

Ohio Department of Transportation

BRIDGE STAGE 3 PLAN REVIEW CHECKLIST

VERSION 1 DECEMBER 15, 2014

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12/15/2014

BRIDGE STAGE 3 PLAN REVIEW CHECKLIST

Complies with the 2013 CMS

Bridge No: <u>CUY-00090-16.960 (Bridge 14)</u>

Checker: KAG Date: 5/22/2024

PID: <u>82382</u>

Applicable bullet items shall be included in each Stage 3 design review submittal. This "checklist" should be considered as a starting point for each Stage 3 design review. Each structure will contain anomalies specific to that site and should be reviewed/analyzed accordingly.

NOT APPLICABLE

NOT ADDRESSED

GENERAL

- ☑ All Stage 2 comments resolved and Stage 3 plans are as per approved Stage 2.
- ☑ All correspondence has been reviewed?

ESTIMATED QUANTITIES

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- All materials and/or work shown in the plans listed in the Estimated Quantities or otherwise accounted for?
- ☑ Foundation quantities agree with the foundation recommendations made during Stage 2 review (e.g., use of pre-bored holes/pile points, minimum bedrock socket depth, etc.)? If pile design load differs from the previously anticipated, the estimated pay lengths may need to be revised
- ☑ Term "as per plan" used appropriately? Plan notes used to describe "as per plan" items where appropriate?
- □ Term "See Proposal Note" included with the applicable pay items (see Reminder List and List of Proposal Notes)?
- ☑ Units of measure in conformance with the Item master (lump sum, cubic yard, lineal foot, etc.) and in agreement with plan notes and proposal notes?
- ☑ Columnar breakdown provided in the quantity table (i.e. Abutments, Piers, Superstructures and General)?
- ☑ Quantities listed in the columnar breakdown add up to the total? (Check these)

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- All Special items accompanied by plan notes or proposal notes that completely describes the item? If a "standard" proposal note does not exist, plan notes or a proposal note should contain:
 - a. Description of the item
 - b. Material requirements
 - c. Construction procedures
 - d. Submittal requirements (shop drawings, etc.)
 - e. Method of Measurement.
 - f. Basis of Payment.
- Quantity amounts make sense? Generally, they do not need to be checked; however, quick calculations may show if an obvious oversight has been made.

Items to be paid 100 percent by other agencies properly identified (County/local governments, utilities, etc.)?

REINFORCING STEEL

A. REINFORCING DETAILS

- ☑ Bar lengths conform to (BDM 301.5.1)? The maximum bar length should be approximately 40 feet. For longitudinal deck reinforcing, bar lengths of 30 feet are preferred, except for one odd length at end of run.
- ☑ Length of the short leg of L-shaped bars less than 8'-0"? (BDM 301.5.1)
- ☑ Minimum reinforcing steel provided in all faces of retaining walls and wall-type abutments and piers for shrinkage and temperature reinforcement? (BDM 301.5.8)(LRFD 5.10.8)
- Splice and development lengths for epoxy bars conform to current AASHTO requirements? (LRFD 5.11.2)
- ☑ All bar splice lengths shown by plan note, on plan details, combination or reference?
- ☑ Reinforcing steel clearances are shown, except where 2 inches?
- ☑ Bridge seat reinforcement adequately clear of bearing anchors?
- ☑ Treatment of reinforcing steel appropriate at all construction, contraction, and expansion joints?
- Reinforcing steel in footings comply with (BDM 303.4.1.3) (i.e., secondary rebars under main rebars, rebars at bottom of footing and not top of piles, dowel legs placed at bottom layer of footing rebars)?
- ☑ For cantilevered pier caps (T-type and cap and column), is the top layer of bars bent down the end face of the cap? Side faces adequately reinforced to resist longitudinal superstructure forces? (BDM 303.3.2.8)
- Lateral ties in T-type and wall type piers as per section (BDM 303.3.2.8).
- All reinforcing epoxy coated? (Except certain bars in prestressed box beams) (BDM 302.5.1.8)
- ☑ Letter prefix A (abutments), P (piers), S (superstructure), SP (spirals), DS (drilled shafts) generally used in bar marks? (BDM 301.5.2)

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□ Mechanical connectors used where appropriate? (BDM 301.5.3)

□ Mechanical connectors designated as the non-protruding type where necessary?

□ Splices avoided at pier horizontal construction joints, except at top of footing? (BDM 301.5.3

B. STEEL LIST

☑ Bar list conform with the format shown in (BDM Figure 301.5.2-1)

☑ Proper length deduction made for bent bars? (BDM Figure 301.5.4-3)

- ☑ For spirals, is core diameter, pitch, mark, number, height, and weight given? Spirals for 36-inch columns generally 30 inches outside diameter at 4 ½inch pitch? (BDM 303.3.2.1)
- ☑ Spiral material given in the General Notes (Design Data)? (BDM 602.2)

□ Reinforcing bars that will utilize mechanical connectors noted as such? (For stage construction, etc. Required dowel bar connector length specified on the drawings as well as a plan note provided?

☑ Details for drilled shaft reinforcing shown on list.

I acknowledges that the Stage 3 Design Plans have been reviewed in accordance with this checklist and that all responses are correct and accurately reflect the information presented on the submitted Design Plans.

Kimberly Guice

5-22-2024

Signature

Date