



SP 8.7-001 (2013)

Standard Specifications for Construction City of Waco 2013 Special Provision Section 8.7: Pavement Markings & Roadway Signage

August 24, 2021

The Standard Specifications for Construction City of Waco 2013
Section 8.7: Pavement Markings & Roadway Signage

is hereby deleted in its entirety and replaced as follows effective for all projects with bid opening date of October 1, 2021 and thereafter:

SECTION 8.7: PAVEMENT MARKINGS & ROADWAY SIGNAGE

PART 1: GENERAL REQUIREMENTS

The City uses the Texas MUTCD and TxDOT standard specifications and sheets, except as noted in the plans. The Contractor should contact James Bailey, P.E. with City of Waco Traffic Services for specific questions at (254) 750-6639.

PART 2: INSTALLATION OF PAVEMENT MARKINGS:

1. SURFACE CONDITION AND CLEANING

Remove all applied markings that are not in alignment or sequence as stated on the plans, or in the specifications or in good weather or damaged by traffic, at the Contractor's expense in accordance with TxDOT Item 677, "Eliminating Existing Pavement Markings and Markers," except for measurement and payment.

Cleaning for New Asphalt Surfaces and Retracing of All Surfaces: Air blast or broom the pavement surface for new asphalt surfaces (less than 3 years old) and for retracing of all surfaces to remove loose material, unless otherwise shown on the plans.

Cleaning for Concrete Surfaces and Old Asphalt and (Excludes Retracing):
Water Blast Clean old asphalt surfaces (more than 3 years old) and all concrete surfaces in accordance with TxDOT Item 678, "Pavement Surface Preparation for Markings," to remove concrete curing membrane, dirt, grease, loose and flaking existing construction markings, and other forms of contamination.

2. THERMOPLASTIC MARKINGS (TYPE I) ON NEW ASPHALT SURFACES

Permanent markings shall be TxDOT standard thermoplastic materials Item 666 "Retroreflectorized Pavement Markings" and (DMS 8220).

A sealer for Type I markings is not required for new asphalt surfaces (less than 3 years old) and for retracing of all surfaces, unless otherwise shown on the plans.

Type I Marking Application—Place a sample of Type I marking material on a piece of tarpaper placed on the pavement. Allow the material to cool to ambient temperature, and then inspect the underside of the tarpaper in contact with the pavement. Pavement will be considered dry if there is no condensation on the tarpaper.

Apply Type I non-profile markings with a minimum thickness of:

0.090 in. (90 mils) for new Asphalt surfaces

0.060 in. (60 mils) for retracing on thermoplastic pavement markings

0.100 in. (100 mils) for surface treatments involving TxDOT Item 316, "Seal Coat"

3. SEALERS FOR THERMOPLASTIC MARKINGS (TYPE I)

Apply a pavement sealer to old asphalt surfaces (more than 3 years old) and to all concrete surfaces before placing Type I markings on locations that do not have existing markings, unless otherwise approved.

The pavement sealer may be either a Type II marking or an acrylic or epoxy sealer as recommended by the Type I marking manufacturer unless otherwise shown on the plans. Follow the manufacturer's directions for application of acrylic or epoxy sealers.

Clean sealer that becomes dirty after placement by washing or in accordance with Section 666.4.2.1., "Cleaning for New Asphalt Surfaces and Retracing of All Surfaces," as directed. Place the sealer in the same configuration and color (unless clear) as the Type I markings unless otherwise shown on the plans.

4. WATERBORNE PAINT (TYPE II)

Waterborne paint may be used for temporary markings, as a sealer, or as approved. All waterborne paint shall be of the TxDOT standard Traffic Paint of Item 666 "Retroreflectorized Pavement Markings" and (DMS-8200) and material producer list.

5. PREFORMED THERMOPLASTIC

For arrows, words and triangles use Item 668 "Prefabricated Pavement Markings" heat applied preformed thermoplastic.

PART 3: TESTING OF TYPE I PAVEMENT MARKINGS:

Type I markings must meet the following minimum retroreflectivity values for edgeline markings, centerline or no passing barrier-line, and lane lines when measured any time after 3 days, but not later than 10 days after application:

White markings: 250 millicandelas per square meter per lux (mcd/m²/lx).

Yellow markings: 75 mcd/m²/lx.

Contractor shall complete the retroreflectivity testing in accordance with TxDOT Item 666 "Retroreflectorized Pavement Markings" and shall provide written report with test results confirming conformance and the required retroreflectivity values.

PART 4: INSTALLATION OF SIGNS

All signs installed within the City's rights-of-way shall be mounted on a breakaway style support system to ensure NCHRP 350 compliance.

See Standard Detail "Sign Post Installation Detail" for sign areas up to 16 square feet or as approved, use a 14 gauge 2 inches x 2 inches square tube perforated sign post and stub and sleeve as shown on the City Standard Sheets.


See Standard Detail "Street Name Sign Blade Detail" for post mounted street name signs up to 48 inches wide.

New and relocated sign posts shall be paid for by TxDOT Item 644 "Small Roadside Sign Assemblies" for temporary sign support relocation. New posts may be provided by the City and installed under the relocation bid item. Removal of existing signs is paid under relocation when used.

New sign blanks will replace all relocated old signs at the end of the project and be paid for by TxDOT Item 636 "Signs."

Furnish sign blank substrates in accordance with DMS-7110, "Aluminum Sign Blanks". Use single-piece sheet-aluminum substrates for Type A (small) signs and extruded aluminum substrates for Type G (ground-mounted) or Type O (overhead-mounted) signs. Furnish Sign Face Materials in accordance with DMS 8300.

The Contractor shall furnish signs for the sizes and details in the plans or the Texas standard Highway Sign Design manual (SHSD). The Contractor shall furnish paper and electronic file shop drawings for review and approval.


Thomas M. Dahl, P.E., CFM
City Engineer