

## STATEWIDE CRITICAL REQUIREMENTS - FISCAL YEAR 2017/2018

### Quality Assessment Category Number 10B Bridge Structures - Bearings/Beams/Bolts

1. Does the CEI staff verify that anchor bolts and bearing plates are in the correct location and are installed properly, that bolt material is per specifications, that expansion plate temperature adjustments are accurately performed, that the proper bolt setting method is used, that anchor bolt holes are not drilled through rebars, and that a substructure survey is performed prior to erection with discrepancies reported to the Project Administrator for resolution? Do elastomeric bearing pads have deformations that do not exceed dimensional tolerances? Is there documentation to substantiate that these requirements were met and does a field visit verify this? [Spec. 460-7, 932-2]
2. Does the CEI staff verify that detailed procedures are followed to establish the correct snug tight torque for bolts; that for snugging bolts in the connection, when an impact wrench is used, that the wrench is set at or above the daily snug tight torque; and that an inspector has witnessed the snugging of each bolt? Is there documentation to substantiate that these requirements were met and does a field visit verify this? [Spec. 460-5]
3. Does the CEI staff verify that each fastener assembly is tightened to at least the minimum tension shown in the specifications; that strict tightening procedures are adhered to; that bolts are not tensioned to more than 115% of the required minimum bolt tension; that for final tightening of the connection, the turn-of-nut or DTI method is used and is in compliance with the detailed procedure required by the specifications; that an inspector witnesses the turning of every nut or verifies each DTI gap; and that a washer is under every element that is turned? Is there documentation to substantiate that these requirements were met and does a field visit verify this? [Spec. 460-5]
4. Does the CEI staff verify that assembly and disassembly of falsework used to temporarily support permanent structural components are in compliance with the Contractor's erection plan and approved shop drawings? Have any violations of the erection plan, or have falsework systems that seem to be inadequate, been immediately reported to the Project Administrator? Is there documentation to substantiate that these requirements were met and does a field visit verify this? [Spec. 5-1, 460-7]
5. Does the CEI staff verify that for construction affecting public safety, beam stability calculations have been submitted for Engineer review as well as an erection plan by a Specialty Engineer and has a Specialty Engineer or an authorized designee inspected the initially erected structure in the field? Does the Contractor perform daily inspections of erected members until the deck is completed? For all steel, does the Contractor submit an erection plan for Engineer review prior to the start of erection? Are shear studs installed in the field and are stud bend test records maintained? Is there documentation to substantiate that these requirements have

been met and does a field visit verify this? [Spec. 460-7, 5-1, Good Practice]

6. Has the Buy America specification been complied with? Is there documentation to substantiate that these requirements have been met and does a field visit verify this? [Spec. 6-5]