

Conditions of Use/ Responsibility of Data

These “guideline” specifications are to be used by the A/E as a base document in the development of project/site-specific Division 2 – SITE WORK specifications for Montgomery County Public Schools Construction Projects. They may or may not be complete, correct and/or appropriate for use for any given project. It is the responsibility of the A/E to review these “guideline” specifications and to edit and/or supplement them as required to ensure that they represent the full, complete, correct and code-compliant specifications required for all construction of the project to which they apply. The use of these “guideline” specifications, and/or any information herein, in no way releases the A/E from their contractual responsibility to prepare and provide the full, complete and correct code-compliant Contract documents, plans and/or specifications required for construction.

Review and editing of these “guideline” specifications shall be performed by appropriately licensed Maryland professional engineer. Specifications are to be prepared in Microsoft Word, edited using the “Track Changes” feature of that software and submitted to MCPS electronically on a compact Disk for review.

SECTION 02514 – CONCRETE CURBING

PART 1 - GENERAL:

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 and Specification Sections apply to work in this section.

1.2 DESCRIPTION OF WORK:

- A. Section specifies materials and work required to construct Portland cement concrete curbing.

1.3 RELATED SECTIONS:

- A. Refer to Section 02100 "Earthwork and Grading", and Section 02512 "Concrete Walks".

1.4 STANDARDS:

- A. Maryland Department of Transportation State Highway Administration's current "Standard Specifications for Construction and Materials".
- B. Montgomery County, Department of Transportation's current "Design Standards".

1.5 SUBMITTALS:

- A. Submit cut sheets for construction of curb in public right-of-way to and obtain approval from governing jurisdiction and Architect prior to curb construction.
- B. Contractor shall provide a sample of eight linear feet of typical concrete curb-and-gutter, with a control joint, for approval by Owner's Representative. No additional concrete curbing may be constructed until sample is inspected and approved.

1.6 PROJECT CONDITIONS:

- A. Traffic: Maintain vehicular and pedestrian traffic during curb construction operations.
- B. Limitations:
 - 1. Environmental: Refer to Section 02200 "Utility Standards".
 - 2. Underground Utilities: Refer to Section 02512 "Concrete Walks".

1.7 CONSTRUCTION SURVEYS:

- A. Retain services of a Maryland Registered Land Surveyor or Professional Engineer to provide combined horizontal and vertical alignment stakes for curb construction within public right of way. Horizontal stake interval 25 feet maximum.
- B. Provide combined horizontal and vertical alignment stakes for project site curb construction. Horizontal stake interval 25 feet maximum.

PART 2 - PRODUCTS:

2.1 MATERIALS:

- A. Concrete: Class 'A' Portland cement concrete, Section 02200 "Utility Standards"
- B. Joint Materials: Expansion and isolation joints: ASTM D 994, bituminous preformed joint filler, 1/2 inch thick.
- C. Forms: For straight or tangent curbing use steel or wood. For curved curbing use flexible spring steel or laminated wood.
- D. Curing Material: Refer to Section 02512 "Concrete Walks".
- E. Stone Base: Refer to Section 02512 "Concrete Walks".

PART 3 - EXECUTION:

3.1 PROTECTION AND RESTORATION:

- A. Refer to Section 02512 "Concrete Walks".

3.2 SUBGRADE PREPARATION:

- A. Refer to Section 02512 "Concrete Walks".

3.3 FORMS:

- A. Refer to Section 02512 "Concrete Walks", and as noted.
- B. Form curbing to standards indicated and specified.

3.4 EXPANSION JOINTS:

- A. Refer to Section 02512 "Concrete Walks" and as noted.
- B. Install expansion joints at maximum 30-foot intervals or as indicated. Place expansion joints perpendicular to surface and curbing face. Place combination curb and gutter expansion joints, with top edge 1/2 inch below gutter surface.

3.5 ISOLATION JOINTS:

- A. Refer to Section 02512 "Concrete Walks".

3.6 CONTRACTION JOINTS:

- A. Refer to Section 02512 "Concrete Walks" and as noted.
- B. Provide Contraction joints, perpendicular to surface and face of curbing, at 10 foot intervals. Place Contraction joints at points where curved and tangent sections of curbing meet. Place Contraction joints with removable form spreader places. Contractor's option: Score or saw joints to 1-1/4 inch depth.

3.7 CONCRETE PLACEMENT:

- A. Refer to Section 02512 "Concrete Walks".

3.8 FINISHING:

- A. Strike off top surfaces of curbing to top of forms and to smooth and uniform texture. Strip curb face forms when concrete takes initial set. Trowel curb face to smooth and uniform texture. Finish top surfaces and curb face to fine texture by drawing a soft bristle brush longitudinally along curb. Finish edges of curbing with edging tool having a radius as in-

licated. Maintain forms, except curb face forms, in place 12 hours after concrete placement. Correct defects (e.g. holes, honeycomb areas, broken edges, etc.) upon removal of remaining forms, with cement mortar. Finish contraction joints with 1/4-inch radius edging tool. Finish curbing joints to clean and true edges. Maintain curbing surfaces moist during finishing operations.

- B. Curing: Refer to Section 02512 "Concrete Walks".
- C. Protection: Contractor shall protect concrete curbs from damage, effacing, etc. during construction. Contractor shall remove and replace any curb damaged, effaced and/or marred during construction at no additional cost to Owner.

END OF SECTION