

## **410 RECYCLED BITUMINOUS PAVEMENT AS BASE OR BINDER COURSE**

### **410.01 DESCRIPTION**

This work shall consist of preparing and placing plant mixed recycled bituminous concrete on a prepared surface in accordance with this specification and the applicable requirements of 401.

The Contractor shall have the option of substituting plant mixed asphaltic concrete for the plant mixed recycled bituminous concrete.

The Contractor shall have the option of using asphalt concrete millings that are removed from this contract, if any, or asphaltic concrete from an existing stockpile, or any combination of the foregoing.

### **410.02 COMPOSITION**

Recycled Bituminous Pavement as Base or Binder Course shall consist of recycled asphaltic concrete, coarse aggregate, fine aggregate, mineral filler, asphalt cement, modifying agent and hydrated lime or anti strip additive as required by the approved job mix formula.

### **410.03 MATERIALS**

Asphalt Cement shall conform to the requirements of AASHTO M 226, Table 2, for the Grade required by the approved job mix formula. The delivery and certification requirements of 802.01 apply.

Coarse Aggregate shall conform to the quality requirements of the type of bituminous base or binder course specified.

Fine Aggregate shall conform to the quality requirements of the type of bituminous base or binder course specified.

Mineral Filler - 803.05

Modifying Agent, if not asphalt cement - 802.07

Hydrated Lime - 821.03(A)

Anti Strip Additive - 802.08

Recycled Asphaltic Concrete shall consist of asphalt concrete millings or crushed bituminous pavement with maximum nominal size determined by maximum nominal size of base or binder course specified, and in no case exceed 1 inch. There shall be little evidence of deleterious materials in the recycled asphaltic concrete.

### **410.04 JOB MIX FORMULA**

The job mix formula requirements of 401.02 apply for the class of base or binder course specified, except the portion of recycled asphaltic concrete of the total Recycled Bituminous Pavement mixture shall not exceed 60 percent by weight.

A blend of asphalt cement, modifying agent, anti strip additive and recovered bitumen shall be proportioned to meet the requirements of AC-20 per 802.02(A), except the requirements for penetration and/or viscosity shall apply. Bitumen shall be recovered from the recycled asphaltic concrete using the Abson method.

The Contractor should allow 20 working days to receive approval or rejection of a proposed job mix formula after it has been submitted to the Engineer for approval.

Section 818.01 6.f., "Other", may include recycled asphaltic concrete, modifying agent and anti stripping additive or hydrated lime.

#### **410.05 CONSTRUCTION REQUIREMENTS**

**(A) GENERAL.** The construction requirements for the type of mix specified apply.

**(B) METHOD.**

**(1)** Recycled Asphaltic Concrete will be sized prior to entering the cold feed to the maximum 1 inch nominal size. If there is evidence of the millings not breaking down during the heating and mixing, the Engineer may elect to modify the 1 inch maximum nominal size requirement.

**(2)** Gradation for the fine aggregate and/or coarse aggregate used in the production of the recycled bituminous pavement shall be the total responsibility of the Contractor and when combined with recycled asphaltic concrete, the combined material will meet the approved job mix formula gradation within the construction tolerances of 401.02.

#### **410.06 MEASURE AND PAYMENT**

The unit of measure for Recycled Bituminous Pavement as Base or Binder Course of the class specified will be the ton. The number of tons will be the actual number of tons complete in place as weighed on approved truck scales. The Engineer will deduct the weight of all material lost, wasted, damaged, rejected or applied in excess of the Engineer's direction or contrary to these specifications.

The number of tons of Recycled Bituminous Pavement as Base or Binder Course of the class specified, as measured, will be paid at the contract unit price per ton, which payment will be full compensation for furnishing, hauling, and placing all materials and for furnishing all equipment, tools, labor and incidentals necessary to complete the work as specified herein.