

**FY 2009/2010 QC Category No. 8A**  
**STATEWIDE INSPECTION GUIDELIST**  
**Concrete Pavement**

1. A detailed sequence and schedule of concrete placement operations is provided in the Quality Control (QC) Plan and the QC Plan is approved prior to paving operations. [Spec. 350-1]
2. Ensure the method of placement for reinforcing steel, tie bars and dowel bars included in the QC Plan is being used. [Spec. 350-1]
3. Ensure the electronic delivery ticket is furnished for each batch of concrete. [Spec 346-6]
4. The pavement is constructed by a slip-form paver or fixed form. [Spec 350-1]
5. Ensure that the procedure for the protection of the fresh concrete pavement from inclement weather included in the QC Plan is being used. [Spec. 350-1]
6. Ensure that the defined provisions for lighting at night work included in the QC Plan are being used. [Spec. 350-1]
7. Ensure that any uncontrolled cracks appear during the life of the Contract, the cracks shall be removed and replaced and effective solutions shall be implemented immediately to eliminate further cracks. [Spec. 350-1]
8. The slip-form paver is self-propelled and equipped to spread, strike-off, consolidate, screed, and float-finish the freshly placed concrete in one complete pass. [Spec. 350-3]
9. The slip-form paver uses automatic guidance and grade controls with the exceptions noted in the Spec. [Spec. 350-3]
10. The concrete is consolidated for the full width of the strip being placed with a correct surface pan type or internal type vibrator. [Spec. 350-3]
11. For surface vibrators, the frequency is greater than 3500 impulses per minute. [Spec. 350-3.3]
12. If using internal type tube or spud vibrators, then for tube vibrators use a frequency greater than 5000 impulses per minute and for spud vibrators use a frequency greater than 7000 impulses per minute. [Spec. 350-3.3]
13. The device for application of membrane curing compound is self-propelled and capable of uniformly applying the curing compound at the specified rate. [Spec 350-3.4]

### **Concrete Pavement ... continued**

14. When using a hot-poured sealer, the heating kettle is of the indirect heating or double boiler type, using oil as a heat transfer medium. [Spec 350-12]
15. The subgrade is completed for a distance of at least 500 feet (150 m) ahead of the paving operation. [Spec 350-4]
16. The subgrade is maintained in a smooth and compact condition and is within 2% of the optimum moisture content at the time concrete is placed. [Spec. 350-4]
17. The forms are set to line and grade and such that they rest firmly on grade, throughout their entire length. [Spec 350-5]
18. Forms are maintained 500 feet on each side of the roadway in advance of the concrete pavement being placed and are true to line and grade. [Spec. 350-5]
19. Forms are clean and oiled thoroughly after each use and prior to placing concrete against them. [Spec. 350-5]
20. Where the Plans call for reinforced concrete pavement (RCP), ensure that the re-bars are free from any material which can impair bonding of the steel with the concrete such as dirt, oil, mill scale, etc. [Spec.350-7]
21. Ensure that all the re-bars of RCP are placed in accordance with the Plans and the bars are securely wired together at the transverse and longitudinal intersections. Lap splices are not less than 20 times the nominal diameter of the bar and only in the longitudinal members. [Spec. 350-7]
22. All paving operations cease when rain is imminent and have all available personnel cover the surface of the unhardened concrete with a protective covering. [Spec 350-6]
23. The pavement is constructed to the full width of the lane or slab in a single construction operation. [Spec. 350-8]
24. Ensure that workers do not walk in the freshly placed concrete with their boots or shoes coated with earth or other deleterious substances. [Spec. 350-8].
25. The concrete is thoroughly consolidated against and along the faces of all forms, and along the full length on both sides of all joint assemblies by means of hand-operated, spud-type vibrators. [Spec. 350-8]
26. The final finish is applied using a seamless length of damp burlap over the full width of the strip of constructed pavement as the water sheen disappears from the surface of the pavement and just before the concrete achieves its initial set. [Spec. 350-10]

27. Ensure all joints are checked with straightedge before concrete becomes nonplastic and make corrections if any smoothness deficiency is found. [Spec. 350-10]
28. Ensure that the concrete is cured in accordance with the requirements of the Specifications. Do not leave the concrete exposed for a period in excess of 30 minutes between stages of curing or during the curing period. [Spec. 350-11]
29. Ensure that the forms are not removed from freshly placed concrete for at least 12 hours after placement. After removing the forms, immediately apply curing compound to the sides of the slab. [Spec. 350-11]
30. Ensure that the longitudinal joints are constructed in accordance with the details shown in the Plans and the tie bars or tie bolt assemblies are placed correctly in depth, spacing, location and angles. [Spec. 350-12]
31. Transverse construction joints are placed at the end of all pours and other locations where paving operations are stopped for as long as 30 minutes. [Spec. 350-12]
32. Accomplish the transverse contraction joint sawing in two steps. Make the initial cut 1/8 inch wide by a depth at least 1/3 of the pavement thickness and as soon as possible in no case longer than 12 hours after placing the concrete, unless cutting the transverse joint would damage the surface by raveling or chipping. Should the contractor have to saw cut the concrete after the 12 hours allowed by specifications, obtain the Engineer's approval of the additional curing time prior to saw cutting. [Spec. 350-12]
33. Dowel load-transfer devices are placed in all transverse joints and the position of the devices shall be confirmed by suitable means acceptable to the Engineer. [Spec. 350-12]
34. In those sawed joints that receive sealant, the joint is flushed with a jet of water to remove any remaining slurry. [Spec. 350-12]
35. The pavement is cored to determine the actual thickness and the portions of the pavement removed by the borings shall be replaced properly. [Spec. 350-14]
36. After placement of the concrete, traffic is kept off the pavement for a minimum of 14 calendar days or for such period as otherwise provided in the contract documents. [Spec. 350-16]
37. Ensure that the pavement surface is true to grade and uniform in appearance with a longitudinal line type texture by grinding operation and the smoothness is tested by the 10 foot rolling straightedge for acceptance. All deficiencies shall be corrected and retested to ensure conformity. [Spec. 352-4, 5, 6]