**Hold Points**

1. Prior to any land disturbance to ensure adequate installation of best management practices (BMPs) and that all other environmental compliances are met in accordance with the plans, permit, and Storm Water Pollution Prevention Plan (SWPPP).
2. After all clearing and grubbing to verify limits were cleared per plan and specifications.
3. Prior to any excavation when original ground limits need to be established in order to compute a measured quantity for payment. When no final measurement is necessary, original ground should still be verified in order to confirm there is no appreciable error.
4. Prior to excavation of a borrow area and at completion of use of a borrow area when measurements are necessary for payment.
5. After completion of grading of a roadbed and prior to placement of base rock to ensure subgrade is constructed in accordance with contract requirements.
6. After placement of each layer of base course to verify proper grade, thickness, and density.
7. For Group A, B, and sometimes C pipe culverts installed under pavement, after completion of the aggregate base, but prior to placing the pavement, a hold point is required in order for QC to perform manual or video inspections and to record the specified measurements in accordance with Sec 724.3. For culverts installed elsewhere (i.e. not under pavement), the hold point and inspection shall occur no sooner than 30 days after completion of the grade. QA should be present when a mandrel is used to measure deflection. For any deficiencies found in the inspection, the contractor shall have a corrective action plan approved by the engineer prior to acceptance of the pipe and prior to placement of pavement above the culvert.
8. Prior to first asphalt lift and prior to placement of any subsequent lifts.
9. Prior to concrete paving to ensure proper width, depth, baskets, tie bars, etc.
10. Prior to any masonry concrete pour for inspection of forms, dimensions, rebar, etc.
11. Prior to application of seed & mulch or sod to review readiness of slopes and finish grade.
12. Prior to commencing work on a project, verify all traffic control devices are in the proper location and meet current standards.  Signs and other devices should be unobstructed, plumb, and comply with the “Quality Standards for Traffic Control Devices” as outlined in MoDOT’s Engineering Policy Guide ([Quality Standards for Temporary Traffic Control Devices](http://epg.modot.org/files/a/a1/616.19_Quality_Standards_2013.pdf)).
13. Prior to any significant changes in traffic patterns to verify all devices are in place and all preliminary tasks are complete.
14. Prior to backfilling of drainage installations, pipe culverts, drop inlets, manholes, etc.
15. Prior to beginning construction of MSE walls & box culverts to confirm subgrade.
16. Prior to placement of MSE wall panels, straps, and select granular backfill and at periodic frequencies established by the engineer.
17. Prior to beginning pile driving to confirm pile driving submittals, equations, and equipment.
18. After completion of pile driving operation to review results and records.
19. Prior to placement of concrete for any substructure unit for inspection of forms, dimensions, rebar, etc.
20. Prior to steel girder erection to verify rocap testing is complete and that inspection torque is determined for each combination of nut/bolt.
21. Prior to placement of concrete for bridge deck, approach slab, approach pavement, diaphragms and bridge barrier wall.
22. For bridge deck replacements, a hold point for girder/diaphragm inspection is required after sawing and/or removal of approximately 250 sq. ft. of bridge deck. Subsequent hold points may also be required as determined by the engineer to ensure no damage has occurred to the girders and diaphragms.
23. For bridge deck replacements, a hold point for girder/diaphragm inspection is required after completion of sawing and/or removal of the bridge deck, prior to cleaning/coating of the top flange and forming of the deck.  Any damage will need to be repaired to the satisfaction of the engineer, including the MoDOT Bridge Division Project Manager, prior to proceeding past this hold point.
24. Prior to placement of concrete for all CIP retaining walls, and box culverts.
25. Prior to placement of roadway barrier wall and at periodic frequencies established by the engineer.
26. Prior to placement of concrete for curb, sidewalk, gutter, islands, raised medians, paved approaches, etc.
27. Prior to placement of concrete for signal bases, truss foundations, sign post foundations, DMS and ITS foundations.
28. Prior to placement of drilled shaft concrete.
29. After placement of drilled shaft concrete and prior to column construction to review CSL results.
30. Prior to and between each structural steel coating applications.