



**SPECIAL PROVISIONS
FOR
UNIT PAVING**

**Black Hawk County
HSIPX-057-2(031)--3I-07**

**Effective Date
November 18, 2025**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

230373.01 GENERAL.

A. Description of Work.

Provide all labor, materials, equipment, and supervision required to furnish and install clay and concrete pavers.

B. Submittals.

1. Paver manufacturer's material test data certifying pavers comply with specification.
2. Paver sample, one of each specified color.

C. Codes, Permits and Fees.

Obtain any necessary permits and pay any fees required for permits.

D. Site Disturbances.

1. Take precautions to ensure that equipment and vehicles do not disturb or damage existing site grading, walks, drives, utilities, plants, etc.
2. Verify locations and depths of all underground utilities prior to excavation.
3. Repair and/or return to original condition any damage caused by Contractor's negligence at no cost to Contracting Authority.
4. Provide temporary barricades and warning lights as required for protection of project work and public safety.

230373.02 MATERIALS.

A. Concrete Pavers

1. "Holland Premier": interlocking paving stones as manufactured by Unilock, Chicago, Illinois.
2. 3.14 inch depth.
3. Compressive strength: Average 8000 psi with no individual piece less than 7500 psi.
4. Water absorption: Not greater than 5%.
5. **Color and Finish.**
 - Type 1 & Type 3: Color: Dark Charcoal, Finish: Smooth
 - Type 2 & Type 4: Color: Granite, Finish: Smooth

B. Joint Sand.

1. Provide polymeric joint sand as follows:
 - a. Shall be polymeric jointing compound sand in color three colors, one for each paver type. Colors shall be standard and shall be selected by the Engineer during the submittal process.
 - b. Washed, clean, non-plastic, free from deleterious or foreign matter, symmetrically shaped, natural or manufactured from crushed rock.
 - c. Do not use limestone screenings, stone dust, or sand for the joint sand material that does not conform to the grading requirements of ASTM C 144 provided as shown on plans.
 - d. Utilize sands that are as hard as practically available where unit pavers are subject to vehicular traffic.
2. Aggregate material shall comply with ASTM C 144 and gradation below:

Table SP-230373.02-1

| | <u>Natural Sand</u> | <u>Manufactured Sand</u> |
|-------------------|------------------------|--------------------------|
| <u>Sieve Size</u> | <u>Percent Passing</u> | <u>Percent Passing</u> |
| No. 4 | 100 | 100 |
| No. 8 | 95 to 100 | 95 to 100 |
| No. 16 | 70 to 100 | 70 to 100 |
| No. 30 | 40 to 75 | 40 to 100 |
| No. 50 | 10 to 35 | 20 to 40 |
| No. 100 | 2 to 15 | 10 to 25 |
| No. 200 | 0 to 1 | 0 to 5 |

C. Bituminous Setting Bed

1. **Bituminous Setting Bed.**
 - a. Asphalt primer: ASTM D 2028 cut-back asphalt, Type RC, rapid cure.
 - b. Asphalt cement: Shall conform to ASTM D 946 with a penetration at 77°F, 5 Sec of minimum 85 mm and maximum of 100 mm.
 - c. Fine aggregate: ASTM C 136, clean hard sand free of adherent coatings, clay alkali salts, and organic matter. Uniformly graded with coarse to fine and 100% passing No. 4 sieve.
 - d. Tack coat: 2% neoprene (grade WMI), oxidized asphalt, 10% long fibered mineral fiber.
 - e. Mix: Combine dried fine aggregate with hot asphalt cement. Heat the mix to approximately 300°F at an asphalt plant. The approximate proportion of materials shall be 7.0% asphalt

cement and 93.0% fine aggregates. Apportion each ton by weight in the approximate ratio of 145 pounds asphalt to 1855 pounds sand.

2. Rigid Base: Concrete, provided as shown on plans.
3. Other materials: Other materials, not specifically described, but required for a complete and proper installation of unit pavers, shall be as selected by the Contractor subject to review of the Engineer.

230373.03 CONSTRUCTION.

A. Preparation of Concrete Sub-Base.

1. Inspect concrete sub-base to ensure surface is clean and built in conformance with details.
2. Verify elevation difference between concrete sub-base and adjacent finish concrete surface to ensure concrete pavers can be installed flush with bordering concrete pavement.

B. Preparation of Asphalt Base.

1. Apply High Performance Bituminous Mix in 7/8 inch layer over concrete base that is 4 inches below the finished surface grade of the concrete pavers.
2. Asphalt slab bed surface must be parallel with (have the same slope as) the finish grade of the concrete pavers.
3. Asphalt surface shall be smooth and free of low spots, voids, and debris.

C. Placement of Pavers.

1. Begin laying pavers from the edges referenced on the contract documents.
2. Place pavers by hand.
3. Always work on top of laid pavers.
4. A chalk line may be snapped on asphalt base to assist in alignment of pavers.
5. Complete placement of whole pavers over entire area.
6. Complete placement of pavers by placing cut pavers along edges.

D. Joint Filling.

Cross directionally sweep a thin layer of sand over the entire paver area.

E. Clean-Up.

Sweep excess sand from paved surfaces and remove from site.

230373.04 METHOD OF MEASUREMENT.

The Engineer will measure in square feet, to the nearest square foot, the surface area of Landscaping Pavers.

230373.05 BASIS OF PAYMENT.

Per square foot. This will be considered full compensation for furnishing all materials, equipment, and labor for installation of Landscaping Pavers in accordance with contract documents.