This checklist is intended for use as a tool for a local agency or agency representative during asphalt paving operations in the field. The checklist is based on general asphalt paving best practices, Indiana Department of Transportation (INDOT) Standard Specifications, and INDOT General Instruction for Field Employees Section 13 Hot Mix Asphalt, HMA, Pavement. The inspector should still follow local specifications and use sound engineering judgement during any construction operation.

PRE-PAVING

- ☐ The Contractor's project Quality Control Plan (QCP) was received and reviewed by the agency, if required by the project.

- ☐ The DMF for the mixture(s) that are being delivered to the jobsite were reviewed and approved prior to use on the project.

- ☐ The asphalt mixture being delivered to the jobsite is what is listed on the DMF, including the asphalt plant source, type of mixture, and size of mixture.

- ☐ The existing pavement surface is properly treated prior to the asphalt overlay:
  - Subgrade preparation can support the pavement and anticipated traffic loading. It is properly graded to provide adequate drainage with a smooth cross slope and properly compacted.
  - Aggregate bases were mixed to proper moisture content and placed in 4-10 in compacted lifts. The longitudinal joints were staggered at least one foot in each succeeding layer and compacted to the percentage of specified proctor.
  - Any failed areas of an existing asphalt surface were repaired before overlaying. This can be done by one or more of the following: patching, cleaning and filling cracks, placing a leveling course, or milling the surface.

- ☐ If patching is necessary, best practices were followed:
  - Minimum 2" vertical joint was constructed compared to the remaining pavement
  - Full depth patches were to the bottom of the existing asphalt material, or as directed
  - Material has been removed to repair to a depth that achieves firm support
  - Excavation was extended at least one foot into the good pavement surrounding the patch
  - Patching has been done to create straight lines (i.e. a square/rectangle shape) to allow for proper compaction with no distressed areas outside the patch
  - Tack coat has been applied to the vertical faces after the area has been cleaned. Deep patches have a tack coat on the horizontal face

- ☐ Finished patches are even with the surrounding pavement (check with a straightedge if needed)

- ☐ Milling operations performed below the depth of distresses with no scabbing present.
  - The underlying layer has been inspected after milling and no further work is needed
  - Macrotexture test passed per ITM 812

☐ Prior to tack coat being applied, the surface does not have excess debris, has minimal amount of dust, is dry, and no standing water present.

☐ Tack coat materials are in accordance with INDOT 902.01 (SS-1h, AE-NT, PG 58S-28).

☐ Tack coat is uniformly applied across the entire width of the pavement to be overlaid and cover 95% of the area. Material should be given enough time to break and set.

☐ Tack coat application rates are in accordance with INDOT specification section 406.05

Surface Type	Application Rate (gal./syd)*
New Asphalt	0.05 – 0.08
Existing Asphalt	0.06 – 0.11
Milled Surface	0.06 – 0.12
PCCP	0.05 – 0.08
*The asphalt material shall not be diluted	

PAVING OPERATIONS

☐ The following weather limitations are met:

- HMA course < 110 lb/syd are to be placed when the ambient and surface temperatures are 60°F or above*
- HMA courses ≥ 100 lb/syd but < 220 lb/syd are to be placed when the ambient and surface temperatures are 45°F or above*
- HMA courses ≥ 220 lb/syd and HMA curbing are to be placed when ambient and surface temperatures are 32°F or above*
- Mixtures shall not be placed on frozen subgrade

**HMA courses may be placed at lower temperatures provided the density of the HMA course is in accordance with 402.16*

☐ Equipment being used by the Contractor is listed in the project QCP for each operation.

☐ Adequate work zone signage and flaggers are available to perform work safely for workers and the travelling public.

☐ The temperature of each mixture at the time of spreading is < 315°F when PG 58-28S or PG 58H-28 is used. The temperature of each mixture at time of spreading is not less than 245°F.

☐ No mixture is placed on a previously paved course that is > 175°F, except for patching.

☐ Mix is placed at the appropriate width and is checked every 500 ft.

☐ Yield is checked with five to ten trucks at least twice a day.

- Determine approximate beginning station association with the first truck.
- Determine the approximate ending station associated with the last truck.

- Calculate the weight of the mix from trucks by using the difference between the stations to determine the length and average paving width accounting for the edge slope for the mix on either or both edges as appropriate.
- Calculate the in-place lay ate of the course by dividing the weight of the mix by the area over which it is placed.
- Determine the target lay rate from the planned lay rate of the appropriate typical section or standard drawing multiplied by the MAF.
- Compare the actual placed lay rate to the target lay rate for the mix. If there is more than 5% difference, notify the contractor to take appropriate corrective action.

☐ Trucks are using tarps when delivering asphalt mixtures to the project.

☐ The speed of the paver is not > 50 ft/min when spreading mixtures.

☐ The finished thickness of each course is at least 2 times but not more than five times the maximum particle size as shown on the DMF. The finished thickness of wedge and level mixtures is at least 1 ½ times but not more than 6 times the maximum particle size. If feathering is done, the thickness may be less than these minimum thickness requirements.

☐ During paving operations at the end of each workday:

- Planned HMA courses > 220 lb/syd placed under traffic are brought up even with each adjacent lane.
- Planned HMA courses ≤ 220 lb/syd are brought forward concurrently, within practical limits, limiting the work in one lane to not more than one workday of production before moving back to bring forward the adjacent lane.
- Traffic has not been allowed on open graded mixtures.

☐ A safety edge is constructed when a dense graded intermediate or surface mixture is placed adjacent to an aggregate or earth shoulder.

☐ The in-place density is within specifications, if required by the project. If density requirements are not specified, assume compaction requirements in accordance with INDOT Specification 402.15.

☐ Compaction equipment should not exceed 3 mph except vibratory rollers are limited to 2.5 mph.

☐ Areas inaccessible to rollers are compacted thoroughly to achieve the required compaction.

☐ Longitudinal joints in the surface course are placed at the lane lines of the pavement. Longitudinal joints below the surface have been offset from previously constructed joints by approximately 6” and within 12” of the lane line.

☐ The Contractor is required to provide a Type D certifications according to the following frequency: 1) The first 250 ton and each subsequent 1,000 ton of each Design Mix Formula (DMF) for base and intermediate mixtures; 2) The first 250 ton and each subsequent 600 ton of each DMF for surface mixtures.

- The calculated percent air voids are ± 2.0% deviation from the DMF target.
- The total asphalt binder content for the mixture is ± 0.7% deviation from the DMF target.