SECTION 524
CONCRETE DITCH AND SLOPE PAVEMENT

524-1 Description.
Construct concrete pavement in the flow channel of drainage ditches and on slopes in accordance with the notes and details shown in the Plans.

524-2 Materials.
Concrete ..............................................................................Section 347
Preformed Expansion Joint Material and Hot Poured Sealer .................................................................Section 932
Filter Fabric ........................................................................Section 985
Reinforcing Steel .....................................................................Section 415

524-3 Forms.
Provide forms as specified in 520-3.

524-4 Foundation.
Shape and compact the foundation materials, upon which the pavement is to be constructed, to a firm, even surface, true to grade and cross-section.
Dispose of surplus material.

524-5 Joints and Weep Holes.
524-5.1 Joints: Form open or tooled (dummy) type joints as shown in the Plans. Form open joints by staking a metal bulkhead in place and placing the concrete on both sides of it. When the concrete has set sufficiently to preserve the width and shape of the joints, remove the bulkhead. Upon finishing the pavement over the joint, open and edge the slot with a tool having a 1/4 inch radius.

524-5.2 Method of Placing Slope Pavement: Place slope pavement in vertical strips, 4 feet, plus or minus 1 inch, wide, except taper radii strips from the 4 foot width at the bottom to a minimum width of 1 foot at the top. Score the strips horizontally at intervals of 2 feet, plus or minus 1 inch, with a tool having a double 1/4 inch radius. Edge construction joints between strips with a tool having a 1/4 inch radius. The Engineer will allow construction joints at horizontal scorings.

524-5.3 Weep Holes: Locate and construct weep holes as shown in the Plans. Construct weep holes at the toe of slope for all slope pavements.

524-5.4 Filter Fabric: Locate and construct filter fabric as shown in the Plans and Design Standards.

524-6 Placing Concrete.
Place the concrete in the forms, tamp and spade it to prevent honeycombing, and until the top of the structure can be floated smooth and the edges rounded.
524-7 Finishing.
Roughen the surface of ditch pavement after screeding concrete, unless otherwise specified, to the approximate shape and grade by a rake or other suitable tool drawn perpendicular to the direction of flow. Ensure that the furrows are at least 1/4 inch deep.
Strike off slope pavement or smooth surfaced ditch pavement, when specified, true to line and cross-section, and remove all surplus water and laitance from the surface. Lightly broom the finish.

524-8 Curing.
Cure the concrete as specified in 520-8.

524-9 Method of Measurement.
524-9.1 Concrete Ditch and Slope Pavement: The quantities to be paid for Concrete Ditch Pavement and Concrete Slope Pavement will be the plan quantity, in square yards, completed and accepted. Where the Plans show headers or cut-off walls at the end or edge of the pavement, the volume of the additional thickness of pavement that constitutes the headers, calculated in accordance with plan dimensions, will be converted into equivalent square yards of standard thickness pavement and included in the quantity to be paid for.
No deduction will be made for any areas occupied by manholes, inlets, or other drainage structures or by public utility appurtenances within the pavement area. The square yard quantity includes any ditch blocks with ditch or slope pavement on top. When steel reinforcement is called for in the Plans, payment will be included in the square yard item.

524-9.2 Concrete Core Ditch Blocks: The quantity to be paid for Concrete Core Ditch Blocks will be the plan quantity of concrete, in cubic yards, completed and accepted. When steel reinforcement is called for in the Plans, payment will be included in the cubic yard pay item. The cubic yard pay item includes any ditch block within a grass or earth ditch, without other pavement on top.

524-10 Basis of Payment.
Prices and payments will be full compensation for all work specified in this Section, including all earthwork, skimmers, and incidental materials necessary to complete the work.
For repairs and replacements, removal of the existing concrete ditch or slope pavement will be included in the cost of new concrete ditch or slope pavement.
Payment will be made under:
Item No. 524- 1- Concrete Ditch Pavement - per square yard.
Item No. 524- 2- Concrete Slope Pavement - per square yard.
Item No. 524- 3- Concrete Core Ditch Block- per cubic yard.