



# Wisconsin Department of Transportation

November 29, 2018

## Division of Transportation Systems Development

Bureau of Project Development  
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### NOTICE TO ALL CONTRACTORS:

**Proposal #11: 5992-09-14, WISC 2019 005**  
**City of Madison, East Johnson St**  
**N Baldwin Street to First Street**  
**LOC STR**  
**Dane County**

**5992-09-15**  
**City of Madison, East Johnson St**  
**N Baldwin Street to First Street**  
**LOC STR**  
**Dane County**

**5992-09-16**  
**City of Madison, East Johnson St**  
**N Baldwin Street to First Street**  
**LOC STR**  
**Dane County**

### Letting of December 11, 2018

This is Addendum No. 01, which provides for the following:

#### Special Provisions:

| Revised Special Provisions |                                      |
|----------------------------|--------------------------------------|
| Article No.                | Description                          |
| 6                          | Utilities                            |
| 127                        | Colored Crosswalk, Item SPV.0165.001 |

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

**ADDENDUM NO. 01**

**5992-09-14/15/16**

**November 29, 2018**

**Special Provisions**

**6. Utilities**

*Replace the third paragraph in the AT&T Wisconsin Plans to Address Identified Conflicts: section within the **AT&T Wisconsin - Communications** section with the following.*

At approximately Station 94+08, 59' RT, the existing AT&T manhole (HH 1801) will be replaced with a proposed AT&T manhole in order to aid with required splicing. This manhole will be cast-in-place with dimensions of 12 feet x 4 feet x 7 feet. The construction of the manhole will be completed prior to construction. The manhole frame/cover will need to be adjusted to the finished grade of the path during construction.

*Replace the seventh paragraph in the AT&T Wisconsin Plans to Address Identified Conflicts: section within the **AT&T Wisconsin - Communications** section with the following.*

Existing AT&T 1800 cable running below Fordem Avenue and East Johnson Street will be discontinued in place. This cable will be replaced with a 600 pair cable. This new cable will be directionally bored between the existing AT&T facilities along the west side of Fordem Avenue (approximately Station 12+50 FO, 53' LT) to the existing AT&T manhole at the intersection of East Washington Avenue and First Street outside of the roadway project limits. This bore will run down the west side of Fordem Avenue, continue underneath East Johnson Street to AT&T Handhole 1801. From Existing Handhole 1801, the proposed 600 pair cable will travel along the south side of East Johnson Street between Stations 94+00 and approximately Station 100+50. The cable will then turn south and run to the existing AT&T manhole at the intersection of East Washington Avenue and First Street. The cable will not enter the existing AT&T manhole at the southeast corner of East Johnson Street and First Street. This bore will provide a minimum of two (2) feet from all proposed facilities. There will also be an additional proposed 4-inch conduit installed along this path between Handhole 1801 and the existing manhole at the intersection of First Street and East Washington Avenue for future capacity. This work will be completed prior to construction.

*Add the following paragraph after the seventh paragraph in the AT&T Wisconsin Plans to Address Identified Conflicts: section within the **AT&T Wisconsin - Communications** section.*

A proposed AT&T pedestal will be installed at the southeast corner of Johnson Street and First Street in order to aid with required splicing. This pedestal will be installed at approximately Station 11+20 LT. This work will be completed prior to construction.

*Add the following paragraphs after the sixth paragraph in the MGE Relocation Plans to Address Identified Conflicts: section within the **Madison Gas & Electric - Gas** section.*

MGE Gas will relocate the existing gas main on the south side of East Johnson Street at about Station 84+60 around the proposed storm sewer inlet.

MGE Gas will relocate the existing gas main on the south side of East Johnson Street at about Station 86+25 around the proposed fire hydrant.

**127. Colored Crosswalk, Item SPV.0165.001.**

*Replace the entire article language with the following:*

**A. Description**

This work consists of furnishing and applying a high friction surfacing system in accordance with this section and in conformity with the lines and details shown on the plans. The locations on the plans are noted as "Colored Crosswalk". The field installed system consists of a Methyl Methacrylate (MMA) resin system that is used for pavement area markings and anti-skid surfacing to provide high friction resistance and the desired color. Colored Crosswalk will be red or green in color as shown in the plans.

Arrange for the manufacturer's technical representative to come to the construction site to train the engineer and contractor personnel prior to surface treatment and have the representative be available during application as necessary or provide documentation from manufacturer's representative endorsing the contractor as qualified to install the material.

**B. Materials**

**General:** Use an MMA based resin system capable of retaining an aggregate topping under vehicular traffic conditions. Install in accordance with manufacturers specifications.

For green colored crosswalks, comply with chromaticity requirements in accordance with MUTCD Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes.

**MMA Based Resin System:** Provide MMA based resin system meeting the following requirements:

| <u>Property</u>                         | <u>Value</u> | <u>Test Method</u> |
|---|--------------|--------------------|
| Tensile Strength @ 7 days, psi, minimum | 1000         | ASTM D 638         |
| Hardness, Shore D, minimum              | 80           | ASTM D 2240        |
| Gel Time, minutes, minimum              | 10           | ASTM D 2471        |
| Cure Rate, hours, maximum               | 3            | Film@ 75°F         |
| Water Absorption @ 24 hours, %, max.    | 0.25%        | ASTM D 570         |

**Aggregate:** Provide aggregate that is high friction crushed Bauxite, Granite, or gravel. Deliver the aggregate to the construction site in clearly labeled bags or sacks. Provide aggregate that is clean, dry and free from foreign matter and that meets the following requirements:

| <u>Property</u>                      | <u>Value</u>     | <u>Test Method</u> |
|--------------------------------------|------------------|--------------------|
| Aggregate Abrasion Value, maximum    | 20               | LA Abrasion        |
| Aggregate Grading,                   |                  |                    |
| No 6 Sieve Size, minimum passing, %  | 95               |                    |
| No 16 Sieve Size, maximum passing, % | 5                |                    |
| Aggregate Color                      | As shown in plan |                    |

**Certification:** Provide a finished surface having a minimum 60 FN40R in accordance with ASTM E274 of aggregate bonded to a vehicular bearing surface.

### C. Construction

**General:** Apply in accordance with manufacturers specifications.

**Preparation:** Prepare surfaces so that they are clean, dry, and free of all dust, oil, debris and any other material that might interfere with the bond between the resin system and existing surfaces. The manufacturer's representative will determine if all surfaces have been adequately cleaned unless the contractor has been endorsed by the manufacturer as qualified to install the material in accordance with section A of this article.

Protect utilities, drainage structures, curbs and any other structure within or adjacent to the treatment location against the application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the application surfaces as directed by the engineer. Remove by grinding any pavement markings that conflict with the surface application and thoroughly sweep or vacuum the surface clean prior to the resin application.

Pre-treat joints and cracks greater than 1/4 inches in width and depth with the mixed resin specified herein or by using an alternative procedure proposed by the manufacturer and agreed upon by the engineer. Proceed with the resin and aggregate topping installation once the resin, in the pre-treated areas, has gelled or once the alternative procedure has been accomplished.

For applications on new pavements, install the resin and aggregate topping a minimum of 20 days after the placement of the underlying and adjacent pavement.

**Mixing and Application of Epoxy Binder and Aggregate Wearing Course:** Use one of the following methods for the application of the MMA based resin system, as applicable.

- (1) **Hand mixing and application:** Proportion the MMA based resin system as recommended by the manufacturer, and mix using a low speed, high torque drill fitted with a helical stirrer. Hand-apply the mixed components onto a prepared pavement surface at a thickness recommended by the manufacturer. Uniformly spread hand-applied base binder onto the substrate surface by means of a serrated edge squeegee.
- (2) **Mechanical mixing and application:** Apply the MMA based resin system material by a truck mounted application machine onto the pavement section to be treated in varying widths at a uniform application thickness. Proceed with operations in such a manner that will not allow the MMA based resin system material to separate in the mixing lines, cure, dry, or otherwise impair retention bonding of the high friction surfacing aggregate. Apply the mixed components mechanically onto the prepared pavement surface with a uniform thickness of 50 to 100 mils. Immediately, mechanically apply the high friction surfacing aggregate in a uniform, continuous manner.

For either of the above methods, do not use vibratory or impact type compaction on the aggregate after placement. Use only lightweight rollers to seat the aggregate topping without crushing the aggregate. Complete coverage of the "wet" MMA based resin system material with aggregate is necessary to achieve a uniform surface. Once the aggregate is placed, no exposed wet spots are to be visible.

**Curing:** Allow the high friction aggregate topped MMA based resin system to cure in accordance with manufacturer recommendations. Protect treated surfaces from traffic and environmental effects until the area has cured.

**Removal of Excess Aggregate:** Remove the excess aggregate by hand brooms, mechanical sweeping, or vacuum sweeping before opening to traffic. Excess aggregate can be reused on the following day's installation, provided the aggregate is clean, uncontaminated, and dry.

The engineer may require additional mechanical or vacuum sweeping as necessary after the system fully cures and the treated surface is open to traffic.

### PERFORMANCE REQUIREMENTS

**Raveling and Delamination:** Remove and replace high friction surface treatment that ravel, delaminates, or wears off within 90 days after placement, unless approved to remain in place by the

engineer. The limits of removal and replacement are subject to the approval of the engineer. Provide replaced high friction surface treatment meeting the requirements of this article.

Install the MMA based resin system material per the plans and specification. The engineer will notify the contractor within 48 hours of installation regarding any of the MMA based resin system material that is installed not to specification. Remove non-conforming MMA based resin system material at no charge to the department and replace with conforming product.

**D. Measurement**

The department will measure Colored Crosswalk by the square foot acceptably completed. No deduction will be made for the areas occupied by manholes, inlets, drainage structures, pavement markings or by any public utility appurtenances within the area.

**E. Payment**

The department will pay for the measured quantity at the contract unit price under the following bid item:

| ITEM         | DESCRIPTION       | UNIT |
|--------------|-------------------|------|
| SPV.0165.001 | Colored Crosswalk | SF   |

Payment is full compensation for furnishing and installing all materials including any re-application or repair required under the Performance Requirements as provided herein.

END OF ADDENDUM

