# Warranty Requirements for Hot Mix Asphalt (HMA) Top Course

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I. AVAILABILITY

A Contractor may request the use of a warranty provision against defects attributed to operations during construction of the hot mix asphalt (HMA) surface course pavements, including shoulders. The warranty specification is only available for surface course placed outside the seasonal limits, but which meets the other requirements of §402-3.01 Temperature and Seasonal Limitations.

The Contractor is responsible for initiating the warranty, performing work under the warranty in conformance with the specifications, and correcting any defects covered by the warranty. The Engineer will administer the warranty requirements in accordance with MURK Part A (Contract Administration Manual) §105-19 Contractor Warranties.

II. WARRANTY IMPLEMENTATION

A. Notice

The Contractor shall request the use of the warranties from the EIC in writing at least 14 calendar days prior to the beginning of warranty work. The warranty need only be elected once for the Contractor to warranty paving work. The Contractor may warranty different sites at different times once they elect the warranty; however, the Contractor must notify the EIC of the intent to perform warranty work at additional locations, prior to starting work.

The EIC will discuss the Contractor’s proposal with the Construction Area Supervisor to ensure that the request fulfills the intent of the specification.

B. Pre-Warranty Meeting

The EIC and Contractor shall conduct a pre-warranty meeting prior to the Contractor beginning warranty work. The parties will review and complete the Pre-Warranty Work Meeting Check List during the meeting. The purpose of this meeting is to ensure both parties fully understand the intent and scope of the warranty specification and to discuss and resolve potential impediments to the success of the warranty pavement.

C. Warranty Report

The Contractor shall record, and submit to the Department, all information necessary to accurately define the limits and location of warranty work completed in a HMA Pavement Warranty Report. The report shall document information including quantity placed, location of pavement placed by station or route/reference marker and offset, and dates/times of performance of the work. The Contractor shall submit the warranty report to the EIC as soon as warranty work is complete for each location of warranty work.

The EIC will sign and date the warranty report to indicate acceptance of the warranty work upon completion by the Contractor, and to start the warranty. This acceptance serves only to acknowledge that the work operation to be warranted has been completed and establishes the date the warranty begins. The EIC will attach a copy of the warranty report to the Daily Work Report (DWR).
III. DEFINITIONS FOR WARRANTIES

A. **Work Phase** shall commence on the date of the contract award and end on the date of contract final acceptance.

B. **Acceptance of the Work** shall mean the date the Department issues the contract final acceptance.

C. **Warranty Phase** shall mean:

1. For warranty work completed within one year prior to the contract completion date, the warranty phase is the one year period from the time the Department approves completion of the item of work for which the Contractor is providing the warranty, or

2. For warranty work completed before the one year period described in (1) above, the warranty phase shall run from the time the Department approves completion of the items of work for which the Contractor is providing the Warranty until acceptance of the work.

3. No warranty shall commence until all items set forth in “Warranty Work” have been completed and approved by the Department. If the contract is terminated in accordance with §105-07 Termination, the warranties with respect to all work performed under this contract by the Contractor prior to such termination shall be deemed to commence on the day immediately preceding the effective date of such termination, and shall run for the one year period described in (1) above.

D. **Acceptance of the Warranty Phase** shall mean the acceptance of the warranty work following the date of the expiration of the warranty.

E. **Warranty Work** shall mean all top course material placed (permanent pavement and shoulders) including any other items of work necessary to perform such work once the warranty is elected by the Contractor.

IV. CONTRACTOR WARRANTIES

The Contractor warrants to the Department with respect to warranty work as follows:

- that at the conclusion of the warranty phase, the completed work shall be fit for its intended purpose;
- that the work shall be free of defects as listed herein (both latent and patent);
- that materials, supplies, and equipment furnished under this contract shall be of good quality;
- that all work has been performed in a workmanlike manner; and
- that all work shall meet all of the requirements of this contract.
A. Defective Work Criteria

The Department has ultimate authority to decide whether work is defective. The following are the pavement characteristics which the Department shall consider defective in the warranty work but are not limited to:

1. **Corrugations** – A series of ripples occurring at fairly regularly spaced intervals perpendicular to the pavement centerline that usually occur at points where traffic accelerates and decelerates. No corrugations shall appear during the warranty period.

2. **Slippage Cracks** – Crescent or half-moon shaped cracks typically produced by vehicles braking or turning their wheels causing the pavement surface to slide or deform. No slippage cracks shall appear during the warranty period.

3. **Raveling** – A progressive deterioration of the pavement surface caused by the dislodging of aggregate particles, typically at the longitudinal joint(s) and wheel tracks. No raveling shall appear during the warranty period except for occasional popouts resulting from unsound aggregate particles.

4. **Longitudinal Joint Separation** – A separation, sometimes having the appearance of a crack, in the longitudinal joint between lanes that occurs when either the paver screed has insufficient material or the paver is misaligned. No separation shall appear during the warranty period.

5. **Wheelpath Rutting** – Longitudinal surface depressions in the wheelpaths. No rutting in excess of ¼ inch shall appear during the warranty period.

6. **Potholes** – Relatively small holes that penetrate through the surface course. No potholes shall appear during the warranty period.

7. **Delamination** – Breaking up of the surface course into fragments due to no bond between the surface layer and the layer immediately below it. No delamination shall appear during the warranty period.

B. Corrective Work.

Corrective work to be performed by the Contractor shall include repairs to pavement deficiencies defined herein. The repairs shall be made in areas delineated by the EIC and may include one or a combination of the following items to restore the intended pavement service life:

1. Removing the pavement surface course, including shoulders if necessary, by milling and replacing in kind;

2. Paving a 1 ½ inch overlay on the existing surface, including shoulders, with the surface course specified in the contract; and

3. Routing, if applicable, and sealing longitudinal joint separation.

The Department reserves the right to select an appropriate treatment(s) which will restore the intended service life of the warranted pavement. This may include additional items not listed above.
C. Warranty of Subcontractor/Material Supplier

The Contractor shall guarantee and warranty any work, including the performance of a subcontractor and/or material supplier. Upon receipt from the Department of a notice of rejection of any of the work, to satisfy any warranty work performed by a subcontractor, the Contractor shall enforce or perform any such warranty or guarantee. Until the termination of the warranty period, the cost of any labor, equipment, materials, including re-engineering or rework, supervision or overhead shall be the responsibility of the Contractor and the Contractor shall replace or repair defective materials or workmanship furnished by subcontractors or suppliers.

D. Warranties and Guarantees

The warranties of this section are in addition to the warranties and guarantees of the original contract.

V. INSPECTION

The Department will inspect all warranty work within one year of placement of hot mix asphalt top course subject to these warranty provisions.

The Department will solely make the determination and notify the Contractor whether the warranty work is accepted or found to be defective.

VI. DEFECTIVE WORK

If the warranty work is found to be defective, the EIC and the RME or their designees and representatives of the Contractor and Material Supplier shall meet within 14 calendar days of such notice to inspect the defective work. Defects in warranty work will be documented by the Department and provided to the Contractor using Warranted Work Inspection Report. The Department has ultimate authority to decide whether work is to be rejected.

The Contractor shall correct defective work that fails to conform to the contract and/or the warranties. The Contractor shall bear all costs associated with correcting such rejected work, including any independent testing necessary to resolve disputes. No liquidated damages or engineering charges will be assessed upon a Contractor for performing repairs to warranty work.

VII. DURATION OF WARRANTY

The Contractor’s applicable warranties shall apply to any corrective work and shall remain in effect until the expiration of the one year warranty period for the initial work, or contract final acceptance, whichever is longer.
VIII. SCHEDULE FOR CORRECTIVE WORK

Within 7 calendar days after the meeting between the Department and Contractor, the Contractor and the Department shall mutually agree when and how the Contractor shall perform corrective work. In case of an emergency requiring immediate corrective action, the Contractor and the Department shall agree on such remedy immediately upon notice by the Department of such emergency. Should the Contractor and the Department fail to reach such an agreement within such 7 calendar day period (or immediately in the case of emergency conditions), the Contractor shall proceed as directed by the Department and shall follow the process outlined in §105-14 Disputed Work and Dispute Resolution provisions. If the Contractor does not use its best efforts to proceed to complete said remedy within 30 calendar days of the time agreed to, or should the Contractor and the Department fail to reach such an agreement within such 30 calendar day period (or immediately in the case of emergency conditions), the Department, after notice to the Contractor, shall have the right to perform or have performed by third parties the necessary remedy and the costs thereof shall be borne by the Contractor, or pursue any other option in accordance with the terms of the performance bond.

IX. DISPUTE RESOLUTION

If the Contractor disagrees with the basis of the rejection of the warranty work by the Department, the Contractor shall follow the process outlined in §105-14 Disputed Work and Dispute Resolution provisions. If the dispute continues, final payment should not be processed or accepted. After the final payment is made and accepted, the Department cannot make any additional payments to the Contractor and any payment provisions of §105-14 Disputed Work and Dispute Resolution are not applicable. However, the parties shall use the process contained therein to resolve issues regarding rejected work. Notwithstanding the provisions of §107-06 Insurance, and the bond requirements as contained in the contract, the Contractor’s bonds and insurance shall remain in effect throughout the duration of any dispute and subsequent corrective work, including any corrective work which is scheduled beyond the Warranty Phase.

X. INSURANCE

Additional insurance coverage is required only if the warranty period extends beyond the contract final acceptance.

The Contractor shall submit proof of insurance in accordance with §107-06 Insurance. The insurance shall be in place for the entire period of the warranty (work phase and warranty phase). In the event there is more than one warranty location, the insurance coverage shall remain in force through the date that the last warranty period expires.
XI. BONDS

Faithful performance and labor and materials bonds are required only if the warranty period extends beyond contract final acceptance.

The Contractor must submit faithful performance and labor and material bonds prior to the beginning of the warranty phase. The bonds shall conform to the contract requirements and shall be for the full value of the items which constitute all warranty work submitted by the Contractor. If there is more than one warranty location, the amount of the bond required will be the sum of the full value of each of the warranties.

XII. STATUTE OF LIMITATIONS

A. Any Statue of Limitations or Notice provision relative to work phase claims shall commence on the date payment for the final estimate for the work phase is issued.

B. Any Statue of Limitations or Notice provision relative to warranty phase claims, for the warranty period defined in Paragraph III.C.1., shall commence on the date of acceptance of the warranty phase.