisions on construction quality (as it relates to design compliance) remain within the province of the licensed Engineer-of-Record (EOR) in accordance with Washington State law in the Revised Code of Washington (RCW), deferring Category 3 to the general commercial enterprise of the Design-Builder, without requiring EOR involvement, creates a potential conflict with licensing laws and regulations.

Current Process

With a growing number of DB contracts, special provisions are evolving to address unique contract terms. However, these special provisions continue to supplement the Standard Specs. Since the Standard Specs were written in a DBB format, the lines of responsibility and authority relating to engineering processes are not defined. The current approach for DB contracts is to address questions at a project level, which adds risk of constructive change in every construction contract. The Request for Proposals

(RFP) Section 1-03.3 integrates Divisions 2 through 9 of the Standard Specs by assigning the following definition for instances of the term "Engineer":

> "References to the Engineer in the context of provider of compliance judgment may mean Engineer-of-Record, the Design-Builder's Quality Assurance Manager or other appropriate representative of the Design-Builder, or it may mean a WSDOT representative, depending on the context, as determined by WSDOT in its sole discretion."

As can be seen from these contract provisions, interpretation of the term "Engineer" is case-by-case.

Desired Outcomes

The desired outcome of this proposal is to modify the Standard Specs to define the term "Engineer" for DB contracts by specifying one of the following three entities for each instance:

- Project Engineer (WSDOT PE)
- Engineer-of Record (DB EOR)
- Quality Assurance Manager (DB QAM)

The instances of "Engineer" in the Standard Specs that apply to WSDOT should remain as written, while those that can be delegated to the Design-Builder should be identified and assigned to either the DB EOR or the DB QAM.

The result will remove ambiguous references to the term "Engineer" in DB contracts, ensure that the EOR and Design-Builder are following RCW's for engineering design, and establish a reliable basis for competitive bids on DB contracts.

Proposal

Produce a pdf (only) version of the WSDOT Standard Specifications for Design-Build contracts that change instances of the term "Engineer" to Design-Build Engineer-of-Record or the Design-Build Quality Assurance Manager, as appropriate.

Pros

The direct benefits are:

- Clarity in the construction contract administration
- Reliability for WSDOT in the authority and actions of the EOR
- Provides clear definition of responsibility for the Project Engineer, Engineer of Record, and the Design-Builder's QAM
- Provides consistency for administration of design related issues during construction

Cons

- Effort in editing the Standard Specifications to create a separate document for design-build contracts
- DB Standard Specifications require update in tandem with updates to the Standard Specifications.
- There are a multitude of design and construction manuals that will still reference the authority of the State in a Design-Bid-Build context.

Stakeholders

- WSDOT Design-Build Policy Team
- WSDOT/AGC Design-Build Team

Estimated Schedule for Implementation

Upon approval of the process by WSDOT/ACEC Executive Committee, it is anticipated that it will take approximately six months to complete an edit of the Standard Specifications and produce a pdf copy for review and approval.

Testing

Once review and editing by WSDOT is completed, the need for testing is not anticipated.

Quality Performance Measures

The edits and approach to responsibility and authority within the Standard Specifications would be reviewed at all levels of design and construction management within the DOT in order to assure the final document in conformance with current WSDOT policies and procedures.

Acknowledgements

The template for this proposal is the current operating practice in British Columbia.