# SUMMARY OF PUBLIC WORK STANDARD SPECIFICATION REVISIONS - 2024

# STANDARD SPECIFICATIONS

## Modify article 107 – Protection of Public and Utility Interests

### 107.16 Maintain Driveway Access.

Bid Item 10770 Maintain Driveway Access Description.

## Description.

Maintain Driveway Access shall consist of all work, materials and incidentals necessary to maintain access to the driveways of properties identified on the plans, as identified in the special provisions, or as directed by the Engineer. The Contractor shall maintain access at the identified locations at all times and for the duration of the project. This work may involve constructing temporary accesses using materials approved by the Engineer, using steel plates, limiting the size of the work areas around and within the driveways, or using high early strength concrete. Maintaining access may also involve performing work outside of scheduled work hours or outside of the Contractor's planned phasing of the project, if approved or directed by the Engineer.

If constructing a temporary access, the Contractor shall ensure that proper drainage is maintained while the temporary access is in use, which includes grading of the temporary access and installation of temporary culverts or piping, as necessary. This item also includes removal of any temporary materials along with any necessary restoration of the area disturbed by the temporary access.

### Method of Measurement.

Maintain Driveway Access will be measured by Each location acceptably completed.

# Basis of Payment.

This item, measured as provided above, shall be paid for at the contract unit price for all work, materials, equipment, and incidentals necessary to complete the work as set forth in the description.

# 107.17 Utility Coordination.

In the event of on-going work and a utility conflict is determined with one (1) or more utilities, the Contractor shall contact a representative from each utility and the Construction Engineer for conflict resolution. This may include plan revisions to work being performed. The Contractor shall provide time and area for the utility to support their facilities and complete their work.

# New article 107.18 – Temporary Crosswalk Access

107.18 Temporary Crosswalk Access.

# Description.

Temporary Crosswalk Access describes maintaining accessible crosswalks crossing the construction zone. Maintaining accessible crosswalks consists of maintaining a crosswalk on existing pavement, new pavement, or temporary surface material. Depending on the Engineer's selected location of the temporary crosswalk, installation of a temporary ramp shall be required to meet ADA guidelines and shall be considered incidental to this bid item. If the temporary ramp crosses over existing curb and gutter, drainage through the gutter shall be maintained. Temporary Crosswalk Access shall be used to maintain pedestrian access as required under Maintenance of Traffic.

# Materials.

Furnish a hard temporary surface material consisting of hot mix asphaltic surface or any grade of concrete, skid resistant steel plating, or alternative material as approved by the Construction Engineer. Gravel or base course material, cold patch, and rubber matting is not acceptable.

# Construction.

Install, maintain, and remove temporary surface material at Temporary Crosswalk Access locations as shown on the plans, discussed in the contract specifications, or as directed by the Construction Engineer. Level and compact the surface prior to placing temporary surface material. The temporary crosswalk shall have a minimum clear width of 5 feet and meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Contractor shall maintain the Temporary Crosswalk Access when disturbed by construction operations or utility trenches or as necessary to keep the access in compliance with ADAAG. Depending on the amount of disturbance to the Temporary Crosswalk, maintaining that temporary access shall require removing and relaying the material in the same location.

Depending on the selected location for the temporary crosswalk, the Contractor shall also be required to provide a temporary ramp, which shall be included with this item.

# Method of Measurement.

Temporary Crosswalk Access shall be measured as Each acceptably installed, maintained and removed in a single location.

## <u>Basis of Payment.</u>

Temporary Crosswalk Access, as measured above, will be paid for at the contract unit price which is full compensation for furnishing, loading, hauling material; for preparing the foundation; for furnishing, placing, maintaining, and removing temporary surface material; for reconstructing or relaying the temporary surface material; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

New article 107.19 – Project Information Sign

### 107.19 Project Information Sign.

Description.

Work under this item shall include the furnishing and installation of project information signs as shown in the plans or as directed by the Engineer. The background of the sign shall be orange, the message shall be black, and the border shall be black. The lettering series shall be C. The sign may be plastic or metal. The signs shall be attached to Type III barricades and placed at either end of the project for the duration of the project.

### Method of Measurement.

Project Information Sign shall be measured by Each four (4) foot x six (6) foot sign, acceptably installed.

#### <u>Basis of Payment.</u>

Project Information Sign, as measured above, will be full compensation for all work, materials, and incidentals to complete the work as outlined in the description.

### New article 107.20 – Archaeology Field Monitoring or Investigation and Report

#### New article 107.20 – Archaeology Field Monitoring or Investigation and Report.

#### Description.

There is a chance of finding human remains or archaeological materials during this project. To ensure compliance with the State Burial Site Preservation law, the Contractor shall provide a qualified Archaeologist to monitor critical phases of this project as required by the Wisconsin State Historic Preservation Office (SHPO), and as described in the SHPO project permit authorizing ground-disturbing activities within the archaeology site boundaries. City Engineering obtained the SHPO project permit. The hired Archaeologist shall be qualified as defined by the Secretary of Interior's professional qualification standards (36 CFR 61, Appendix A), and shall be approved by the Wisconsin Historical Society. More information and a list of qualified archaeologists can be found at the link below. There is a list of qualified archaeologists for conducting research and a separate list of qualified archaeologist on this project is specified in the SHPO project permit.

#### https://www.wisconsinhistory.org/Records/Article/CS2835

The Contractor shall inform the Engineer and Project Engineer of the Archaeologist prior to the preconstruction meeting.

The Contractor and the Archaeologist shall have the archaeological monitoring timeframe and coordination methods in place prior to the pre-construction meeting. The Archaeologist shall also attend the preconstruction meeting.

NOTE: Any place where human remains are buried are considered burial sites, subject to the State's Burial Site Preservation law, Wis. Stat. § 157.70. Burial Sites are protected under this law. The Contractor shall be responsible for compliance with the requirements of this Statute should human remains be discovered, and solely liable for the payments of penalties or fines imposed by any state or local agency, and for any violation of any state, or local law or regulation arising as a result of the Contractor's performance. The Contractor, or their agent, shall be fully conversant with Wis. Stat. § 157.70 and shall be expected to act in full conformance with that statue. If any human remains or archaeological materials are found, or unusual soils encountered during the project, all ground disturbing construction activities must cease.

The initial stripping of the terrace and removal of base course shall be monitored for the presence of cultural material. If the work areas are already disturbed or within the sterile B soil horizon, the need for monitoring can be reevaluated by the Compliance Team of the Wisconsin State Historical Society using case reference number # 23-0111.

The monitoring Archaeologist shall compile all recorded pertinent information and observations in a Final Report format acceptable to the Wisconsin Historical Society and the Wisconsin Department of Natural Resources. The Final Report shall be submitted to the Wisconsin Historical Society, Wisconsin Department of Natural Resources, Engineer, and Project Engineer within 3 weeks of concluding the field monitoring activities.

### Method of Measurement.

Archaeology Field Monitoring or Investigation and Report shall be measured as Lump Sum for compensation.

### Basis of Payment.

Archaeology Field Monitoring or Investigation and Report shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all travel, equipment, materials, tools, labor, and incidentals required to complete the work as defined in the description. In the event of delay in submitting the Final Archaeology Monitoring Report to the Wisconsin Historical Society, Wisconsin Department of Natural Resources, Engineer, and Project Engineer, the fixed, agreed, and liquidated damages due the City from the Contractor shall be assessed in the amount of \$100/day.

### **ARTICLE 108 - LEGAL RELATIONS**

### 108.1 Laws to be Observed.

The Contractor shall at all times observe and comply with all Federal and State laws and administrative rules, local laws, ordinances, and regulations which in any manner affect the conduct of the work, and all orders or decrees, as exist at the present or which may be enacted later, of bodies or tribunals having jurisdiction or authority over the work. No plea of misunderstanding or ignorance thereof will be considered. The Contractor shall indemnify, defend and save harmless the City and all of its officers, officials, agents, employees and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor or the Contractor's employees, subcontractors or agents.

### Modify article 109.9 Liquidated Damages

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Add Fiber penalties

## Modify article 201 – Excavation Cut

## 201.3 Description.

201.3(a) Under Drain, 6 Inch, Wrapped.

201.3(b) Geotextile Fabric, Type SAS (Non-Woven).

201.3(c) Test Rolling Street Subgrades and Base Course Preparatory to Paving.

201.3(d) Terrace Excavation for Tree Planting

This bid item shall include all work necessary to excavate areas within grass terraces to an appropriate depth suitable for new tree plantings. All work under this item shall be in accordance with Article 201 of the Standard Specifications. The Contractor shall coordinate with the Engineer and Forestry representative to select the appropriate locations for tree plantings to be completed in the future, by City Forestry, under a separate contract, or when the contract includes new tree plantings.

Once the locations are marked, the Contractor shall excavate the terrace area to a suitable depth for new tree plantings, a minimum of twenty (20) inches up to approximately twenty-four (24) inches. The terrace shall be excavated to a minimum length of twenty (20) feet, but that may be reduced by Engineer to fit site constraints, as necessary. The width of the terrace shall also be excavated six (6) inches from the sidewalk/path and one (1) foot from the curb or street edge. While performing the excavation, the Contractor shall take care to not undermine or damage the adjacent sidewalk/path or curb, including the gravel base extension beneath these items. If damaged during the excavation process, the Contractor shall replace curb or sidewalk at no cost to the City.

Once the area is excavated, the Contractor shall backfill the entire depth of the excavated area with regular topsoil per Article 202 of the Standard Specifications. The top six (6) inches of topsoil shall be paid for under the appropriate bid item. The backfill of the remaining depth of fourteen (14) inches to eighteen (18) inches of topsoil is included with this bid item. The surface shall be restored as specified in the contract, which is typically with terrace seeding and erosion matting, paid for under the appropriate bid items.

# 201.4 Materials.

# Modify article 302 – Concrete Curb and Gutter

# 302.2(i) Traffic Circle Mountable Concrete Curb & Gutter.

The work under this item shall consist of constructing Traffic Circle Mountable Concrete Curb & Gutter in accordance with Standard Detail Drawing 3.06 and appropriate sections of the Standard Provisions.

### 302.2(j) Sidewalk Curb.

The work under this item shall consist of constructing Sidewalk Curb as shown in the plans, or directed by the Engineer, and appropriate sections of the Standard Provisions.

## 302.3 Measurement and Payment.

## Modify article 210 – Erosion Control

## 210.1(i) Erosion Matting.

When required, either by the erosion control plan or by the Construction Engineer, erosion matting shall be installed to reduce soil erosion caused by concentrated runoff or rainfall impact. The erosion mat supplied shall be one of the products listed on the PAL under the specified category, and shall conform to Wisconsin Department of Transportation requirements for the specified category.

## 210.1(j) Terrace Restoration.

Terrace Restoration shall include the provision, placement and finish grading of a minimum thickness of 6" of topsoil and the restoration with Shade or Sun Terrace Mix as directed in the field. The seeding work shall conform to the specifications in Article 207 - Seeding. In greenways and detention basin areas, a minimum thickness of six inches (6") of topsoil shall be required.

## 210.1(k) Dust Control.

Modify article 303 – Concrete Sidewalks, Concrete Driveways, Concrete Mountable Median Island Nose and steps of Concrete Masonry

## 303.1(d) Stamped & Colored Concrete.

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended.

A separate design mix shall be provided for all areas to receive integrally colored concrete. Integrally colored concrete mix(es) shall not contain fly ash. Consider admixture recommendations for concrete mix design, however, mix design must also conform to the standard specifications. Submit the concrete mix design to the City of Madison for review.

Contractor shall provide a 12"x12" sample of the colored concrete, which will be reviewed and approved by the City prior to final installation. Provide a minimum of 3 days notice to the Engineer in order to schedule review of the sample.

Excess concrete material from mockups can be used elsewhere per the Engineers approval if the mix design meets the standard requirements of the secondary use.

# 303.1(e) Temporary Sidewalk.

The contractor shall install temporary sidewalk at the locations shown in the plans. The temporary sidewalk shall be three (3) inch concrete over (2) inch crushed aggregate base course gradation no. 2, cold patch is not acceptable. The temporary sidewalk shall maintain a 2% cross slope towards the street and match existing ground or sidewalk.

Prior to placement of the temporary sidewalk, the Contractor shall remove any loose material, including dirt, vegetation, or other debris. If temporary sidewalk is removed, the Contractor shall prepare and compact the base, and the temporary sidewalk shall be installed such that the concrete material fully replaces the removed sidewalk.

## 303.1(f) Temporary Bus Stop Pad.

This item shall be used to install temporary bus stop pads at the locations shown in the plans or as directed by the Engineer.

During construction, if buses continue to use the street, the stops shall be relocated and placed in temporary locations or if buses are detoured away from the street, the stops shall be placed in temporary locations. The Contractor shall install temporary pads as necessary to serve the stops. Depending on the construction, the temporary pads will either be in the terrace areas or adjacent to the construction zone. When located within the construction zone, the Contractor shall take care to not install the pads in front of driveways or within turning radii for vehicles turning on to or off of side streets.

Temporary bus stop pads shall be constructed either of concrete or asphalt. The concrete or asphalt shall be on existing pavement, new pavement, or temporary surface material. Concrete pads shall be five (5) inches of concrete on three (3) inch minimum of crushed aggregate or shall be three and five tenths (3.5) inches of asphalt on six (6) inch crushed aggregate minimum. The temporary pads shall either be six (6) feet wide or the entire width of the terrace and ten (10) feet in length, minimum. bus stop zone shall be designated and separated from the construction zone with construction fencing (plastic).

## This item also includes all work necessary to maintain the bus stop pads while in use.

The temporary bus stop zone shall also have a concrete or asphalt surface pedestrian route to connect directly to a crosswalk (existing, new, or temporary) or directly to an open sidewalk. If required due to the location of the temporary bus stop, installation of a temporary ramp may be required to meet ADA guidelines. If the temporary ramp crosses over existing curb and gutter, drainage through the gutter shall be maintained. Installation of surface materials and fencing as necessary are included with this item.

The temporary pads shall be kept free of significant cracks and offsets and kept visible and clean and all times while in use. Maintenance of the temporary pads may include removal and replacement as directed by the Engineering.

This item also includes removal of the temporary pads once a switch in traffic control phasing no longer requires use of the temporary pads, and when it is not expected to require use in any future traffic control phasing. Once a temporary pad is removed in the terrace, the terrace shall be restored with topsoil, seed, and erosion matting.

### 303.2 Construction Methods.

### 303.2(a) Preparation of Foundation.

303.2(r) Stamped & Colored Concrete.

## Construction

Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved samples.

Protect all adjoining areas of concrete prior to pouring colored concrete. Perform any finishing work as necessary to prepare the colored concrete for stamping as recommended by the pattern manufacturer.

Set stamp pattern in accordance to the manufacturer's specified methods. Check all depths of imprints by tool-to-tool surface leveling. Perform tooling and finishing as stamping tools are removed after imprinting. Eliminate all squeeze joints between stamping tools, if any, with hand tools prior to concrete setting.

Joint the concrete in accordance with the standard specifications amended as follows: Saw joints such that the saw joint follows the concrete recess.

Apply curing compound per manufacturer's recommended coverage rate and to meet curing requirements of the City of Madison Standard Specifications.

Stamped & Colored Concrete shall match the visual appearance of the approved reference samples. Replace any not conforming to the reference samples at the Contractor expense.

## Materials

Integral-mix colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494 and ASSHTO M194. Admixture shall be a single-component, colored, water-reducing, set-controlling admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant. The admixture shall be factory formulated and packaged in cubic yard dosage increments, not multiple additives and pigments added separately into the mix.

The Color and stamping pattern shall be defined by the Engineer, prior to installation of sample.

All surfaces shall be cured uniformly. The concrete shall never be covered with plastic sheeting.

Curing compound shall comply with ASTM C309 and be of same manufacturer as colored admixture, for use with integrally colored concrete. All placing, finishing, curing, joint sealing, and patching shall be in accordance with the admixture manufacturer's recommendations.

# 303.2(s) Radial Detectable Warning Fields

Work under this item shall include furnishing all materials, incidentals, equipment, and labor required to complete the installation of Radial Detectable Warning Field as shown in the plans.

All work under this shall be completed in accordance with the Wisconsin Department of Transportation Facilities Development Manual Specifications (10.2.6) and Standard Detail Drawings (SDD 08D05-f) for Radial Detectable Warning Field.

### 303.3 Measurement and Payment.

## 303.3(a) Method of Measurement.

Sidewalks, sidewalk ramps, temporary sidewalks, mountable median island nose, driveways and steps shall be measured by area in square feet. The measured areas of crosswalks shall be included with the measured areas of sidewalks.

Curb Ramp Detectable Warning Field<mark>s and Radial Detectable Warning Fields</mark> shall be measured in place by the square feet of surface area.

Tree grates as described above shall be measured by the unit, each, installed and accepted in place. All tree location test holes shall be considered incidental to the tree grate.

When required, the "Profile Sawcut" shall be measured by length in linear along the flow line of the curb. In the case of integral curb and walk, the width of the walk shall extend to a point six (6) inches behind the face of curb. The curb shall be paid for separately as Curb and Gutter.

In the case of steps, the area measured for payment shall be the summation of the areas of the treads, computed by multiplying the width of the tread by the length of the tread out to out of integral wall, if any.

Reinforcing steel for concrete sidewalk installed in accordance with the terms of the contract will be included with this bid item.

Cold weather protection for sidewalk and drives shall be measured by the square foot of sidewalk or driveway surface.

C1 Concrete Sidewalk, 7-Inch shall be measured by the square foot installed and accepted.

Colored Concrete shall be measured by the square foot installed and accepted.

Stamped & Colored Concrete shall be measured by the square foot installed and accepted.

Temporary bus pad shall be measured by each pad acceptably installed, maintained and removed.

### 303.3(b) Basis of Payment.

The area, measured as provided above, shall be paid for at the contract unit price per square foot for the items of concrete sidewalk, temporary sidewalks, concrete driveways, concrete mountable median island nose, and concrete steps, which price shall be full compensation for furnishing all materials, including concrete masonry, expansion joints and sealant; for excavations and preparation of subgrade including subbase, backfilling, and disposal of surplus material; for forming; for placing, finishing, protecting, jointing, sealing and curing of the concrete; and for all labor, tools, equipment and incidentals necessary to complete the work and restore the site of the work. Providing and placing crushed aggregate base course shall be paid for separately with bid item 40102.

Payment for Curb Ramp Detectable Warning Fields and Radial Detectable Warning Fields is full compensation for providing all materials, including detectable warning field panels, finishing, protecting, and curing concrete; and restoring the work site; and for all labor, tools, equipment and incidentals

required to complete the work and restore the site. Payment for any concrete sidewalk directly below detectable warning field is paid for separately under the applicable concrete sidewalk bid item.

Payment for Tree Grate as described above, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing tree grates and washed stone, reinforcing steel; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

The footage for profile sawcut, measured as provided above, shall be paid for at the contract unit price per linear foot, which price shall be full compensation for excavating; for all labor, tools, materials, and equipment necessary to complete the work, including crushed stone made necessary by excessive excavation behind the curb; and for disposal of the concrete.

The contract price for reinforcing steel for concrete sidewalk shall include furnishing the specified materials and all labor, tools, equipment and incidentals necessary to complete the work.

Cold weather protection for sidewalk and drives shall be paid for at the contract unit price per square foot, measured as specified above in Method of Measurement, which price shall be full compensation for furnishing all materials; for placing and maintaining; and for all labor, tools, equipment and incidentals necessary to complete the work during the concrete curing time specified in Section 301.8(a.) "Cold Weather Protection."

Where reinforcing steel for concrete sidewalk is not listed as an item on which to submit unit prices, it shall be understood and agreed that the Contractor shall be paid seventy-five (\$0.75) cents per linear foot of uncoated reinforcing steel, and one (\$1.00) dollar per linear foot of epoxy-coated reinforcing steel furnished and placed in accordance with these Specifications.

C1 Concrete Sidewalk, 7-Inch, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site. However, if the contract provides a bid item for excavation, then the department will pay for work required and performed in construction concrete sidewalks as specified in the contract.

Colored Concrete, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

Stamped & Colored Concrete, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

Temporary bus stop pads, measured as provided above shall be paid at the contract unit price, which shall be full compensation for all work, materials, forms, labor, equipment and incidentals necessary to complete the work as set forth in the description.

## Modify article 608 – Pavement Markings

### 608.4 Construction Methods.

608.4(a) Skid/Slip Resistant Preformed Thermoplastic Pavement Marking

Install preformed thermoplastic pavement marking in accordance with manufactures specifications.

### 608.4(b) Black Epoxy

Apply black epoxy in a grooved slot with a matte finish directly after the white marking. Apply epoxy at a wet mil thickness of 20. Apply black aggregate at a rate of 10 pounds per gallon of epoxy. Do not apply glass beads to black epoxy.

## 608.5 Performance Requirements.

## **BID ITEMS**

New Items 10713, TEMPORARY CROSSWALK ACCESS (EACH) 10730, PROJECT INFORMATION SIGN (EACH) 10950, ARCHAEOLOGY FIELD MONITORING OR INVESTIGATION (Lump Sum) – Discuss w/Inspectors 10951, FINAL ARCHAEOLOGY MONITORING REPORT (Lump Sum) – Discuss w/Inspectors 21401, TERRACE SUPPORT SYSTEM (C.F.) 30212, SIDEWALK CURB (L.F.) 30306, TEMPORARY SIDEWALK (S.F.) 30307, TEMPORARY BUS STOP PAD (S.F.) 30339, RADIAL DETECTABLE WARNING FIELDS (S.F.) 60837, PAVEMENT MARKING BLACK EPOXY (L.F.)

Revised Items NONE

Deleted Items NONE

### **DETAIL DRAWINGS**

### REVISED DETAIL

SDD 3.03 – Standard Curb Ramp Types 1 and 2; update note 3, add note 4 & 5, add radial notes <mark>– Discuss radials w/Inspectors</mark>

SDD 3.04 – Curb Ramps General and Curb Ramp 2-A; add guidance about ADA accessible flares for concrete terraces, update note 3, add note 4 & 5, add radial detail/notes – Discuss radials w/Inspectors SDD 3.06 – Madison Standard Concrete Curb & Gutter; Add Type 'A' Concrete Curb & Gutter Reject SDD 3.08 – Madison Standard Concrete Curb & Gutter; Add Type 'H' Concrete Curb & Gutter – Driveway/Ped./Bike

SDD 6.38 – Pavement Marking Details Page 3

SDD 6.39 – Pavement Marking Details Page 2

NEW DETAIL SDD 2.18 – Terrace Excavation for Tree Planting SDD 3.16 – Raised Crossing Detail

DELETED DETAILS

Update specs. to remove Neenah Foundary?