

PERMANENT CHANGES TO PROJECT DATED SPECIAL PROVISIONS

REVISION OF SECTION 105 SEGMENTAL CONCRETE CONTROL OF WORK

DATE	AUTHOR	DESCRIPTION OF CHANGE
3/2/90		Conversion from WANG
9/17/1999	M.Nord	Verified the specification references for conformance with the <i>1999 Colorado DOT Standard Specifications for Road and Bridge Construction</i> . No exceptions were found. On page 2 subsection 7: Removed F-08-AH and replaced it with an underlined blank. Converted to Microsoft Word 97 SR-2

REVISION OF SECTION 105
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Section 105 of the Standard Specifications is hereby revised for the project as follows:

Subsection 105.02 shall include the following:

The Contractor shall submit, as soon as possible, but not more than 120 calendar-days following the "Notice to Proceed", complete final plans and computations for review and approval. These final plans must be approved before any approvals will be made on working and shop drawings. Plans and computations will be required for only those portions of the work that are modified, changed or affected.

The preliminary and final computations and drawings will not be paid for directly, but shall be considered incidental to the contract. The submittal of the aforementioned computations and drawings will not absolve the Contractor of any responsibility for fabrication plans required under Section 105 or elsewhere in these specifications.

No additional compensation shall be allowed for any subsequent changes or deviations from the plans, for any additional material, equipment or costs.

The contract time shall apply. No extensions of these dates will be allowed for preparation, submittal or approval of plans or computations.

The Contractor shall submit information which shall include, but not necessarily be limited to, the following:

1. Detailed shop drawings in accordance with Section 618.
2. Schedule of casting and erection of segments with approximate dates; the schedule shall show chronological order of every phase and stage of erection and construction of the superstructure.
3. Method and length of curing.

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4. Concept drawings showing schematic methods for handling and erecting segments; these are not working drawings, but are provided for information only. The Contractor shall submit for review, by the Engineer, his proposed erection details and appropriate calculations showing the methods, equipment, and construction loads analysis involved with the various bridge components. No erection of the precast segments will be permitted until the erection details are approved by the Engineer.
5. Any handling and erection equipment proposed for use shall be consistent with the concept shown on the plans in order to assure compatibility with the overall design.
6. The design and construction of all special handling and erection equipment is the Contractor's responsibility. No extra payment will be made to the Contractor for any cost incurred in modifying the permanent structure as a result of temporary loadings induced by alternate handling and erection equipment.
7. Additional information: In addition to the above, the following information for Structure _____ shall be submitted for review:
 - A. Locations and layout drawing of the casting site.
 - B. Complete details of the fabrication system to be used, including the forms, foundations and geometry controls.
 - C. Details of handling, storing and transporting segments.
 - D. Details of handling traffic during erection.
 - E. Type and supplier of epoxy adhesive and method and procedure of application.

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- F. A casting curve prepared in accordance with casting and erection methods and schedule proposed by the Contractor. The casting curve shall be of sufficient accuracy to allow the determination of control point settings for accurately casting the segments. The preparation of the casting curve shall recognize all deviations from straight line and deformations due to the final required alignment and due to dead load, erection loads, post-tensioning stresses, including secondary moments, creep and shrinkage. The preparation of the casting curve shall be done at no additional cost to the Division, but shall be considered incidental to the contract.

FINAL WORK PLAN

It shall be the Contractor's responsibility to submit deflections and camber data for each stage of construction, as required, to construct the structure to its final grade. The procedure used shall account for the effect of time dependent prestress losses, shrinkage and creep which occur during the construction phase. The data for the entire bridge shall be submitted for approval by the Engineer prior to commencing the erection.

The camber of the structure will be monitored at each stage and corrective actions, as approved by the Engineer, shall be performed by the Contractor to assure proper erection of the structure to its final grade.

The final work plan shall include graphs, charts or tables showing the theoretical location of forming. This data shall be furnished to the Engineer for his use in checking the erection.

The final work plan shall also include complete details of the system to be used, including all geometry controls.

DESIGN CALCULATIONS

Design calculations shall be submitted for falsework, travelers, staging, forms and any other temporary construction which may be required and which will be subject to calculated stresses. Calculations also shall be submitted to support the system and method of stressing proposed by the Contractor. The calculations shall be done under the direct supervision of a professional engineer registered in the State of Colorado, and shall be approved by him and contain his seal.