|    | INSPECTOR CHECKLIST: 202 -  | BRID | GE | DEN | OLITION |
|----|---|------|----|-----|---------|
|    | Inspection Item   | Yes  | No | N/A | Remarks |
|    | PRE-CONSTRUCTI  | ON   | •  |     |         |
| 1  | Safety Critical/Bridge Removal Plan submitted and approved?   |      |    |     |         |
| 2  | Has Bridge Removal Conference been held at least seven (7) days prior to the beginning of removal operations? Are Minutes from the conference complete and available to field personnel so key contact information and sequence of removal are available during removal operations? |      |    |     |         |
| 3  | Is temporary falsework, bracing, or shoring required? Have drawings been submitted and approved?  |      |    |     |         |
| 4  | Limits of removals marked?  |      |    |     |         |
| 5  | Items designated for removal measured?  |      |    |     |         |
| 6  | Existing conditions documented (survey monuments, utilities, existing structures, landscaping/fencing, water elevations, etc.)?   |      |    |     |         |
| 7  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?   |      |    |     |         |
| 8  | Are roadway protections in place (timber cribbing, falsework/shoring, rubber mats, netting, etc.)?  |      |    |     |         |
| 9  | Are railway permits required and obtained? Are flaggers and/or railroad representatives scheduled?  |      |    |     |         |
| 10 | Have light rail lines been deenergized? Are flaggers and/or light rail representatives scheduled?   |      |    |     |         |
| 11 | Are SWPPP measures in place to protect existing conditions and bodies of water? Are water detours in place per plan?  |      |    |     |         |
| 12 | Have MHT plans been submitted and approved? Have they been installed per plan?  |      |    |     |         |
| 13 | Are there designated areas for QA staff to safely witness removals? Have stopping points been determined to allow for inspection?   |      |    |     |         |
| 14 | Are there fire control measures on site?  |      |    |     |         |
| 15 | Are spill kits on site?   |      |    |     |         |
| 16 | Have hazardous materials been identified and is the Contractor prepared to mitigate these hazards (lead-based paint, asbestos, slurry, etc.)?   |      |    |     |         |
| 17 | Have emergency response agencies been notified 24 hours in advance of work?   |      |    |     |         |
|    | CONSTRUCTION  | N    |    |     |         |
| 18 | Is the Contractor's Engineer on site as required per Section 202: Removal of Bridge?  |      |    |     |         |
| 19 | Have all sawcuts been performed and are they at the proper line, grade, and depth?  |      |    |     |         |
| 20 | Have bridge components (columns, abutments, footings, etc.) been removed to the proper depth?   |      |    |     |         |
| 21 | Are protected elements (reinforcing steel, existing bridge components, etc.) free of damage?  |      |    |     |         |

|    | Inspection Item  | Yes | No | N/A | Remarks |
|----|--|-----|----|-----|---------|
| 22 | Is the Phasing and Schedule being followed per the approved Safety Critical/Bridge Removal Plan?   |     |    |     |         |
| 23 | Are proper hammer sizes and equipment being used for specified removals?   |     |    |     |         |
| 24 | Is dust being maintained? Are environmental, HAZMAT, and other safety plans being followed?  |     |    |     |         |
| 25 | For multi-day operations, has the Contractor provided a Daily Report and ensured the area and structure are safe to leave in its condition overnight?  |     |    |     |         |
|    | POST-CONSTRUCT   | ION |    |     |         |
| 26 | Have cavities left by removals been filled and compacted?  |     |    |     |         |
| 27 | Before opening back to traffic, has roadway been cleared of loose materials/debris? Has the roadway been swept? Is the roadway free of damage and safe to open to public? Have vertical clearnaces been checked? |     |    |     |         |
| 28 | Have railroad or light rail facilities been reenergized and ready for operation?   |     |    |     |         |
| 29 | Have dimensions of remaining elements been identified and left per plan? Are remaining elements free of damage and structurally sound?   |     |    |     |         |
| 30 | Has QA received copy of written approval from Contractor's Engineer that removal has been performed per approved Safety Critical/Bridge Removal Plan?  |     |    |     |         |

|    | INSPECTOR CHECKLIST: 202 - D   | ECK | REH | <b>HAB</b> | ILITATION |
|----|--|-----|-----|------------|-----------|
|    | Inspection Item  | Yes | No  | N/A        | Remarks   |
|    | PRE-CONSTRUCTION PRE-CO | ON  |     |            |           |
| 1  | Reviewed Structure Plans? Familiar with Structural Worksheets for Deck Repairs including, B 202-1: HMA Overlay and B-202-2: Polyester Concrete Overlay?  |     |     |            |           |
| 2  | Deck has been sounded using Chain Dragging or Hammer to locate areas of repair? Locations have been identified with marking paint? Have existing deck conditions been photographed and documented on plan sheets?  |     |     |            |           |
| 3  | Contractor's means & methods for removal have been submitted?  |     |     |            |           |
| 4  | If required, have MHT plans been submitted and approved? Have the MHTs been installed per the approved MHT?  |     |     |            |           |
| 5  | Is the proper sized equipment on site (15 lb. pneumatic hammers)?  |     |     |            |           |
| 6  | If Class 3 repairs, has formwork been submitted and approved?  |     |     |            |           |
| 7  | Overlay materials have been submitted and approved?  |     |     |            |           |
| 8  | If using Thin Bonded Overlay, has a Pre-Paving Concrete been held per 519.07)?   |     |     |            |           |
|    | CONSTRUCTION   | N   |     |            |           |
| 9  | Have all sawcuts been performed and are they at the proper line, grade, and depth?   |     |     |            |           |
| 10 | Are protected elements (reinforcing steel, existing bridge components, etc.) free of damage? If not, have they been repaired or replaced?  |     |     |            |           |
| 11 | Has remaining rebar been cleaned? Has epoxy coated rebar been coated? Has black rebar been sandblasted?  |     |     |            |           |
| 12 | Has remaining rebar been inspected? Is there more than 25% section loss?   |     |     |            |           |
| 13 | Are removals per specified Class?  |     |     |            |           |
|    | Class 1: Maximum removal to middle of top rebar mat  |     |     |            |           |
|    | Class 2: Minimum 1" below top rebar mat and maximum removal of half deck thickness   |     |     |            |           |
|    | Class 3: Full depth repair   |     |     |            |           |
| 14 | If Class 1 repair, ensure only Thin Bonded Overlay is used   |     |     |            |           |
| 15 | If Class 2 repair, is there a solid bond between the existing concrete and rebar? If not, may need to go to Class 3 repair.  |     |     |            |           |
| 16 | If Class 3 repair, has formwork been installed per approved submittal?   |     |     |            |           |
| 17 | For Thin Bonded Overlay, ensure proper surface preparation and application. Surface temps between 40-100 degrees F; Place Primer within 5 minutes of mixing; re-apply as needed; place overlay 15-120 minutes after primer.  |     |     |            |           |
| 18 | For concrete patching, have maturity meters been set?  |     |     |            |           |
| 19 | For concrete patching, has cure material been applied per specifications?  |     |     |            |           |
| 20 | For Waterproofing (Membrane), ensure proper surface preparation and application. Refer to specifications to determine if either shot or sand blasting is required.   |     |     |            |           |

|    | Inspection Item   | Yes | No | N/A | Remarks |  |  |
|----|---|-----|----|-----|---------|--|--|
| 21 | Is dust being maintained? Are environmental, HAZMAT, and other safety plans being followed?   |     |    |     |         |  |  |
|    | POST-CONSTRUCTION   |     |    |     |         |  |  |
| 22 | Has Thin Bonded Overlay been cured for 4 hours or until a reading of 25 on Schmidt hammer has been achieved?  |     |    |     |         |  |  |
| 23 | Has concrete material testing method been approved by regional meterials team? Has the concrete been tested per this method and met required strength (2500 PSI) prior to opening to traffic? |     |    |     |         |  |  |

|    | INSPECTOR CHECKLIST: 502 - DRIVEN PILES  |     |    |     |         |  |  |
|----|--|-----|----|-----|---------|--|--|
|    | Inspection Item  | Yes | No | N/A | Remarks |  |  |
|    | PRE-CONSTRUCTI   | ON  |    |     |         |  |  |
| 1  | Safety Critical Plan submitted and approved?   |     |    |     |         |  |  |
| 2  | Pile Driving Equipment (pile driving hammer, hammer cushion, helmet, pile cushion, etc.) submitted and approved per 502.05?                                |     |    |     |         |  |  |
| 3  | Wave equation analysis submitted?  |     |    |     |         |  |  |
| 4  | Certified Welding Inspector (CWI) certifications submitted?  |     |    |     |         |  |  |
| 5  | Reviewed and familiar with pile type, shape, length, locations, orientations, driving depth, refusal, bearing capacity, cut-off elevation, splicing, etc.? |     |    |     |         |  |  |
| 6  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?            |     |    |     |         |  |  |
| 7  | If needed, has excavation been completed or has fill been placed and accepted prior to driving?  |     |    |     |         |  |  |
| 8  | Has layout, location, and orientation of piles been staked and checked?  |     |    |     |         |  |  |
| 9  | Have hammer settings been checked and verified to match specifications?  |     |    |     |         |  |  |
| 10 | Is pre-drilling required?  |     |    |     |         |  |  |
| 11 | Are test piles required?   |     |    |     |         |  |  |
| 12 | Is Staff Bridge needed for use of Pile Driving Analyzer (PDA)?   |     |    |     |         |  |  |
|    | CONSTRUCTION   | V   | •  |     |         |  |  |
| 13 | Does inspector have proper PPE for operation? Vest, eye protection, hearing protection, etc.?  |     |    |     |         |  |  |
| 14 | Have the piles been made in the USA? Do the heat numbers on the piling match the Mill Test Reports?  |     |    |     |         |  |  |
| 15 | Does the inspector have the necessary pile driving forms to track and log all necessary data during driving operations?                                    |     |    |     |         |  |  |
| 16 | Have pile types, lengths, sizes, heat numbers, conditions, certifications, and Mill Test Reports been documented?  |     |    |     |         |  |  |
| 17 | Does equipment on site match what was submitted and approved?  |     |    |     |         |  |  |
| 18 | Are driving leads adequate?  |     |    |     |         |  |  |
| 19 | If using steel pipe piles, are they free of water or debris prior to filling with concrete?  |     |    |     |         |  |  |
| 20 | Has the pile been driven to minimum specified tip elevation?   |     |    |     |         |  |  |
| 21 | Has the pile been driven to Practical or Absolute Refusal?   |     |    |     |         |  |  |

|    | Inspection Item  | Yes | No | N/A | Remarks |
|----|--|-----|----|-----|---------|
| 22 | During driving, have conditions of equipment and piles been monitored for damage?  |     |    |     |         |
| 23 | During driving, have any of the following been observed: Push-up? Sudden changes in depth?<br>Pile springing? Hammer bouncing? |     |    |     |         |
|    | POST-CONSTRUCT   | ION |    |     |         |
| 24 | Have splices been performed by CWI?  |     |    |     |         |
| 25 | Have splices been inspected, approved, and recorded?   |     |    |     |         |
| 26 | Have pile cut-offs been measured and recorded?   |     |    |     |         |
| 27 | Are driven piles within tolerances outlined in 502.06?   |     |    |     |         |
| 28 | Has CDOT Piling Form for payment been completed?   |     |    |     |         |
| 29 | Have any and all pile deficiencies been corrected?   |     |    |     |         |

|    | INSPECTOR CHECKLIST: 503 - DRILLED SHAFTS   |     |    |     |         |  |  |
|----|---|-----|----|-----|---------|--|--|
|    | Inspection Item   | Yes | No | N/A | Remarks |  |  |
|    | PRE-CONSTRUCTI  | ON  |    |     |         |  |  |
| 1  | Safety Critical Plan submitted and approved?  |     |    |     |         |  |  |
| 2  | Has a concrete mix design been submitted and approved?  |     |    |     |         |  |  |
| 3  | Have submittals for Experience and Personnel, Drilled Shaft Installation Plan, and Slurry Technical Assistance been submitted and approved per 503.02?  |     |    |     |         |  |  |
| 4  | Has a Pre-Construction Meeting been held per 503.03?  |     |    |     |         |  |  |
| 5  | Reviewed and familiar with rebar and concrete materials, shaft locations, depths, diameters, elevations, etc.?  |     |    |     |         |  |  |
| 6  | Reviewed and familiar with boring logs and geological reports? Familiar with appearance and type of material anticipated at drilling depths?  |     |    |     |         |  |  |
| 7  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?   |     |    |     |         |  |  |
| 8  | Has location, centerline, diameter, and elevation of shaft been staked and checked?   |     |    |     |         |  |  |
| 9  | Is fall protection required due to depth of shaft?  |     |    |     |         |  |  |
|    | CONSTRUCTION  | N   |    |     |         |  |  |
| 10 | Do materials being used (casings, rebar, concrete, slurry, etc.) match what was submitted and approved?   |     |    |     |         |  |  |
| 11 | Does inspector have tools required? Tape measure, mirror, plumb bob, etc.? Does inspector have proper PPE, including fall protection, if required?  |     |    |     |         |  |  |
| 12 | Has rebar been inspected per 503.17? Correct bar sizing, spacing, and fastening? Correct height and diameter? Have all intersection been tied? Have all minimum clearances been checked?                              |     |    |     |         |  |  |
| 13 | Is rebar supported off of the ground? Free of excessive rust, mud, oils, solvents, and/or other deleterious materials?  |     |    |     |         |  |  |
| 14 | If needed, are casings watertight and clean?  |     |    |     |         |  |  |
| 15 | Was drilling performed as a continuous operation?   |     |    |     |         |  |  |
| 16 | Has the shaft been drilled to the proper elevation with minimum embedment obtained and documented.  |     |    |     |         |  |  |
| 17 | Is the shaft clean and free of debris and groundwater prior to concrete placement?  |     |    |     |         |  |  |
| 18 | Has the rebar been installed immediately prior to concrete placement? If concrete has not been poured immediately, is rebar and shaft protected from debris and damage? Is open shaft covered to prevent fall hazard? |     |    |     |         |  |  |
| 19 | If needed, has slurry been sampled and tested per 503.15?   |     |    |     |         |  |  |
| 20 | Has concrete been placed within 4 hours of drilling? Was concrete placed continuously? No joints allowed unless approved by EOR.  |     |    |     |         |  |  |
| 21 | Have Crosshole Sonic Logging (CSL) tubes been installed, filled, and capped?  |     |    |     |         |  |  |

|      | Inspection Item  | Yes | No | N/A | Remarks |
|------|--|-----|----|-----|---------|
| 22   | During drilling, have any of the following been observed: Caving? Obstructions? Rebar displacement?      |     |    |     |         |
| 1 /3 | During drilling, have conditions of excavated material, groundwater, and adjacent shafts been monitored? |     |    |     |         |
| 24   | Has CDOT Form 1333 been completed?   |     |    |     |         |
|      | POST-CONSTRUCT   | ION |    |     |         |
| 25   | Are drilled shafts within tolerances outlined in 503.19?   |     |    |     |         |
| 26   | Has integrity testing been performed per 503.20?   |     |    |     |         |
| 27   | Has projecting steel been adequately cleaned?  |     |    |     |         |

|    | INSPECTOR CHECKLIST: 5   | 04 - | MS | E W | ALLS    |
|----|--|------|----|-----|---------|
|    | Inspection Item  | Yes  | No | N/A | Remarks |
|    | PRE-CONSTRUCTION   | ON   |    |     |         |
| 1  | Shop Drawings, calculations, and material certifications submitted and approved? Wall Test<br>Segment constructed and approved?  |      |    |     |         |
| 2  | Have qualifications for installer been provided?   |      |    |     |         |
| 3  | Has a Facial Panel Placing Plan been provided?   |      |    |     |         |
| 4  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?  |      |    |     |         |
| 5  | Has wall layout been completed? Are locations, dimensions, skews, elevations, etc. per plan? Are there offset stakes in place that can be used if other stakes are disturbed or destroyed? |      |    |     |         |
| 6  | Does the Contractor have a plan to properly handle and maintain groundwater? Has this method been included in the SWMP and approved?   |      |    |     |         |
| 7  | Have panels been stored correctly and have they been inspected for cracks or other damage?   |      |    |     |         |
| 8  | Do the materials on site match those in the plans and meet required specifications? Panel dimensions, reinforcement lengths, etc.?   |      |    |     |         |
|    | CONSTRUCTION   | ı    |    |     |         |
| 9  | Is the Contractor's qualified personnel on site during operation? Are technical supplies on site as required?  |      |    |     |         |
| 10 | Approved backfill material has been installed correctly? Lift heights, compaction requirements, etc.   |      |    |     |         |
| 11 | Is there any unsuitable in situ material that requires removal and replacement?  |      |    |     |         |
| 12 | Has Leveling Pad been installed per plans and specifications?  |      |    |     |         |
|    | Base material prepared properly?   |      |    |     |         |
|    | Vertical Steps within limits?  |      |    |     |         |
|    | Reinforcing steel installed per plan and concrete placed, consolidated, and cured properly?  |      |    |     |         |
|    | Has levelness of pad been measured and within specified tolerances?  |      |    |     |         |
|    | Has pad been backfilled as soon as practical?  |      |    |     |         |
| 13 | Are bottom panels flush and fully supported by leveling pad?   |      |    |     |         |
| 14 | Do panel numbers installed match those on the plans? Do panel colors, textures, dimensions, patterns, etc. match those in the plans?   |      |    |     |         |
| 15 | Are there the correct number of connections between the panels and the soil reinforcement and do the connections match those on the plans?   |      |    |     |         |
| 16 | Is bracing being used to maintain proper panel alignment and batter?   |      |    |     |         |
| 17 | Is filter fabric being used to maintain gaps and are gaps and the correct width?   |      |    |     |         |
| 18 | Are soil reinforcements the correct length? Are they slightly tensioned (contain no slack)? Are there any obstructions that require special layout considerations?                         |      |    |     |         |
| 19 | If Settlement Monitoring is required, are devices protected from damage? Is monitoring be performed per specifications?  |      |    |     |         |

|    | Inspection Item   | Yes | No | N/A | Remarks |
|----|---|-----|----|-----|---------|
| 20 | Are underdrains or drainage system installed per plan? Is water flowing properly?   |     |    |     |         |
| 21 | Has concrete coping been installed per plans and is it at the proper elevation and alignment? Has it been properly connected to top panels?               |     |    |     |         |
| 22 | Has the geomembrane been installed at the top of the fill? Does it has the correct slope and has it been properly connected to all other wall components? |     |    |     |         |
|    | POST-CONSTRUCT  | ION |    |     |         |
| 23 | Has wall been inspected for flatness and do the results fall within specified tolerances?   |     |    |     |         |
| 24 | Has top of wall been surveyed and do elevations match those on the plans?   |     |    |     |         |
| 25 | Are soil reinforcements at the correct vertical spacing? Are they within the specified tolerances from top of panel and top of leveling pad?              |     |    |     |         |

|    | INSPECTOR CHECKLIST: 504   | - SC | )IL N | IAIL | WALLS   |
|----|--|------|-------|------|---------|
|    | Inspection Item  | Yes  | No    | N/A  | Remarks |
|    | PRE-CONSTRUCTI   | ON   |       |      |         |
| 1  | Shop Drawings/Safety Critical Plan submitted and approved?   |      |       |      |         |
| 2  | Contractor Qualifications and Construction Plan submitted?   |      |       |      |         |
| 3  | Materials per 504.25 (concrete class D, reinforcing steel, shotcrete, forms & falsework, geocomposite strip drains, and underdrains & pipes) submitted and approved? |      |       |      |         |
| 4  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?                      |      |       |      |         |
| 5  | Has layout been completed? Limits of excavated limits? Hole locations? Are there offset stakes in place that can be used if other stakes are disturbed or destroyed? |      |       |      |         |
| 6  | Does the Contractor have a plan to properly handle and maintain groundwater?   |      |       |      |         |
| 7  | Have bars been stored and handled properly? Do materials on site match those submitted and specifications?   |      |       |      |         |
| 8  | Have verification tests been performed to confirm Contractor's drilling and installation method and required pullout resistance?                                     |      |       |      |         |
|    | CONSTRUCTION   | 1    |       |      |         |
| 9  | Is the Contractor's qualified personnel on site during operation?  |      |       |      |         |
| 10 | Is the Contractor following "top-down" construction?   |      |       |      |         |
| 11 | Is Contractor only excavating within required limits and at height that will only be supported by nails per lift?  |      |       |      |         |
| 12 | Ensure Contractor has not started next lift until previous lift has been completed. Ensure grout has reached 1,000 PSI.  |      |       |      |         |
| 13 | Have any voids in excavated area or wall face been properly filled?  |      |       |      |         |
| 14 | Do locations, elevations, orientations, and lengths of soil nails match those in the plans?  |      |       |      |         |
| 15 | Have holes been grouted within 2 hours of drilling? Has grout been placed in one continuous operation?   |      |       |      |         |
| 16 | Have all components of drainage system been installed per plans?   |      |       |      |         |
| 17 | Has shotcrete been installed at proper thickness? Has proper finish been applied to surface?   |      |       |      |         |
| 18 | Have maturity meters been installed? Has grout met specified strength requirements?  |      |       |      |         |
| 19 | Has hardware been installed during initial set of shotcrete?   |      |       |      |         |
| 20 | Have nuts been hand-wrench tightened?  |      |       |      |         |
| 21 | Has testing apparatus been set up properly?  |      |       |      |         |

|    | Inspection Item  | Yes | No | N/A | Remarks |
|----|--|-----|----|-----|---------|
|    | POST-CONSTRUCT   | ION |    |     |         |
| 22 | Has an excess of grout been used? Has the Engineer been notified of possible voids?  |     |    |     |         |
| 23 | Is there uniform contact been hardware and surface of shotcrete?   |     |    |     |         |
|    | Has proof testing been performed and do all results fall within specified limits? Have results been submitted to Engineer within 24 hours? |     |    |     |         |

|    | INSPECTOR CHECKLIST: 518 - BRIDGE EXPANSION DEVICES   |     |    |     |         |  |  |  |
|----|---|-----|----|-----|---------|--|--|--|
|    | Inspection Item   | Yes | No | N/A | Remarks |  |  |  |
|    | PRE-CONSTRUCTION  | ON  |    |     |         |  |  |  |
| 1  | Familiar with Structural Worksheets B-518 and B-601?  |     |    |     |         |  |  |  |
| 2  | Working Drawings and materials submitted and approved?  |     |    |     |         |  |  |  |
| 3  | Weld Procedures and Welding Certifications submitted?   |     |    |     |         |  |  |  |
| 4  | Is the joint layout at the proper alignment, grade, and dimensions?   |     |    |     |         |  |  |  |
| 5  | Bridge survey completed to ensure proper fit of device?   |     |    |     |         |  |  |  |
| 6  | All debris has been removed and joint area cleaned prior to pour and install?   |     |    |     |         |  |  |  |
| 7  | Materials inspected and stored in good condition?   |     |    |     |         |  |  |  |
|    | CONSTRUCTION  | J   |    |     |         |  |  |  |
| 8  | For removal of existing expansion device:   |     |    |     |         |  |  |  |
|    | Is the proper sized equipment on site (15 lb. pneumatic hammers)?   |     |    |     |         |  |  |  |
|    | Has all demo debris been removed?   |     |    |     |         |  |  |  |
|    | Has all formwork been removed?  |     |    |     |         |  |  |  |
| 9  | Manufacturer's representative on site during installation?  |     |    |     |         |  |  |  |
| 10 | "A" and "W" gaps are correctly sized for weather and temperature at time of concrete placement?   |     |    |     |         |  |  |  |
| 11 | Concrete has been well consolidated around device?  |     |    |     |         |  |  |  |
| 12 | Expansion fittings are installed around all utilities in concrete area?   |     |    |     |         |  |  |  |
| 13 | Contractor is NOT using sharp tools to install that may damage device?  |     |    |     |         |  |  |  |
| 14 | Device has been installed flush with riding surface? Survey has checked grade/elevations?   |     |    |     |         |  |  |  |
| 15 | If any welding, has welding been perfomred per specifications and performed by CWI? Have all certification documents been submitted and approved? |     |    |     |         |  |  |  |
|    | POST-CONSTRUCTION POST-CONSTRUCTION   |     |    |     |         |  |  |  |
| 16 | Have support brackets been removed after initial concrete set?  |     |    |     |         |  |  |  |
| 17 | Have bulges in device been identified and corrected as needed?  |     |    |     |         |  |  |  |
| 18 | Has Watertight Integrity Testing been performed per 518.09?   |     |    |     |         |  |  |  |
| 19 | Has the Contractor provided Certification that the device has been installed properly?  |     |    |     |         |  |  |  |

| Inspection Item | Yes | No | N/A | Remarks |
|-----------------|-----|----|-----|---------|
|-----------------|-----|----|-----|---------|

|    | INSPECTOR CHECKLIST: 601 DECK CONSTRUCTION   |     |    |     |         |  |  |  |
|----|--|-----|----|-----|---------|--|--|--|
|    | Inspection Item  | Yes | No | N/A | Remarks |  |  |  |
|    | PRE-CONSTRUCTI   | ON  |    |     |         |  |  |  |
| 1  | Has a Structural Concrete Pre-Pour Conference been held?   |     |    |     |         |  |  |  |
| 2  | Have the locations of maturity meters been determined?   |     |    |     |         |  |  |  |
| 3  | Has the Concrete Mix Design been submitted and approved?   |     |    |     |         |  |  |  |
| 4  | Has a pouring schedule/sequence been submitted and approved?   |     |    |     |         |  |  |  |
| 5  | Has the Contractor submitted a plan for hot/cold weather concrete placement?   |     |    |     |         |  |  |  |
| 6  | Have Scale and Weigher Checks been submitted and approved?   |     |    |     |         |  |  |  |
| 7  | Has a curing method been submitted and approved?   |     |    |     |         |  |  |  |
| 8  | Does the bridge deck layout match what is specified in the plans? Lengths, widths, thicknesses, skew, etc.?                                |     |    |     |         |  |  |  |
| 9  | Does the rebar installed match what is specified in the plans? Size, spacing, type? Length and location of splices?                        |     |    |     |         |  |  |  |
| 10 | Are chair heights correct? Do rebar clearances match plans? Have damaged bars been repaired or replaced? Are minimum tie percentages met?  |     |    |     |         |  |  |  |
| 11 | Have beam and girder surveys to verify elevations been completed and submitted to CDOT for review?   |     |    |     |         |  |  |  |
| 12 | If necessary, have hand and toe rails been installed to protect workers from falls and the traveling public?                               |     |    |     |         |  |  |  |
| 13 | Have joints, bulk heads, and other bridge components been installed per plan? Is there a plan in place if emergency bulk heads are needed? |     |    |     |         |  |  |  |
| 14 | Have forms been inspected?   |     |    |     |         |  |  |  |
|    | Unsuitable forms rejected?   |     |    |     |         |  |  |  |
|    | Forms are clean of dirt and debris?  |     |    |     |         |  |  |  |
|    | Chamfer strips are in place per plan?  |     |    |     |         |  |  |  |
|    | Form Release has been submitted, approved, and adequately applied?   |     |    |     |         |  |  |  |
|    | Blockouts for items such as conduits, drains, etc. have been installed and secured?  |     |    |     |         |  |  |  |
|    | • Is adequate bracing installed to prevent bowing, blowouts, etc.  |     |    |     |         |  |  |  |
|    | • If required, has approval for backform omission been submitted and approved?   |     |    |     |         |  |  |  |
| 15 | If using Precast Panel Deck Forms:   |     |    |     |         |  |  |  |
|    | Have drawings been submitted and approved?   |     |    |     |         |  |  |  |
|    | Have minimum extensions beyond the beam and vertical clearances between  |     |    |     |         |  |  |  |
|    | panels and beams been checked?   |     |    |     |         |  |  |  |
|    | Have haunch depths been checked and match the plans?   |     |    |     |         |  |  |  |
|    | Have surveys to check elevations been completed?   |     |    |     |         |  |  |  |
| 16 | If using Stay-In-Place (SIP) Forms:  |     |    |     |         |  |  |  |
|    | Have erection drawings been submitted and approved?  |     |    |     |         |  |  |  |
|    | Have forms been installed per plan?  |     |    |     |         |  |  |  |
|    | Have forms been attached, secured, and sealed properly?  |     |    |     |         |  |  |  |

|    | Inspection Item   | Yes | No | N/A | Remarks |
|----|---|-----|----|-----|---------|
|    | Have welding arcs been prevented from coming into contact with steel girder flanges?                                    |     |    |     |         |
|    | Have haunch depths been checked and match the plans?  |     |    |     |         |
|    | Have surveys to check elevations been completed?  |     |    |     |         |
| 17 | Has a dry run been performed and do rebar clearances and concrete depths match plans?                                   |     |    |     |         |
| 18 | Is the deck machine supported beyond the edge of deck?  |     |    |     |         |
| 19 | Has burlap been soaking for 12 hours prior to pour?   |     |    |     |         |
|    | CONSTRUCTION  | ı   | ı  | ı   |         |
| 20 | Does the concrete being used match what has been submitted and approved?  |     |    |     |         |
| 21 | Does the concrete ticket provide all required information per 601.06?   |     |    |     |         |
| 22 | Has the concrete been placed in the specified time limit?   |     |    |     |         |
| 23 | Does the concrete temperature at time of placement measure between 50 and 90 degrees F?                                 |     |    |     |         |
| 24 | Is concrete slump, air, and W/C ratio within range of submitted and approved mix design?                                |     |    |     |         |
| 25 | Have concrete cylinders been made and have they been placed in proper cure environment?                                 |     |    |     |         |
| 26 | If water is added, has it been recorded and mixed per specifications?   |     |    |     |         |
| 27 | Are random clearance checks of rebar and depth checks of concrete being performed and these match the plans?            |     |    |     |         |
| 28 | Are the proper vibrators being used and are they adequately consolidating concrete?                                     |     |    |     |         |
| 29 | Is the concrete being placed per the approved schedule/sequence?  |     |    |     |         |
| 30 | Have maturity meters been installed in planned locations and are they protected from damage?                            |     |    |     |         |
| 31 | Is the specified finish being applied in a uniform manner that provides a smooth surface with minimum ridges and voids? |     |    |     |         |
| 32 | Submitted and approved curing method applied at specified rate?   |     |    |     |         |
| 33 | Is hand work being kept to a minimum?   |     |    |     |         |
| 34 | Is water being applied to surface at a minimum and being applied using approved fog spray?                              |     |    |     |         |
| 35 | Have construction joints been installed in approved locations, only?  |     |    |     |         |

|    | Inspection Item  | Yes | No | N/A | Remarks |  |  |
|----|--|-----|----|-----|---------|--|--|
|    | POST-CONSTRUCTION  |     |    |     |         |  |  |
| 36 | Are curing blankets and burlap being protected and secured from being wind blown?  |     |    |     |         |  |  |
| 37 | Are maturity meters working and are the results within the specified limits? If not, are corrective actions being discussed? |     |    |     |         |  |  |
| 38 | Has concrete obtained required strength to remove forms?   |     |    |     |         |  |  |
| 39 | Are concrete depths within tolerance of 601.18?  |     |    |     |         |  |  |
| 40 | Has smoothness been tested and meet specified requirements?  |     |    |     |         |  |  |

|    | INSPECTOR CHECKLIST: 614 - OVERHEAD SIGN STRUCTURES  |     |    |     |         |  |  |  |
|----|--|-----|----|-----|---------|--|--|--|
|    | Inspection Item  | Yes | No | N/A | Remarks |  |  |  |
|    | PRE-CONSTRUCTI   | ON  |    |     |         |  |  |  |
| 1  | Safety Critical/Erection Plan submitted and approved?  |     |    |     |         |  |  |  |
| 2  | Safety Critical/Erection Meeting held?   |     |    |     |         |  |  |  |
| 3  | Shop drawings submitted?   |     |    |     |         |  |  |  |
| 4  | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?                                  |     |    |     |         |  |  |  |
| 5  | Drilled shafts installed per 503 and inspected? Reviewed and familiar with S-614-60 (Sheet 14 of 14)? No special conditions for caisson foundation that requires special design? |     |    |     |         |  |  |  |
| 6  | Anchor bolts checked? Bolt and dimensions? Top 10" threaded and top 15" galvanized? Top 10" projecting out of caisson?   |     |    |     |         |  |  |  |
| 7  | Has concrete caisson met required strength prior to setting overhead sign structure?   |     |    |     |         |  |  |  |
|    | CONSTRUCTION   | ١   |    |     |         |  |  |  |
| 8  | Structure has been inspected for damage and conform to specifications and shop drawings?<br>Dimensions, materials, layouts, cambers, etc.?                                       |     |    |     |         |  |  |  |
| 9  | Material certifications have been received and documented? Meet Buy America?   |     |    |     |         |  |  |  |
| 10 | CDOT Form 157 has been completed?  |     |    |     |         |  |  |  |
| 11 | Equipment on site matches what was submitted and approved (crane, rigging equipment, crane operator and signaler)?   |     |    |     |         |  |  |  |
| 12 | Verified clearances between bottom of leveling nuts and top of caisson? Verified minimum projection above top of nut?  |     |    |     |         |  |  |  |
| 13 | Anchor bolts tightened to snug fit? Bolts tightened per S-614-50, Sheet 6, Sections A and H?   |     |    |     |         |  |  |  |
| 14 | No load is on the splice bolts?  |     |    |     |         |  |  |  |
| 15 | Contractor's Method for splice bolt testing has been verified with direct tension measuring device per 509.28?   |     |    |     |         |  |  |  |
| 16 | Mounting brackets are connected to tie rods with lock washers? 2 bolts are provided at all Z to mounting bracket connections?  |     |    |     |         |  |  |  |
| 17 | Signs are in the proper locations along mast arm per shop drawing?   |     |    |     |         |  |  |  |
|    | POST-CONSTRUCT   | ION |    |     |         |  |  |  |
| 18 | Are cantilevered signs correctly aligned? Are they at the correct elevation, are they level, and are they centered over the lane of traffic they are directing?                  |     |    |     |         |  |  |  |
| 19 | Prior to opening traffic under overhead structures: Vertical clearances have been checked? Contractor's Engineer has inspected signs and safe to open road to traffic?           |     |    |     |         |  |  |  |
|    |  |     |    |     |         |  |  |  |

|       | INSPECTOR CHECKLIST: 618 - GIRDER ERECTION   |         |        |       |  |  |  |  |  |
|-------|--|---------|--------|-------|--|--|--|--|--|
|       | Inspection Item  | Yes     | No     | N/A   | Remarks  |  |  |  |  |
|       | PRE-CONSTRUCTION PRE-CONSTRUCTION  |         |        |       |  |  |  |  |  |
| 1     | Safety Critical/Girder Erection/Falsework Plan submitted and approved? Do inspectors have copies of these submitted and approved plans to reference during girder erection?                  |         |        |       |  |  |  |  |  |
| 2     | Safety Critical/Girder Erection Meeting held?  |         |        |       |  |  |  |  |  |
| 3     | Girder and falsework drawings submitted?   |         |        |       |  |  |  |  |  |
| 4     | Have existing utilities been located? Marked? Deenergized? Protected? Conflicts resolved? Have equipment offsets from utilities been discussed?  |         |        |       |  |  |  |  |  |
| 5     | Abutments and/or piers have been inspected and meet the following requirements: Forms stripped? Concrete has reached 90% compressive strength? Surveys have been submitted?                  |         |        |       |  |  |  |  |  |
| 6     | Bearings have been installed and been checked for the following: Correct dimensions? Correct locations? Correct elevations? Correct slopes? Shimmed as needed?                               |         |        |       |  |  |  |  |  |
| 7     | If applicable, MHTs have been submitted and approved?  |         |        |       |  |  |  |  |  |
| 8     | If applicable, Contractor's Engineer has inspected and certified falsework conforms to specifications?   |         |        |       |  |  |  |  |  |
| 9     | Crane staging area is suitable for girder erection? Level? Well-drained? Stable?   |         |        |       |  |  |  |  |  |
|       | CONSTRUCTION   |         |        |       |  |  |  |  |  |
| 10    | Equipment on site matches what was submitted and approved (crane, rigging equipment, crane operator and signaler, outrigger pad sizes)?  |         |        |       |  |  |  |  |  |
| 11    | Girders have been inspected for damage and conform to specifications? Lengths, camber, etc.?   |         |        |       |  |  |  |  |  |
| 12    | Girder center alignment, orientation, <i>CROSS BRACING</i> , etc. checked? Girders are stabilized?   |         |        |       |  |  |  |  |  |
| 13    | Girders have CDOT QA Stamp?  |         |        |       |  |  |  |  |  |
| 14    | If applicable, pedestrian control is in place?   |         |        |       |  |  |  |  |  |
| 15    | Signs are in the proper locations along mast arm per shop drawing?   |         |        |       |  |  |  |  |  |
|       | POST-CONSTRUCTION  |         |        |       |  |  |  |  |  |
| 16    | Girders have been surveyed and are in the correct location and at the correct elevation?<br>Girders have been checked for stabilization and cross bracing?                                   |         |        |       |  |  |  |  |  |
| 17    | Prior to opening traffic under girders: Vertical clearances have been checked? Contractor's<br>Engineer has inspected girders and provided stamped written approval of stability of girders? |         |        |       |  |  |  |  |  |
| DIEVO | NOTE THAT THE INTENT OF THESE CONSTRUCTION QUALITY ASSURANCE ORSEDVATION C   | HECKLIG | TC ADI | TO 40 | CV OLIECTIONS DECARDING OBSERVATION DUTIES THAT WILL |  |  |  |  |