Utah Department of Transportation

Supplemental Specifications for

2012 Standard Specifications

FOR ROAD AND BRIDGE CONSTRUCTION

Issued May 9, 2013

Memorandum UTAH DEPARTMENT OF TRANSPORTATION

DATE: May 9, 2013

TO: Holders of Hard Copy of Standard Specifications

FROM: Barry Axelrod
Standards and Specifications

SUBJECT: Supplemental Specifications Distribution, dated May 9, 2013

Applicable files for the change are attached. Maintain these files as a supplemental update to the UDOT Standard Specifications dated January 1, 2012. No pages are to be removed or replaced in the basic book, electronic or hard copy.

Refer to the Standards and Specifications Web site, Standard and Supplemental Specifications at http://www.udot.utah.gov/go/2012specifications for electronic copies of any Standard or Supplemental Specification. Select the appropriate subtopic from there.

Refer to the Standards and Specifications Web site, Engineering Services Web Store at http://www.udot.utah.gov/go/webstore to purchase a hard copy of the Standard Specifications or Standard Drawings books.

Contact Barry Axelrod at 801-964-4570, 801-725-8823 (cell), or by email at **baxelrod@utah.gov** if you have any questions or problems with the electronic files.

Attachments

Listing of Supplemental Specifications

Issue Date: September 19, 2012

Revised August 30, 2012

Section 00120M Article 1.15, paragraph A20, Article 1.17, Article 1.18, and Article 1.20 replaced and Article 1.21, paragraph A14 and Article1.27 added.
Section 00515M Article 1.11, paragraph A replaced.
Section 00570M Article 1.7, paragraph A38 and A66 through A104 replaced.
Section 00820M Article 1.17, paragraph C replaced.
Section 01315M Article 3.1, paragraph D2 and H1 replaced.
Section 01571M Article 2.1, paragraph B1 replaced.
Section 02822M Article 1.3, paragraph G and H and Article 2.5, paragraph B8 replaced.
Section 02823M Article 1.3 and Article 2.2, paragraph B6 replaced.
Section 02891M Article 1.3, Article 1.4, paragraph A1, and Article 2.1, paragraph C replaced.
Section 02893M Article 1.3, Article 2.1, paragraph A3c, Article 2.1, paragraph C1, and Article 2.1, paragraph D2 replaced.
Section 03211M Article 1.3 replaced, Article 2.1, paragraph C added, Article 2.2, paragraph A replaced, Article 2.7, paragraph D and Article 2.8, paragraph D added, Article 3.1, paragraph B1a replaced, and Article 3.1, paragraph E and Article 3.2, paragraph O added.
Section 03393M Article 1.5, paragraph B deleted, Article 2.1, paragraph A, Article 3.1, paragraph B, and Article 3.3, paragraph C and D replaced, and Article 3.3, paragraph I added.
Section 03924M Article 1.1, paragraph B added.
Section 05120M Article 1.3, Article 1.5, paragraph B1, Article 2.2, paragraph C1, and Article 2.2, paragraph D replaced.
Section 06055M Article 1.3 and Article 2.3 replaced.
Section 13553M Article 3.2, paragraph O replaced.

Issue Date: November 14, 2012

Revised October 25, 2012

Section 02752M Article 3.10, paragraph E
Section 03211M Article 1.3 replaced, Article 2.1, paragraph C added, Article 2.2, paragraph A replaced, Article 2.7, paragraph B replaced, Article 2.7, paragraph D and Article 2.8, paragraph D added, Article 3.1, paragraph B1a replaced, and Article 3.1, paragraph E and Article 3.2, paragraph O added. (This issue replaced previously issued Supplemental Specification for this section.)
Section 13557M Article 3.1, paragraph A and Article 3.2, paragraph E replaced.

Issue Date: March 14, 2013

Revised February 28, 2013

Section 00570M Article 1.7, paragraph A38, paragraph A49 Table 1, and paragraphs A66 through A104 replaced.

Section 00727M Article 1.28, paragraph B replaced.

Section 00820M Article 1.13, Article 1.17, paragraph C, and Article 1.17, paragraph F3 replaced.

Section 01282M Article 1.9, paragraphs C1b and D5 and Article 1.11, paragraph E1 replaced

Section 01456M Article 1.6, paragraph C replaced.

Section 02821M Article 1.3, paragraph H and Article 2.2, paragraph A1 replaced.

Section 02891M Article 1.3, Article 1.4, paragraph A1, Article 2.1, paragraph B, Article 2.1, paragraph C, and Article 2.1, paragraph E replaced.

Issue Date: May 9, 2013

Revised April 25, 2013

Section 01721M Article 1.3 and 1.5, paragraph C replaced.

Section 02765M Article 1.3, paragraphs M through R and Article 2.2 replaced.

Section 03055M Article 2.1, Table 2, note replaced.

Section 13551M Article 3.13 added

Section 13553M Article 1.5 paragraph B, Article 2.1, paragraph A3, Article 3.2 paragraph F, and Article 3.2 paragraph O replaced. (This issue replaced previously issued Supplemental Specification for this section.)

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SECTION 01721M

SURVEY

Delete Article 1.3 and replace with the following:

1.3 REFERENCES

A. UDOT Mapping and Aerial Photogrammetry Manual

Delete Article 1.5, paragraph C and replace with the following:

C. Submit a statement before beginning work indicating all Department provided horizontal and vertical control has been field checked and the control has been determined to be accurate within the tolerances specified in the Mapping and Aerial Photogrammetry Manual. Refer to http://www.udot.utah.gov/go/standardsreferences. Attach field survey information used to verify control. Notify the Engineer verbally and in writing if discrepancies are found.

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SECTION 02765M

PAVEMENT MARKING PAINT

Delete Article 1.3, paragraphs M through R and replace with the following:

M. Environmental Protection Agency Testing Methods

N. Federal Specification

O. Federal Standards

P. Manual on Uniform Traffic Control Devices (MUTCD)

Q. UDOT Materials Manual of Instruction

R. UDOT Minimum Sampling and Testing Requirements

S. UDOT Quality Management Plans

Delete Article 2.2 and replace with the following:

2.2 GLASS SPHERES (BEADS) USED IN PAVEMENT MARKING PAINT

A. Heavy metal concentration: Manufacturer must provide a certificate of compliance stating that all beads contain no more than the amounts listed for the following materials as determined by testing performed according to EPA test methods 3052 and 6010C. Other suitable x-ray fluorescence spectrometry analysis methods may be used to screen samples of glass spheres for arsenic, antimony and lead content.

Table 5

Heavy Metal Materials	
Material	**Level (ppm, total)**
Arsenic	200
Antimony	200
Lead	200

B. Longitudinal Lines – Refer to AASHTO M 247, Specific Properties, with the following exceptions:

1. Gradation:

Table 6

Gradation	
Sieve Size	**Accumulated Percent Passing**
No. 18	65 – 80
No. 30	30 – 50
No. 50	0 – 5

2. Coating – Dual coating for optimum adhesion and embedment.
3. Roundness – 80 percent true spheres below the number 30 sieve. Refer to ASTM D 1155
4. Color/Clarity – Colorless/clear and free of carbon residue.
5. Refractive Index – Minimum 1.51 by oil immersion method.
6. Air Inclusions – Less than 5 percent by visual inspection.
7. Hardness – Beads above the number 30 sieve exhibit an average hardness of C70.5 when measured using the Rockwell C scale method and using a minimum sample of 100 beads.
8. Crushing Strength – Beads above the number 30 sieve exhibit an average crushing strength of 60,000 psi when measured by the L/D^2 method and with a minimum sample of 100 beads.
9. Chemical Resistance – Beads resistant to hydrochloric acid, water, calcium chloride, and sodium sulfide. TT-B Federal Specification 1325C sections 4.3.6 to 4.3.9.

C. Transverse Markings – Refer to AASHTO M 247, Specific Properties, with the following exceptions:

1. Gradation:

Table 7

Gradation	
Sieve Size	**Accumulated Percent Passing**
No. 20	90 – 95
No. 30	45 – 70
No. 50	5 – 25
No. 80	0 – 5

2. Coating – Dual coating for optimum adhesion and embedment.
3. Roundness – The glass beads will have at least 75 percent true spheres.
4. Refractive index – Minimum 1.51 by oil immersion method.
5. Air Inclusions – Less than 10 percent by visual inspection.
6. Have at least 80 percent true spheres.

D. Beads used in Temporary Pavement Markings. Meet the above or AASHTO M 247 Type II uniform gradation.

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SECTION 03055M

PORTLAND CEMENT CONCRETE

Delete Article 2.1, Table 2, note ** and replace with the following:

** For *f* ’c over 4,000 psi, design and proportion mixes according to ACI Manual of Concrete Practice 301: Specifications for Concrete and project specific criteria. Use Table 2 Class AA(AE) Air Content Percentages according to coarse aggregate size for these mixes.

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SECTION 13551M

GENERAL ATMS REQUIREMENTS

Add the following to Article 3.13:

H. Maintain in operable condition all existing ATMS devices and fiber optic cable until they are replaced by operable contractor-installed items or until Final Acceptance.
   1. Complete repairs within 48 hours of notice given by the Engineer.
   2. Failure to provide adequate repairs will result in the Department making the necessary repairs at the Contractor's Expense.

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SECTION 13553M

ATMS CONDUIT

Delete Article 1.5 paragraph B and replace with the following:

B. Refer to this Section articles 3.2 paragraph F4, 3.2 paragraph I1, and 3.7 paragraph A.

Delete Article 2.1 paragraph A3 and replace with the following:

3. HDPE conduit with ribbed or smooth interior.

Delete Article 3.2 paragraph F and replace with the following:

F. Proof all conduit before installation of cabling and detectable pull tape.
   1. Use a mandrel approved by the Engineer.
   2. Schedule proofing with the Engineer at least 5 working days in advance of performing the work.
   3. Proof all conduit with a Department representative witness present.
   4. Submit a completed Conduit Mandrel Test form to the Engineer for all ATMS conduit prior to Final Acceptance. Refer to http://www.udot.utah.gov/go/standardsreferences.

Delete Article 3.2 paragraph O and replace with the following:

O. Install a bushing or adapter at ends of all nonmetallic conduit that contain a conductor according to the NEC.