



Asphalt Paving

REFERENCES:

Alabama Department of Transportation Standard Specification for Highway Construction, latest edition.

QUALITY ASSURANCE:

The work of asphalt paving shall be accomplished by skilled workmen experienced in the laying of asphalt.

All equipment shall be of a design and size to successfully accomplish the work.

PROJECT CONDITIONS:

The Contractor shall comply with all environmental laws and requirements pertaining to the work.

The Contractor shall take adequate measures to control dust in the work area.

The Contractor shall thoroughly inspect the roadway base and assure himself that proper laying conditions exist.

The Contractor shall provide and maintain adequate and safe traffic control.

PRODUCTS

Prime Coat:

- Prime Coat shall be emulsified asphalt, Type AE-P, tar types RT2 or RT3, or cutback asphalts MC 250, MC 70, RC70 or RC250 as defined in Section 804 of the Alabama Department of Transportation Standard Specifications, latest edition.
- Prime Coat shall be applied at the rate of 0.22 to 0.25 gallons per square yard over the entire area to be treated with asphalt.

Tack Coat:

- Tack coat shall be emulsified asphalt type SS-1, SS-1h, or RS-2 or Asphalt Cement Grade AC-10 or AC-20 as defined in Section 804 of the Alabama Department of Transportation Standard Specifications, latest edition.
- Tack coat shall be applied at a rate not to exceed 0.10 gallons per square yard.

Asphalt Patch:



Section 3: Standards by CSI Divisions

- Asphalt paving used in patching shall be Plant Mix Bituminous Base as defined in Section 327 of the Alabama Department of Transportation Standard Specifications, latest edition.
- Materials shall meet the requirements of Article 429 of the above mentioned specifications.
- The Contractor shall refer to the Bid Proposal or Drawings for the quantity of material to be applied per square yard.

Asphalt Paving:

- Asphalt paving shall be improved Bituminous Concrete Plant Mix meeting the specification outlined in Section 429 of the Alabama Department of Transportation Standard Specifications, latest edition.
- Final layer of asphalt placed outside in streets and parking lots shall be improved Bituminous Concrete Wearing Surface, with all materials conforming to Section 429 of the Alabama Department of Transportation Standard Specifications, latest edition.

Traffic striping and control markings shall conform to Sections 701 and 703 of the Alabama Department of Transportation Standard Specifications for Highway Construction, latest edition. All striping, delineations, markers, etc. damaged or destroyed during the construction shall be replaced by the Contractor at his expense.

Before overlaying the street, the Contractor shall raise or lower all valve boxes, manholes, and other embedded items, including items that have previously been paved over. No extra payment will be made for these adjustments.

Equipment:

- Equipment used in asphalt patching and/or asphalt paving shall meet the requirements of Article 410.03a of the Alabama Department of Transportation Standard Specifications, latest edition.
- Equipment used in the application of Prime Coat and Tack Coat shall comply with Article 401.03a of the above mentioned Specifications.

Prime and Tack Coat:

- Bituminous materials shall not be placed on wet surfaces or when the air temperature is below 60-degrees F.
- Bituminous materials shall not be placed when the temperature is expected to fall below freezing during the night regardless of the daytime temperature.

The asphalt mixture shall be placed only upon an approved underlying course that is dry.



Section 3: Standards by CSI Divisions

Asphalt layers of 200-pounds per square yard or less shall not be placed when the air temperature is below 40-degrees F. The air temperature must be 40-degrees F. and rising before the spreading operation is started and the spreading operation shall be stopped when the air temperature is 45-degrees F. and falling. For asphalt layers over 200-pounds per square yard, the above temperatures shall be lowered by 5-degrees.

EXECUTION

Prime and Tack Coat:

- All loose material, dust and foreign material shall be removed from the surface. Cleaning shall be continued until all caked and loose dirt and dust are removed.

Asphalt Patching:

- All designated areas to be patched shall be trimmed to neat vertical lines to the depth of patch specified. All loose material shall be removed. A prime or tack coat shall be applied as specified above. The asphalt shall be placed and compacted to a degree that further consolidation of the patch is not anticipated.
- Any patched areas that do consolidate shall be replaced or additional material brought in to bring the patch up to the surrounding level.
- All asphalt or concrete streets, parking areas and drives shall be patched the same day they are cut. Temporary or cold patch material may be used until the permanent patch can be placed; however, no extra payment will be made for temporary patching.

The Contractor shall adequately protect his work and the public. Where unpaved or rough areas may exist, the Contractor shall provide adequate warning signs. The signs shall be equipped with flashing lights if the condition exists after darkness.

Prime and Tack coat shall be uniformly applied at the rate specified by pressurized distributors.

All areas to be treated with an asphalt surface treatment shall be primed and/or tacked.

Asphalt Paving and Patch:

- Asphalt Patching may be applied with spreaders, by hand, or with motorgraders. All areas inaccessible to large equipment shall be spread by hand.
- Asphalt patching shall be thoroughly compacted through the use of steel wheeled rollers and/or rubber tired rollers. Density shall be as specified on the drawings, in the Bid Proposal or in the Alabama Department of Transportation Standard Specifications.



Section 3: Standards by CSI Divisions

- Asphalt paving shall be applied with spreaders; except in inaccessible areas spreading may be done by hand, uniformly placing the desired rate per square yard over the underlying surface.
- As soon as the mixture has set sufficiently to prevent cracking, the mixture shall be rolled with steel wheel and rubber-tired rollers to compact the mixture. Density shall be as specified on the drawings or in the Bid Proposal.
- All patching, including any temporary patching, shall be done in a professional manner, shall be smooth, and shall blend smoothly with adjacent paving.
- Generally, unless called out differently elsewhere, the asphalt paving shall not be placed until the project has satisfactorily passed all tests and all construction activities are complete, and there is no need for any further construction traffic in the affected areas. However, the Contractor shall adequately maintain the patched areas for the safety of the public.

Testing of the asphalt mixtures shall be performed at the discretion of the Owner and shall be paid by the Owner. However, re-tests shall be paid by the Contractor. Testing shall include but not be limited to density tests and extraction tests.

The finished surface of asphalt overlays shall be checked with string, level and/or straightedge. The finished surface shall not vary more than 1/4" from the required sections as measured at right angles to the roadway centerline. The finished surface shall not vary more than 3/8" in any 25-foot section measured parallel to the centerline at the following locations: one foot inside of the edges of pavement, at the centerline and at other points as designated.

The Contractor shall maintain and protect the newly laid asphalt until final acceptance of the work.