Implementing Practical Design on Design-Build Contracts

WSDOT is committed to incorporating practical design principles to align our project decisions with the needs of the project and to look for cost-effective solutions. On design-build projects, WSDOT has implemented several specific processes to insure we are embracing practical design to the fullest extent possible. Here is a summary of our efforts to champion practical design on design-build projects:

Practical Design during contract development – WSDOT typically develops the project baseline design to the 20-30% level for inclusion in the Request for Proposal (RFP). This early design work seeks out innovative and efficient solutions that provide the maximum benefit at the least cost. WSDOT also includes performance requirements in the RFP when feasible such that the Contractor’s designer can utilize practical design principles as they develop the design.

Alternative Technical Concepts – During the proposal phase when Contractors are reviewing WSDOT’s baseline design, they can submit Alternative Technical Concepts (ATC’s) for WSDOT approval. To be evaluated as an ATC, the proposal needs to be “equal or better” than the RFP requirements. In determining if an ATC proposal is equal or better, WSDOT can consider elements like safety, reduced environmental impacts, lower life-cycle costs, reduced impact on the travelling public, etc. All ATC’s found to be equal or better are approved and may be incorporated into the Contractor’s proposal.

Practical Design Workshop – WSDOT is experimenting with a Practical Design Workshop (PDW) that happens after the proposal process and once WSDOT has selected the Contractor. The PDW gives the Contractor the opportunity to bring forward practical design ideas that are not “equal or better” (i.e. didn’t qualify as ATC’s). While these proposals don’t meet the requirements of the RFP, they offer reduced cost, shortened contract time or other quantifiable benefits. These proposals may include design deviations or other modifications to WSDOT standards. WSDOT evaluates these proposals and approves the proposals that provide a practical design benefit to the project.

Besides these current efforts, WSDOT is working on some additional practical design opportunities:

ATC and PDW feedback loop – Development of a web-based tool to share ATC and PDW proposals with all WSDOT Regions. This will allow design teams developing new projects to review proposals that WSDOT has approved on past projects. It is to WSDOT’s advantage to incorporate these successful proposals into future projects so that we capture 100% of the benefit.

ATC’s that are not “equal or better” – WSDOT is evaluating ways to allow Alternative Technical Concepts are not equal or better to the RFP requirements. Since this has the potential of disrupting the competitive bidding process, this needs to be approached with caution.