

SECTION 02502

COLORED CONCRETE SIDEWALKS AND RAMPS

1.0 DESCRIPTION

This item shall consist of colored Portland cement Concrete sidewalks, driveway ramps and pedestrian ramps constructed on a processed aggregate base course in the locations and to the dimensions and details shown on the plans or as ordered and in accordance with these specifications.

2.0 MATERIALS

Colored concrete admixture shall be “Color-Crete Redwood CC630/6” manufactured by Increte Systems or approved equal as determined by Engineering. Concrete for this work shall conform to the requirements of City of Meriden Specification Section 02501 and Article M.03.01 of ConnDOT Form 816 for Class “C” Concrete.

Curing compound shall be “Cure crete plus VOC” manufactured by Increte Systems or approved equal as determined by Engineering.

Evaporation barrier shall be Eucobar manufactured by Increte Systems or approved equal as determined by Engineering.

Load size must be verified by Engineer or authorized representative prior to placement of color to concrete.

Welded wire mesh to be used in all colored concrete sections in accordance with City of Meriden Specification Section 02501.

#4 rebar x 18” long dowels are to be used to join colored and non-colored concrete sections. Dowels are to be installed using Speed Dowel manufactured by Sika greenstreak or approved equal method as determined by Engineer.

3.0 CONSTRUCTION METHODS

- a. Excavation Processed Aggregate Base Forms and joints are to be constructed in accordance with City of Meriden Specification Section 02501.
- b. Mixing and Placing Concrete:
 1. Load size must be verified by Engineer or authorized representative prior to placement of color to concrete.

2. Slump of the concrete, as determined by AASHTO method T-119, shall be not less than four (4) inches nor more than five (5) inches. Concrete shall contain not be less than 4 nor more than 6 percent entrained air at the time the concrete is deposited in the forms, as determined by AASHTO Methods T-152 or T-121.
 3. Plastic sheeting to be placed between all curbing and colored concrete. This will protect the curbing and act as a bond breaker. Non-colored concrete shall be protected with plastic sheeting during the placement of colored concrete.
 4. Dowels are to be installed every 18" on center. Dowels should fall no less than 3" from an expansion joint.
- c. Consolidation and Finishing: Evaporation barrier shall be used in lieu of water for all tools that will come into contact with colored concrete. The initial edging shall be performed, then the surface shall be dragged with a clean, stiff bristle broom. Before initial set, the final edging against forms and expansion joints and of dummy joints shall be made. Broom shall not be saturated with water as this will discolor the concrete. Broom finish must be made in same direction for each concrete section to maintain consistency in appearance. Broom finish to be placed over final edging.
- d. Sawcut if called out on plans: Concrete shall be sawcut after concrete has set for at least 24 hours. Sawcut scores shall be ¾" deep and extend the full width of the colored concrete. No score marks allowed on un-colored concrete. Edges may need to be grinded to carry score to edge of colored concrete. No dry cutting allowed.
- e. Curing: Liquid curing compound shall be applied immediately following the disappearance of the water sheen following the final finishing and before any marked dehydration of the concrete or surface checking occurs. The compound shall be applied in two even coats of one gallon per 200 square feet, with a continuous even film at right angles to each other and with not more than 30 minutes between coats. Application shall be by pressure sprayer giving a fine uniform spray. Should rain fall on the newly coated surface before it dries, a new application shall be maintained to protect the concrete surface from rain during finishing operations and until the curing compound dries. The walk shall be barricaded and all traffic shall be restricted for at least seven (7) days. No foreign materials may be used to cover the concrete.

4.0 METHOD OF MEASUREMENT

Colored concrete sidewalk and ramps shall be measured for payment by the total square feet of the top surfaces of the sidewalk, driveway ramps, and pedestrian ramps, excluding the exposed top surface of the concrete curbing.

The Detectable Warning strip will not be measured for payment. All materials, equipment, tools and labor incidental thereto shall be included in the Bid price for Concrete Sidewalk.

1.0 BASIS OF PAYMENT

Payment for concrete sidewalks, driveway ramps, and pedestrian ramps shall be at the contract unit price per square foot of “Colored Concrete Sidewalk” complete in place and accepted.

Price and payment for “Colored Concrete Sidewalk”, in place shall include the removal of all existing sidewalks and curbing, the removal and replacement of all bituminous concrete pavement, all forms necessary for tree pits, grass and brush and all equipment and labor, excavation, backfill (except rock excavation), bedding, and all other miscellaneous items necessary to complete the work, and not listed for separate payment in the bid.