Amend **Section 302 - Recycled Plant Mix Asphalt Concrete Base Course** to read as follows:

"SECTION 302 - RECYCLED PLANT MIX ASPHALT CONCRETE BASE COURSE

302.01 Description. This section is for furnishing and placing recycled plant mix asphalt concrete base (Recycled ACB) according to the contract.

302.02 Materials. The Recycled ACB includes a mixture of crushed reclaimed asphaltic concrete pavement (RAP), virgin aggregate, and asphalt cement. Select the exact proportion of crushed RAP to virgin aggregate in the mix. Do not exceed the proportion of crushed RAP to virgin aggregate:

Proportion	Type Of Mix Plant
30-70	Batch
40-60	Drier-Drum

The Contractor shall conform to the following requirements:

Asphalt Cement	702.01
Aggregate for Plant Mix Asphalt Concrete Base Course	703.03

Process the RAP to provide a uniform gradation from fine to coarse. 100% of the RAP shall pass the one and a half inch sieve. The extracted bitumen content for the crushed RAP shall be not less than 2% when tested according to AASHTO T 164 (ASTM D 2172). Handle and size the virgin aggregate material such that the blend of the crushed RAP material and the virgin aggregate material conforms to Subsection 703.03 - Aggregate for Plant Mix Asphalt Concrete Base Course.

Submit for acceptance a job-mix formula for the recycled mixture to be supplied. Confirm the job-mix formula, the source of aggregate, grade of bituminous material and the proportion of crushed RAP to be used in the mixture. Furnish only one grade of bituminous material and one recycle proportion for the product. Make grade or proportion changes only upon written permission by the Engineer.

The established recycled ACB mixture shall be of optimum cohesion at an air void content of 3% to 6% and have a minimum stability of 37 when tested according to AASHTO T 246 (ASTM D 1560). The Contractor shall submit for acceptance a job-mix formula based on tests according to AASHTO T 245 (ASTMD 1559) when requested by the Engineer. Subsection 301.02 - Materials specifies the job-mix formula. The total amount of bituminous binder

in the recycled ACB mixture shall be between 4% and 6%. The amount added shall be as specified by the Engineer.

This work shall not start and the Engineer will not accept the mixtures until:

(1) the samples of the materials intended for use are submitted and

(2) the Engineer establishes an asphalt content.

Submit the samples no less than 15 working days before the work begins.

302.03 Construction Requirements. Construction methods shall conform to Subsection 301.03 - Construction Requirements, except as specified herein.

(A) Compact the recycled ACB material thoroughly according to Subsection 401.05(E) - Compaction immediately upon completion of spreading operation.

(B) The equipment shall conform to Subsection 401.05 - Construction Requirements except as specified herein.

(1) Requirements for Batching Plants.

(a) The Engineer reserves the right to waive the three bin operation.

(b) Heat the virgin aggregate material to an approximate temperature of 450 ^{o}F. to result in a finished mix temperature of approximately 280 ^{o}F. Control the mixing and weighing operations to optimize heat transfer from virgin aggregate material to the reclaimed aggregate material.

(c) Use an appropriate method to add the crushed RAP material to the heated virgin aggregate material. This method shall allow the crushed RAP material to be added after the virgin aggregate material has left the drier. The method shall provide a positive control on proportioning of the crushed RAP material into the mixture. The crushed RAP material shall:

1. feed directly into the weigh hopper or pugmill;

2. feed to an accuracy of 10% of the required weight;

3. Have a maximum moisture content of 3% when mixed with the heated virgin aggregate; and

4. Retain the recycled ACB mixture in a single silo.

(2) Requirements for Drier-Drum Plants. Design the cold-feed system to prevent direct flame impingement on the recycled crushed RAP material. Conform to Subsection 401.04(F)(4) - Proportioning for Drier-Drum Mixing with Cold-Feed Control.

(3) Equip the paver with an accepted electronic screed control device. The electronic device includes a grade controlling sensor mounted on each side of the paver. Each sensor shall take its grade reference from a 10-foot ski for the first pass. The Contractor may substitute one adjacent pavement for subsequent passes.

(C) The criteria on mat thickness shall be as follows:

(1) Spread and compact the mixture in one layer where the required thickness of recycled ACB is 6 inches or less.

(2) Spread and compact the mixture in two or more layers of approximately equal thickness where the required thickness of recycled ACB is more than 6 inches. The maximum compacted thickness of one layer shall not exceed 6 inches.

(D) When necessary, furnish regular ACB conforming to Section 301 - Plant Mix Asphalt Concrete Base Course instead of recycled ACB. Notify the Engineer and obtain permission before doing such work.

(E) Brooming off shall conform to Section 310 - Brooming Off.

(F) Cut samples from the compacted pavement for testing within 24 hours of lay down. The cut pavement samples shall be 12 inches by 12 inches or four inches diameter cores, minimum. Take samples of the mixture for the full depth of the course at the location as specified by the Engineer. Place and compact new material to conform with the surrounding area after taking samples.

(G) Apply tack coat to layers of recycled ACB for multiple lift construction. Tack coat shall conform to Section 407 - Bituminous Tack Coat.

302.04 Method of Measurement. The Engineer will measure recycled ACB per ton under Section 312 - Plant Mix Glassphalt Concrete Base Course complete in place.

302.05 Basis of Payment. The Engineer will pay for the accepted recycled ACB at the contract unit price per ton under Section 312 - Plant Mix Glassphalt Concrete Base Course complete in place. The price includes full compensation for handling, salvaging, and reprocessing operations of the RAP; furnishing, spreading, and compacting the recycled ACB; sampling; restoring the area; and furnishing equipment, tools, labors, materials, and incidentals necessary to complete the work.

The Engineer will not pay for the bituminous tack coat separately. The Engineer will consider the cost for the bituminous tack coat as included in the contract price of the various contract items in Section 401 - Asphalt Concrete Pavement."

END OF SECTION