

Structures Engineering Instructions (SEI)

Distribution: Structures, Director PDD, Assistant Director PDD, PDD Section Managers, Chief of Contract Admin., Director Ops., Assistant Director Ops., Consultants

Approved: <u>Wm. Michael Hedges</u> Date: <u>4/20/09</u> Wm. Michael Hedges, Structures Program Manager

Subject: LRFD 5.10.8 Temperature and Shrinkage Reinforcement

Administrative Information:

Effective Date: This SEI shall be effective for Structures Section projects from the date of approval.

Superseded SEI: None.

Exceptions: Exception to this SEI may be granted by the Structures Design Engineer.

Disposition of SEI Content: The content of this SEI will be incorporated into a future revision to the Structures Manual.

Purpose: AASHTO LRFD Guidance - 5.10.8 Shrinkage and Temperature Reinforcement.

Technical Information:

Cast-in-Place (CIP) Concrete Slab Bridge decks and CIP approach slabs are exempt from Article 5.10.8.

The standard details that have been used prior to LRFD implementation for CIP slab bridges and approach slabs have not included a top mat of reinforcement to control cracking due to the effects of shrinkage and temperature. To date the performance of the slab bridges and approach slabs constructed with out the top mat of reinforcing steel have been satisfactory. In addition, the proximity of a reinforcing steel mat near the top of the deck may cause long term durability problems due to corrosion due to chloride intrusion.

Implementation:

The content of this SEI will be implemented immediately on all projects.

Transmitted Materials:

None.