Supplemental Specification
2005 Standard Specification Book

SECTION 03412M

PRESTRESSED CONCRETE

Delete Article 1.3 and replace with the following:

1.3 REFERENCES

A. AASHTO M 203: Steel Strand, Uncoated Seven-Wire for Prestressed Concrete

B. AASHTO M 270: Structural Steel for Bridges

C. AASHTO Standard Specifications for Highway Bridges, Division II

D. AASHTO LRFD Bridge Construction Specifications

E. ASTM C 150: Portland Cement

F. Federal Standards

G. UDOT's Quality Management Plan

Add the following to Part 1, Article 1.4:

E. Do not ship prestressed concrete members until tests on concrete cylinders, manufactured of the same concrete and cured under the same conditions as the girders, indicate that the concrete of the particular member has attained a compressive strength equal to the specified design compressive strength of the concrete in the member.

Add the following to Part 1, Article 1.5:

C. Erection Plan: Submit an Erection Plan 10 days prior to beginning erection of prestressed concrete members for documentation purposes only. The Engineer will not approve the Erection Plan. Fully illustrate the proposed method of erection. Provide complete details of the process including, but not limited to:
   1. Temporary supports, bracing, guys, dead-men, lifting devices, connection details, and attachments to bridge members.

2. The schedule and sequence of erection, location of cranes, crane capacities, location of lifting points on the bridge members, member weights and any other assumed loads during progressive stages of construction.
3. Complete details for all anticipated phases and conditions during erection.
4. Minimum number and arrangement of primary members, secondary members, connections, etc. that must be installed, braced, and/or properly connected to provide structural integrity and stability.
5. Incorporate into the plan the requirements from this section, Article 3.7.
6. A professional engineer, licensed in the State of Utah, will approve, sign, and seal the Erection Plan and supporting calculations. The professional engineer must approve all changes to the Erection Plan prior to implementation.

Add the following to Part 3:

3.7 ERECTION

A. Maintain responsibility for all aspects of girder erection during all stages of construction, including the protection of prestressed concrete members, the workers, and the traveling public.

B. Erect all prestressed concrete members in compliance with the Erection Plan. Erect girders in a manner that prevents damage to all elements of the structure.

C. Temporarily support, anchor and brace all erected superstructure members as necessary for stability and to resist wind or other loads until they are permanently secured to the structure. Support, anchor and brace all superstructure members as detailed in the Erection Plan before allowing traffic under the bridge.

D. Design temporary supports and falsework in accordance with the current edition of the AASHTO LRFD Bridge Construction Specifications, Section 3 "Temporary Works."

E. Accurately assemble all parts as specified in the contract documents or erection drawings. Follow any match-marks.

F. Carefully handle materials so that no parts will be cracked, chipped, broken or otherwise damaged.

G. Use lifting devices in a manner that does not cause damaging, bending, or torsional forces.

H. Before the members are erected, clean bearing surfaces and surfaces that will be in permanent contact.

I. Do not open traffic under a partially-erected bridge superstructure, unless allowed in the Erection Plan or approved by the professional engineer who approved, signed, and sealed the Erection Plan.