Section 2122. Paved Shoulders

2122.01 DESCRIPTION.

A. Prepare the area adjacent to a pavement, as necessary, and furnish and place shoulder material on the prepared area. This work may include construction of an earth fill and a special backfill material layer for new construction or surface preparation for resurfacing or overlay construction.

B. The type of shoulder material may be specified, or it may be an alternate on the proposal, and only one type will be bid and awarded.

2122.02 MATERIALS.

A. Hot Mix Asphalt Mixture (1,000,000 ESAL Base Mixture).
Use materials specified in Section 2303.

B. Portland Cement Concrete Base.
Use materials specified in Section 2201.

C. Special Backfill.
Use materials specified in Section 4132.

2122.03 CONSTRUCTION.

A. Equipment.
Use the type of equipment required or allowed for the type of paved shoulder to be placed. Adapt equipment to shoulder construction in a manner approved by the Engineer.

B. Preparation of Shoulder Area.

1. This work may involve construction of an earth fill and a special backfill material to allow placement of paved shoulders. Spread and compact earth fill according to the requirements of Section 2109.

2. Use select materials of Article 2102.02, D, 1, if available and coordinated with the Engineer, or suitable soils of Article 2102.02, D, 2. Do not use unsuitable soils of Article 2102.02, D, 3, or topsoil.

3. For shoulder construction in which PCC is placed over HMA, thoroughly clean the surface by brooming prior to placing concrete. When HMA is to be placed over HMA, prepare the surface according to Article 2303.03, C, 4.

C. Paved Shoulder Construction.
Construct paved shoulders as follows:

1. Hot Mix Asphalt Mixture.
- **a.** Prior to placement, tack coat the pavement edge.
- **b.** Proportion, mix, place, and compact HMA mixture to the width, thickness, grade, and slope shown in the contract documents, according to the requirements of Section 2303.
- **c.** After finish rolling, visually inspect the paved shoulders to ensure:
  - Roller distortions have been smoothed.
  - Longitudinal and transverse joints have been smoothly constructed.
  - The general grade profile is satisfactory.

2. Portland Cement Concrete Base.
- **a.** Proportion, mix, place, finish, and cure PCC base to the width and thickness shown in the contract documents. Except as modified herein, perform the work according to the requirements of Section 2201.
- **b.** The shoulder may be placed separately, using either fixed forms or slip forms, after placement of the main line pavement. Place tie bars according to the contract documents, or use a method the Engineer approves, prior to the start of paving operations.
- **c.** Finish and edge the concrete. Obtain the Engineer's approval for construction of surface corrugations.

d. Saw the transverse joints as shown in the contract documents. In addition, place expansion and contraction joints to coincide with similar joints in the abutting pavement. Seal transverse sawed joints according to Article 2301.03, P. Fill expansion joints in the same manner as for the main line.

3. Special Backfill Material.
Place special backfill material according to Article 2102.03, D, 3, c.

D. Finishing.
After completion of the paved shoulder, place the granular fillet as shown in the contract documents and according to Section 2121. Finish the foreslope according to Article 2123.03, C.

2122.04 METHOD OF MEASUREMENT.
Measurement will be as follows:

A. Paved Shoulders.

1. Hot Mix Asphalt Paved Shoulder.
Article 2303.04, A, 2, applies.

2. Portland Cement Concrete Paved Shoulder.
Article 2301.04, A, applies.

B. Special Backfill.
Contract quantity.

C. Resurfacing or Overlay of Existing Paved Shoulders.
Article 2303.04 applies.

2122.05 BASIS OF PAYMENT.
Payment for all work performed and measured as prescribed will be according to the following provisions:

A. Paved Shoulders.

1. Hot Mix Asphalt Paved Shoulder.
Article 2303.05 applies.

2. Portland Cement Concrete Paved Shoulder.
a. Article 2301.05, A, applies.
b. Payment for paved shoulders constructed is full compensation for:
- Preparing the area, including the earth fill, furnishing and placing the paved shoulder, and finishing the shoulder edge ~~and foreslope~~.
- Furnishing all the material, equipment, tools, and labor to complete the work according the contract documents and this specification.

c. Separate payment will not be made for:
- Construction of the earth fill.
- Asphalt binder.
- Tack coat bitumen.
- Placement, construction, or sawing and filling of joints for the PCC base.
- Finishing of the shoulder edge and foreslope and furnishing granular material.

3. Furnish samples as specified in Section 2303 or 2301, with payment to be made as specified.

B. Special Backfill.
Article 2102.05, A, 4, applies.

C. Resurfacing or Overlay of Existing Paved Shoulders.
For HMA of the type, width, and thickness specified and satisfactorily constructed, payment will be according to Article 2303.05.