

If an undistributed quantity of HMA wedge and level mixture is included in the contract, the PEMS should inspect the existing pavement to determine the limits for wedge and level construction and mark them on the pavement. After this is complete, compare the quantity to the plan quantity for the HMA wedge and level mixture pay item. If the proposed quantity resulting from the layout overruns or underruns the plan quantity by more than five percent, contact the AE for additional guidance. The AE should contact the PM and request a recommendation regarding the resolution of the potential overrun or underrun funding and scope.

13.14 JOINT CONSTRUCTION (Rev. 03-01-22)

Proper construction of joints is critical in obtaining the design life of the pavement. Two primary causes of premature asphalt pavement failure are improper longitudinal joint construction and deficient joint density. The PEMS must verify that the longitudinal joint for each course is offset approximately 6 in. from the longitudinal joint of the underlying course. This makes the joint more resistant to infiltration of water and allows for better compaction of the material placed in subsequent courses at the joint.

Transverse joints are required at the end of the day's work, when moving from one lane to another, upon suspension of work for an extended period of time, at paving exceptions, when matching with adjacent pavement sections, and as indicated in the plans. Lapped joints are not permitted for these situations.

If traffic is to be maintained across a transverse joint, the joint must be tapered sufficiently to allow a smooth ride. It is necessary to place paper or other bond breaker material under the tapered pavement to facilitate removal of the taper material prior to resuming the paving operation. When paving resumes at the joint location, the paver should be positioned so that the screed rests approximately over the joint line. After the hot mixture is conveyed into position, sufficient time should be allowed to reheat the joint area before the forward movement of the paver begins. The paver is then advanced ahead of the joint enough to allow the workers to perform the necessary handwork to transition the new material the old. The use of a straightedge throughout this process is of primary importance. Paving should continue only after the joint has been satisfactorily shaped, rolled and finished.

The QCP must address the Contractor's method for constructing these transverse joints. Pay special attention to the method of placing and compacting transverse joints at bridges, paving exceptions, and contract limits. The lower courses are of particular concern because the roller cannot be operated across the joint between the newly placed course and the adjacent existing pavement. These areas require transverse rolling or special compaction equipment.

13.15 COURSE DEFECTS (Rev. 03-01-22)

After completion of the finish rolling portion of the paving operation, the PEMS should review the newly placed course for defects. Segregation, flushing, and pulling or tearing are common defects found in newly placed courses.