# TECHNICAL SPECIFICATION 225 BITUMINOUS CONCRETE SIDEWALKS, PATHS, DRIVEWAYS AND PARKING AREAS

# 225.1 SCOPE OF WORK

This technical specification covers the furnishing of all labor, materials, testing, submittals, tools, and equipment necessary to construct bituminous concrete sidewalks, paths, parking areas and driveways in accordance with the details shown on the plans or as directed by the Engineer.

## 225.2 MATERIALS

Materials for the construction of sidewalks, parking areas and driveways shall conform to Form 817, Section 9.22.02, except that:

- A. Binder course shall be HMA S0.5 or Class 1 Bituminous Concrete
- B. Wear course shall be HMA S0.375 or Class 2 Bituminous Concrete
- C. Base material shall be medium gradation processed aggregate base conforming to Technical Specification 210 "Processed Aggregate Base".
- D. Suitable subbase material shall be medium gradation processed aggregate base as specified in Technical Specification 210, or bank or crushed gravel meeting the applicable provisions of Form 817, Section M.02.02.1, and approved by the Engineer.
- E. Tack coat material shall conform to Form 817, Section M.04.01.

## 225.3 <u>SUBMITTALS</u>

The following submittals shall be submitted to the Engineer for review and approval prior to installation:

- Gradation test results for processed aggregate
- Gradation test results for subbase material(s)

Density testing shall be conducted during paving process and the results shall be forwarded to the Engineer.

#### 225.4 CONSTRUCTION METHODS

# A. <u>Bituminous Concrete Sidewalks and Residential Driveways:</u>

All bituminous concrete sidewalk and residential driveway construction shall be excavated or filled to within 10 inches below finished grade and extended 3 inches minimum beyond the outside edges of the proposed walk, drive or bituminous concrete lip curbing (if curbing is installed). The subbase shall be properly graded to form a uniform base, and shall follow a true line and cross-section 10 inches below the finished grade of the pavement. Any material, which, in the opinion of the Engineer, is unsuitable to receive the base material, shall be excavated, removed, disposed and replaced with suitable material and compacted as approved by the Engineer. Leveling material used to fill ruts, holes or irregularities in the subbase is the responsibility of the Contractor and is considered part of this item. The base shall be 8 inches of processed aggregate base as specified and shall be compacted in two 4 inch lifts utilizing a roller weighing a minimum of 2000 pounds. Compaction shall be uniform and the surface of the base shall follow a true line and cross section 2 inches below the finish grade of the walk/drive. At any point where new pavement will match existing pavement, the existing pavement shall be saw cut vertically to a smooth edge and a tack coat shall be applied, and after placement of the pavement, the joint shall be sealed with a hot asphalt material, AC-20 or approved equivalent. Class 2 bituminous concrete shall be placed, and compacted to a depth of 2 inches using a roller weighing a minimum of 2,000 pounds.

Driveways shall be installed full width, with no cold joints, unless prior approval is granted by the Engineer to install driveways in sections. Subbase, if required, shall be placed in maximum 4 inch lifts and compacted with a minimum of 2 passes with a motor drive vibratory compactor.

## B. <u>Bituminous Concrete Parking Areas and Commercial Driveways:</u>

All bituminous concrete parking, and commercial drive construction shall be excavated or filled to within 12 inches below finished grade and extended 6 inches minimum beyond the outside edges of the paved areas or 3 inches beyond bituminous concrete lip curbing (if curbing is installed). The subbase shall be properly graded to form a uniform base. Any material which, in the opinion of the Engineer, is unsuitable to receive the base material shall be excavated, removed, disposed and replaced with suitable material and compacted as approved by the Engineer. Leveling material used to fill ruts, holes or irregularities in the subbase is the responsibility of the Contractor and is considered part of this item. The base shall be 8 inches of processed aggregate base as specified and shall be compacted in two 4 inch lifts utilizing a roller weighing a minimum of 10,000 pounds. Compaction shall be uniform and the surface of the base shall follow a true line and cross section 4 inches below the finish grade. At any point where new pavement will match existing pavement, the existing pavement shall be saw cut vertically to a smooth edge and a tack coat shall be applied, and after placement of the pavement, the joint shall be sealed with a hot asphalt material, AC-20 or approved equivalent. The bituminous concrete shall be placed, and compacted in two 2 inch lifts to a depth of 4

TECHNICAL SPECIFICATION 225 BITUMINOUS CONCRETE SIDEWALKS, PATHS, DRIVEWAYS, AND PARKING AREAS inches using a roller weighing a minimum of 10,000 pounds with no cold joints, unless prior approval is granted by the Engineer to install parking areas and driveways in sections. The binder course shall be placed first followed by the wear course. Tack coat will be applied between lifts as per Technical Specification 220 – "Bituminous Concrete Surfaces".

Bituminous concrete lip curbing, if installed, shall be placed on the binder course with tack coat applied.

## C. Bituminous Concrete Paths:

All path construction shall be excavated or filled to within 10 inches below finished grade and extended 3 inches minimum beyond the outside edges of the proposed path. The subbase shall be properly graded to form a uniform base, and shall follow a true line and cross-section 10 inches below the finished grade of the pavement. Any material, which, in the opinion of the Engineer, is unsuitable to receive the base material, shall be excavated, removed, disposed and replaced with suitable material and compacted as approved by the Engineer. Leveling material used to fill ruts, holes or irregularities in the subbase is the responsibility of the Contractor and is considered part of this item. The base shall be a minimum of 8 inches of processed aggregate base as specified and shall be compacted in two 4 inch lifts utilizing a roller weighing a minimum of 2000 pounds. Compaction shall be uniform and the surface of the base shall follow a true line and cross section 2 inches below the finish grade of the path. At any point where new pavement will match existing pavement, the existing pavement shall be saw cut vertically to a smooth edge and a tack coat shall be applied, and after placement of the pavement, the joint shall be sealed with a hot asphalt material, AC-20 or approved equivalent. Class 2 bituminous concrete shall be placed, and compacted to a depth of 2 inches using a roller weighing a minimum of 2,000 pounds.

Paths shall be installed full width, with no cold joints, unless prior approval is granted by the Engineer to install driveways in sections. Subbase, if required, shall be placed in maximum 4 inch lifts and compacted with a minimum of 2 passes with a motor drive vibratory compactor.

## 225.5 MEASUREMENT

Measurement for this item will be based on the number of square yards completed and accepted in place. This area shall include the area under and beyond the back of the bituminous concrete lip curbing. Tack coat shall be measured for payment by the number of gallons used and accepted.

Sawcutting existing bituminous concrete pavement will not be measured for payment but shall be included in the square yard measurement for this item.

# 225.6 <u>PAYMENT</u>

Payment for this item will be based on the contract unit price per Square Yard (or Gallon for tack coat) including all labor, materials, testing, submittals, tools, and equipment necessary to complete the work as specified. All excavation (up to 12" deep) and sawcutting pavement shall be considered part of this item.

PAY ITEM	PAY UNIT
Bituminous Concrete Sidewalks and	S.Y.
Residential Driveways	
Bituminous Concrete Parking Areas and	S.Y.
Commercial Driveways	
Bituminous Concrete Paths	S.Y.
Tack Coat	Gals