WFLHD SUPPLEMENT 9.6.6.6-1

9.6.6.6 Information for the Construction Project Management Engineer

The purpose of this Supplement is to describe the Design Narrative. Add the following to <u>Section 9.6.6.6</u>:

9.6.6.6.1 Design Narrative

The Design narrative is intended to summarize for the Project Engineer any major project issues and to clarify the intent of the design presented in the contract plans and specifications. It is not simply a summary of all work elements, but a document providing insight into the background and decisions that drove the final design of the work elements within the contract. It is also an opportunity to inform the Project Engineer of potential pitfalls and complications that may arise during the construction phase.

Use the following outline to organize the information in the Design Narrative. The outline may be modified as appropriate to fit the characteristics of the project. The <u>Design</u> <u>Narrative</u> is available as an MSWord template.

- 1. **Introduction** Provide a brief description of the project (location, traffic volumes and concerns, major work elements, environmental document, etc.)
- 2. **Survey and Staking** Describe the survey data (aerial, ground survey, etc...) provided, when it was obtained and in what formats. Provide survey datum. Describe staking data and formats provided. Describe any additional survey that may be required for the project.
- 3. **Environmental** Describe mitigation measures or restrictions tied to the environmental document. Identify sensitive resource sites and special considerations when working around these areas.
- 4. **Typical Sections and Pavement Design** Provide a brief description of typical section, stating the basis for the design criteria (or design exception). Describe any current issues with the typical sections and pavement design that may impact Construction.
- 5. **Geotechnical** Make reference to any geotechnical and/or pavement report. Briefly describe the conclusions of the reports. Describe any current issues with the geotechnical design that may impact Construction.
- 6. **Hydraulics** Make reference to any hydraulic reports that have been produced. Briefly describe the methodology used and the conclusions of the reports. Describe any current issues with the hydraulic design that may impact Construction.
- 7. **Erosion and Sediment Control** Describe the design criteria and methodology used, and any acceptable alternatives to the proposed erosion control plan.

- 8. **Roadway Design** Describe any potential problems or unknowns within the roadway design and earthwork (e.g., variations in shrink swell, unstable slopes, potential increases in subexcavation, etc.) that may impact construction.
- 9. **Bridge Design** Describe any bridge designs and issues involved, as applicable.
- 10. **Traffic Control** Describe the intent and methodology used in developing the temporary traffic control plan. Describe any risks or potential alternatives to the proposed traffic control plan.
- 11. **Signing and Striping** Describe any issues with the signing and striping plan (striping with curve widening, installation of govt. furnished signs, etc.).
- 12. **Landscaping** Explain the involvement and intent of the Client agency in the landscaping plans. Describe any special issues with seeding (time of year, seeding mix, slope preparation, etc.).
- 13. **Rental Equipment** Clarify the intent of any rental equipment work, and purpose of equipment within these work items. Identify any additional rental equipment quantities to be used at the CO's discretion.
- 14. **Specialty Work (as determined by the CO)** Explain any work within the contract requiring direction from the CO. Discuss the uncertainties that resulted in the contract requiring the CO to make field determinations. Discuss overall objectives of this work and identify support person for the CO to contact when this work is performed.
- 15. **Right-of-Way** Describe any unresolved right-of-way issues that may impact Construction. Identify potentially contentious landowners and the issues surrounding them.
- 16. **Utilities** Describe any utility work that is part of the design and the agreements in place for temporary and permanent relocation.
- 17. **Construction Schedule** Describe the logic, time constraints, and production rates used in developing the construction schedule.
- 18. Construction Cost Estimate Briefly describe the engineer's estimate giving the total cost. Include contingencies and inflation rates used as well as price quotes received for major work items. Identify any major work items with significant variations in the awarded unit price versus the Engineers Estimate unit price and discuss justifications or negotiations relating to those items as applicable.