## ALABAMA DEPARTMENT OF TRANSPORTATION

General Application Special Provision

DATE: October 12, 2022 GASP No. 22-GA0017

EFFECTIVE DATE: February 1, 2023

SUBJECT: Electronic Submittals for Shop Drawings and Working Drawings.

Alabama Standard Specifications, 2022 Edition, SECTION 105 shall be amended as follows:

# SECTION 105 CONTROL OF WORK

105.02 Plans and Drawings.

(b) Shop Drawings.

Subarticle 105.02(b) shall be replaced by the following:

- (b) Shop Drawings.
  - 1. Preparation of Drawings

When shown as a contract requirement, the Contractor shall prepare and submit shop drawings for approval. Shop drawings shall be the proposed fabrication details for structural members and components.

Shop drawings for structural steel members and components shall be prepared on 22 inch x 34 inch size plan sheets. Shop drawings for structural members other than structural steel shall be prepared on 22 inch x 34 inch size plan sheets or on 11 inch x 17 inch sheets.

The Contractor shall carefully verify and shall become fully responsible for the correctness of all dimensions other than the principal controlling dimensions shown on the plans. The Contractor shall immediately advise the Engineer of any errors or discrepancies that are found during the preparation of the drawings.

All drawings shall be clear and complete. The signature of the preparer shall be shown on all drawings.

#### 2. Submittal and Review

Shop drawings shall be submitted by the Contractor by either e-mail or physical copy. Shop drawings for structural members and components for bridge structures shall be submitted to the State Bridge Engineer for review and approval. A transmittal letter, in PDF format for e-mail, shall accompany each submittal detailing the content submitted. At a minimum, the transmittal letter shall indicate the Contractor's contact information including a valid e-mail address (when applicable), the ALDOT project number, county or counties, project description, name and address of the preparer of the shop drawings and details of the shop drawings provided in the submittal. Incomplete transmittals may cause rejection of the entire submittal.

Ten business days shall be allowed for each review of each set of drawings containing five sheets or less and two business days shall be allowed for each sheet of each set of drawings containing more than five sheets. If the review is not completed within the number of days allowed, and the delay is not the fault of the Contractor,

the delay will be considered for an extension of contract time.

#### a. E-Mail Submittals

Shop drawings shall be submitted to the State Bridge Engineer at <a href="mailto:BridgeShopDwgs@dot.state.al.us">BridgeShopDwgs@dot.state.al.us</a>. For each e-mail submittal, the subject line shall include the project number, county or counties and type of submittal (e.g., structural steel shop drawings, prestressed girder shop drawings, etc.). A complete PDF copy shall be submitted for review. If necessary, a PDF copy of the drawings with comments noted in red will be e-mailed to the Contractor. After needed corrections are made, an updated copy of the shop drawings shall be submitted by the Contractor to the State Bridge Engineer for verification and noting further comments if necessary. This cycle will be repeated until no further comments are noted.

## b. Physical Copy Submittals.

Two paper copies of the shop drawings shall be submitted for review. If necessary, one copy of the drawings will be returned to the Contractor with comments noted in red. After needed corrections are made, two copies of the updated drawings shall be submitted to the State Bridge Engineer for verification and noting further comments if necessary. This cycle will be repeated until no comments are noted.

#### 3. Approval of Drawings

#### a. E-Mail Submittals.

When the drawings have no further comments, the State Bridge Engineer will electronically stamp the drawings "Approved" along with the current date. The State Bridge Engineer will e-mail a copy of the approved drawings to the Contractor.

## b. Physical Copy Submittals.

When the drawings have no further comments, the State Bridge Engineer will physically stamp the drawings "Approved" along with the current date. The State Bridge Engineer will return by mail one complete copy to the Contractor.

#### 4. Revisions after Approval

#### a. Electronic Mail Submittals.

All revisions to the previously approved shop drawings shall be flagged. A summary of revisions shall be included on the affected sheet(s) and dated. The revised drawings shall be emailed to the State Bridge Engineer for review and approval and will be subject to the review cycles as noted in item 2A above. For each e-mail submittal, the subject line shall include the project number, county or counties and type of submittal (e.g., structural steel shop drawings, prestressed girder shop drawings, etc.). When the revised drawings have no further comments, the State Bridge Engineer will electronically stamp the revised drawings "Approved, Revised" along with the revision number and current date. The revised drawings will be e-mailed to the Contractor.

## b. Physical Copy Submittals.

All revisions to the previously approved shop drawings shall be flagged. A summary of revisions shall be included on the affected sheet(s) and dated. Two paper copies of the revised shop drawings shall be submitted to the State Bridge Engineer for review and approval and will be subject to the review cycles noted in item 2B above. When the drawings have no further comments, the State Bridge Engineer will physically stamp the revised drawings "Approved, Revised" along with the revision number current date. The revised drawings will be

returned by mail to the Contractor.

#### 5. Responsibility

The approval of drawings will not release the Contractor from being solely and fully responsible for the content and accuracy of the drawings. Extra work that may result from omissions and errors in the shop drawings shall be done without additional compensation.

### 6. Beginning Fabrication upon Approval

Fabrication shall not begin until the drawings have been approved. There will be no compensation for, or acceptance of structural members and components that are fabricated prior to approval of the drawings.

#### (c) Working Drawings.

Subarticle 105.02(c) shall be replaced by the following:

#### (c) Working Drawings.

#### 1. Preparation of Drawings.

The Contractor shall prepare and submit working drawings to supplement the plans. Working drawings shall be prepared to provide a complete illustration of the construction methods and materials proposed for use by the Contractor. Design calculations shall be submitted with the drawings. The signature, seal, and date of signature shall be placed on all details and design calculations by a Professional Engineer that is licensed in the State of Alabama and not employed by the ALDOT.

Working drawings and design calculations shall be submitted for:

- 1. Cofferdams, sheeting and shoring near a railroad track;
- 2. Cofferdams where "cofferdam and pumping" is required:
- 3. Structural steel girder erection plans for continuous span bridges;
- 4. Temporary bracing to provide stability for bridge girders;
- 5. Stay-in-place bridge deck forms;
- 6. Falsework for bridge deck overhangs (portion of deck outside of exterior girders);
- 7. Falsework for bridge bent caps;
- 8. Proposed temporary bridges;
- 9. Temporary steel sheet pile walls;
- 10. Falsework for the support of the top slab of cast in place concrete culverts;
- 11. Proposed placement of cranes on bridges;
- 12. Construction loads on bridges.

Working drawings and design calculations shall be submitted for any other construction process where noted on the plans or shown to be required in these specifications.

The Contractor shall be fully responsible for all of the costs of unacceptable construction work whether or not working drawings and design calculations are submitted for the construction procedures and temporary materials that affect the quality of construction.

#### 2. Submittal.

Working drawings shall be submitted by the Contractor by either e-mail or physical copy to the State Construction Engineer for review and approval. A transmittal letter shall accompany each submittal detailing the content submitted. At a minimum, the transmittal letter shall indicate the Contractor's contact

information including a valid e-mail address, the ALDOT project number, county or counties, project description, name and address of the preparer of the working drawings and details of the working drawings provided in the submittal. Incomplete transmittals may cause rejection of the entire submittal. The drawings and calculations shall be submitted well in advance of the point in time when the work will be performed.

Working drawings for work on or over the railroad right-of-way must have the approval of the railroad company before the work will be allowed to begin. The Contractor shall make the submittal far enough in advance of the need for the work to begin so that the railroad company will have ample time to review the drawings and design calculations.

#### a. E-Mail submittals.

Working drawings and calculations shall be submitted to the State Construction Engineer at <a href="ConstructionWorkDwgs@dot.state.al.us">ConstructionWorkDwgs@dot.state.al.us</a>. For each e-mail submittal, the subject line shall include the project number, county or counties and type of submittal (e.g., Falsework for Bridge Deck Overhangs, Stay-in-Place Bridge Deck Forms, etc.). A complete PDF copy shall be submitted for review. If necessary, a PDF copy of the drawings with comments noted in red will be e-mailed to the Contractor. After needed corrections are made, an updated copy of the working drawings shall be submitted by the Contractor to the State Construction Engineer for verification and noting further comments if necessary. This cycle will be repeated until no further comments are noted.

### b. Physical Copy submittals.

Two paper copies of the working drawings and calculations shall be submitted to the State Construction Engineer for review. If necessary, a copy of the drawings and calculations will be returned to the Contractor with comments noted in red. After needed corrections are made, two copies of the updated drawings and calculations shall be submitted to the State Construction Engineer for verification and noting further comments if necessary. This cycle will be repeated until no comments are noted.

Working drawings and design calculations that have been submitted and distributed to ALDOT construction personnel by the State Construction Engineer may be resubmitted for another project provided all requirements are identical in nature to the previous project. The resubmittal of working drawings and calculations shall be signed, sealed and dated again by the Professional Engineer that originally sealed the drawings. The Professional Engineer shall clearly indicate on the drawings and calculations that the resubmittal is applicable to the new work.

## 3. Distribution.

The drawings and design calculations will be checked for completeness. The drawings will be distributed to ALDOT construction personnel for inspection of the work. If submitted through electronic mail, the Approval for distribution will be given to the Contractor through electronic PDF by the Engineer, indicated by an electronic stamp. If submitted through physical copies, the Approval for distribution will be given to the Contractor through paper copies by the Engineer, indicated by a physical stamp. The distribution of the drawings will not release the Contractor and the Professional Engineer from being solely and fully responsible for the

accuracy and adequacy of the drawings. Extra work that may result from errors in the working drawings and design calculations shall be done without additional compensation.

4. Beginning Work shown on Working Drawings.

Construction shall not be performed on any item of work for which Working Drawings are required until the Engineer receives the drawings for inspection of the work. There will be no compensation for work that is performed prior to the point in time that ALDOT personnel have the drawings for use in inspecting the construction work.