



# Wisconsin Department of Transportation

November 8, 2017

**Division of Transportation Systems Development**

Bureau of Project Development  
 4802 Sheboygan Avenue, Rm 601  
 P O Box 7916  
 Madison, WI 53707-7916

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**NOTICE TO ALL CONTRACTORS:**

**Proposal #15: 2230-00-74, WISC 2017 511**  
**West Greenfield Avenue**  
**S 35<sup>th</sup> St To S Cesar E Chaves Dr**  
**Local Street**  
**Milwaukee County**

**2984-04-71**  
**Various Highways**  
**3 Connecting Hwy Intersections**  
**Var Hwy**  
**Milwaukee County**

**Letting of November 14, 2017**

This is Addendum No. 02, which provides for Project ID 2984-04-71 the following:

**Special Provisions:**

Revised Special Provisions	
Article No.	Description
35	Poles Type 9, Item SPV.0060.02; Poles Type 12 Special, Item SPV.0060.03
36	Monotube Arms 30-FT, Item SPV.0060.04; Monotube Arms 35-FT, Items SPV.0060.05; Monotube Arms 25-FT, Item SPV.0060.23

Added Special Provisions	
Article No.	Description
62	Poles Type 10 Black, Item SPV.0060.27; Poles Type 12 Special Black, Item SPV.0060.28; Poles Type 13 Special Black, Item SPV.0060.29
63	Monotube Arms 30-FT Black, Item SPV.0060.30; Monotube Arms 35-FT Black, Item SPV.0060.31

**Schedule of Items:**

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
SPV.0060.02	Poles Type 9	EA	5	-1	4

<b>Added Bid Item Quantities</b>					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
SPV.0060.27	Poles Type 10 Black	EA	0	1	1
SPV.0060.28	Poles Type 12 Special Black	EA	0	2	2
SPV.0060.29	Poles Type 13 Special Black	EA	0	1	1
SPV.0060.30	Monotube Arms 30-ft Black	EA	0	1	1
SPV.0060.31	Monotube Arms 35-ft Black	EA	0	3	3

<b>Deleted Bid Item Quantities</b>					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
SPV.0060.03	Poles Type 12 Special	EA	3	-3	0
SPV.0060.04	Monotube Arms 30-ft	EA	1	-1	0
SPV.0060.05	Monotube Arms 35-ft	EA	3	-3	0

**Plan Sheets:**

<b>Revised Plan Sheets</b>	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
21	Miscellaneous Quantities; Item quantities have changed as stated in schedule of items
22	Traffic Signal Base And Conduit Plan; Plan changes reflect changes to pole type and specification change to black poles

<b>Added Plan Sheets</b>	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
14A	Street lighting & Traffic Signal Details; added because of the addition of Luminaire arms to the Monotube poles
14B	Street lighting & Traffic Signal Details; added because of the addition of Luminaire arms to the Monotube poles

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. 02**  
**2230-00-74 & 2984-04-71**  
**November 8, 2017**

**Special Provisions**

**35. Poles Type 9, Item SPV.0060.02; Poles Type 12 Special, Item SPV.0060.03**

*Replace entire article including title with the following:*

**35. Poles Type 9, Item SPV.0060.02.**

**A Description**

Work under this item consists of furnishing and installing monotube poles.

**B.1 Materials for ID 2230-00-74**

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a three second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hole measuring 4 1/2 inches by 12 inches (115 mm by 305 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

Ensure that all castings are clean, smooth, and with all details well defined and true to pattern.

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

**C Construction**

Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware conforming to standard spec 657.2.2.6. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 657.3.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

**D Measurement**

The department will measure Poles Type 9 as each individual pole, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Poles Type 9	EACH

Payment is full compensation for providing and installing poles including all hardware and fittings necessary to install the poles, for furnishing all excavation, for backfilling and for disposal of excess material.

- 36. Monotube Arms 30-FT, Item SPV.0060.04; Monotube Arms 35-FT, Items SPV.0060.05; Monotube Arms 25-FT, Item SPV.0060.23.**

*Replace entire article including title with the following:*

- 36. Monotube Arms 25-FT, Item SPV.0060.23.**

**A Description**

Work under this item consists of furnishing and installing monotube arms.

**B Materials**

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

Base the designs on the completed maximum loading configuration the standard detail drawing shows. Along with the materials list, submit a certificate of compliance certifying that the arms as furnished conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and

notarized. Send a copy of the certificate and a copy of the monotube arm shop drawings to the City of Milwaukee construction engineer.

Furnish monotube arms conforming to the following:

1. Consist of zinc coated steel round or oval members.
2. Have a mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole as the plans show.
3. Have stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.
4. Have a clean, uniform natural finish. No paint or other corrosion preventive maintenance coating is required.

After welding and before zinc coating, clean exterior surfaces of each arm free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply zinc coating as specified for sign bridge components in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After manufacturing is complete, clean the exterior surfaces of each pole free of all loose scale, dirt, oil, or grease, and other foreign substances.

Provide incidental Cable Traffic Signal as required under section C.

### **C Construction**

Install monotube arms as specified in the plan details and using appropriate contractor-furnished hardware conforming to standard spec 657.3.3.2.

Prior to installation of each monotube arm, a 1 1/4-inch hole shall be drilled into the bottom of the arm approximately centered over each driving lane as shown on the plans. Where emergency vehicle pre-emption (EVP) is installed, a separate 1 1/4-inch hole shall be drilled in the bottom of the arm approximately centered over the roadway approach, but a minimum of four feet from the nearest drilled hole.

The contractor shall provide traffic signal cable spooled 5 feet outside the arm from each drilled hole in the arm, including the hole for EVP if applicable, to the base of the pole below the hand hole. A separate nylon pull rope shall also be provided for the EVP hole to the base of the pole below the hand hole where applicable.

### **D Measurement**

The department will measure Monotube Arms 25-FT as each individual arm, acceptably completed.

### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.23	Monotube Arms 25-FT	EACH

Payment is full compensation for furnishing and installing all materials, for providing high-strength bolt/nut/washer assemblies and DTI washers including those required for testing, and for providing related mounting hardware, leveling shims, incidental cabling, and other required components.

**62. Poles Type 10 Black, Item SPV.0060.27; Poles Type 12 Special Black, Item SPV.0060.28; Poles Type 13 Special Black, Item SPV.0060.29.**

**A Description**

Work under this item consists of furnishing and installing black monotube poles supplied by the contractor.

**B Materials**

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a three second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

For Poles Type 10 Black, provide a reinforced hand hole measuring 4 1/2 inches by 12 inches (115 mm by 305 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For Poles Type 12 Special Black, and Type 13 Special Black, provide a reinforced hand hole measuring 7 1/2 inches by 14 inches (190 mm by 355 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

Ensure that all castings are clean, smooth, and with all details well defined and true to pattern.

For poles with street lighting luminaire arms, the pole shall have an opening (180 degrees apart) at a 28'-9" nominal height for the future installation of double street light arms and fixtures. Include cover plates for all luminaire attachment locations on the pole which will not have a luminaire attached to it under this project. The pole shall be oriented so the opening is perpendicular to the curb. The opening shall be plugged to provide a waterproof seal while not being utilized. Install two (2) additional 1/2" diameter mounting holes with 13NC tap in each of the luminaire mounting plates as shown in the monotube detail drawing in the plans.

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

Apply a polyester powder coat electrostatically to all cleaned and treated surfaces to a uniform 8 mil thickness in a one-coat application. Cure the powder coat in a convection oven at a 400° F minimum temperature to form a high molecular weight fusion bonded finish. Alternate powder coat methods may be reviewed and tested on a case by case basis. However, no alternate coating method will be used unless the Commissioner determines that the alternate is equal to the specified coating system. Measure coating thickness according to SSPC-PA-2-73T, "Measurement of Dry Paint Thickness with Magnetic Gauges", except that the lowest "single spot measurement" in an area of two square inches shall be not less than 7.0 mils.

The exterior coat shall pass 1,000 hours of salt spray exposure per ASTM B117 in a 5% Na C1 (by weight) solution at 95° F and 95% relative humidity without blistering. Before testing, scribe the panel with an "X" down to bare metal.

The arms shall be gloss black in color, unless otherwise indicated. Submit color sample for approval prior to fabrication. This color sample shall include the manufacturer's name and the manufacturer's color name as well as any other information required to purchase the same color for all pole accessories such as the arms, bracelets, and split pedestal bases.

### **C Construction**

Install poles as specified in the plan details and in accordance to 657.3.2 of the standard specifications using appropriate contractor-furnished anchor bolts and hardware conforming to 657.2.2.6. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to 641.3.1.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

Secure rodent screening covering the space between the base plate and concrete base.

### **D Measurement**

The department will measure each Pole Type 10 Black acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.27	Poles Type 10 Black	Each
SPV.0060.28	Poles Type 12 Special Black	Each
SPV.0060.29	Poles Type 13 Special Black	Each

Payment is full compensation for providing and installing poles and for providing grounding lugs, fittings, shims, hardware, and other required components necessary to install the poles.

## **63. Monotube Arms 30-FT Black, Item SPV.0060.30; Monotube Arms 35-FT Black, Item SPV.0060.31.**

### **A Description**

Work under this item consists of furnishing and installing black monotube arms supplied by the contractor.

## **B Materials**

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

Base the designs on the completed maximum loading configuration the standard detail drawing shows. Along with the materials list, submit a certificate of compliance certifying that the arms as furnished conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and notarized. Send a copy of the certificate and a copy of the monotube arm shop drawings to the City of Milwaukee construction engineer.

Furnish monotube arms conforming to the following:

1. Consist of zinc coated steel round or oval members.
2. Have a mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole as the plans show.
3. Have stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.
4. Have a clean, uniform natural finish. No paint or other corrosion preventive maintenance coating is required.

After welding and before zinc coating, clean exterior surfaces of each arm free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply zinc coating as specified for sign bridge components in 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After manufacturing is complete, clean the exterior surfaces of each pole free of all loose scale, dirt, oil, or grease, and other foreign substances.

Provide incidental Cable Traffic Signal 9-14 AWG as required under section C.

Apply a polyester powder coat electrostatically to all cleaned and treated surfaces to a uniform 8 mil thickness in a one-coat application. Cure the powder coat in a convection oven at a 400° F minimum temperature to form a high molecular weight fusion bonded finish. Alternate powder coat methods may be reviewed and tested on a case by case basis. However, no alternate coating method will be used unless the Commissioner determines that the alternate is equal to the specified coating system. Measure coating thickness according to SSPC-PA-2-73T, "Measurement of Dry Paint Thickness with Magnetic Gauges", except that the lowest "single spot measurement" in an area of two square inches shall be not less than 7.0 mils.

The exterior coat shall pass 1,000 hours of salt spray exposure per ASTM B117 in a 5% NaCl (by weight) solution at 95° F and 95% relative humidity without blistering. Before testing, scribe the panel with an "X" down to bare metal.

The arms shall be gloss black in color, unless otherwise indicated. Submit color sample for approval prior to fabrication. This color sample shall include the manufacturer's name and the manufacturer's color name as well as any other information required to purchase the same color for all pole accessories such as the arms, bracelets, and split pedestal bases.

**C Construction**

Install monotube arms as specified in the plan details and using appropriate contractor-furnished hardware conforming to 657.3.3.2. The contractor shall provide 10 working days notice to the project engineer to coordinate housing installation by City of Milwaukee forces within 5 days after the monotube arms being installed.

Prior to installation of each monotube arm, a 1 1/4-inch hole shall be drilled into the bottom of the arm approximately centered over each driving lane as shown on the plans. Where emergency vehicle pre-emption (EVP) is installed, a separate 1 1/4-inch hole shall be drilled in the bottom of the arm approximately centered over the roadway approach as shown in the plans, but a minimum of four feet from the nearest drilled hole.

The contractor shall provide 9-14 AWG traffic signal cable spooled 5 feet outside the arm from each drilled hole in the arm, including the hole for EVP if applicable, to the base of the pole below the hand hole. A separate nylon pull rope shall also be provided for the EVP hole to the base of the pole below the hand hole where applicable.

**D Measurement**

The department will measure each monotube arm as each individual arm acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Monotube Arms 30-FT Black	Each
SPV.0060.31	Monotube Arms 35-FT Black	Each

Payment is full compensation for furnishing and installing all materials, for providing high-strength bolt/nut/washer assemblies and DTI washers including those required for testing, and for providing related mounting hardware, leveling shims, incidental cabling, and other required components.

**Schedule of Items**

Attached, dated November 8, 2017, are the revised Schedule of Items Pages 11 – 14.

**Plan Sheets**

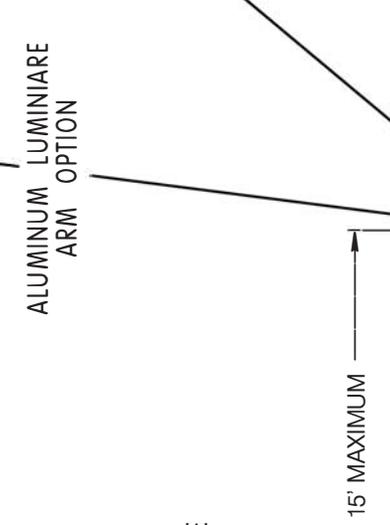
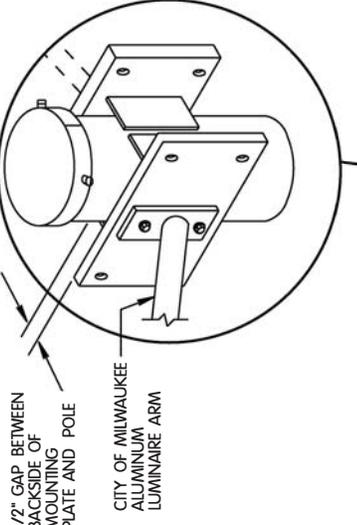
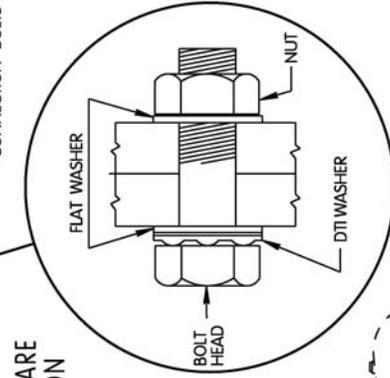
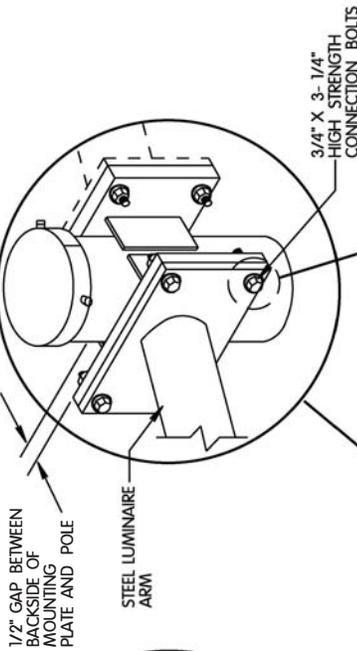
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:

**2984-04-71**

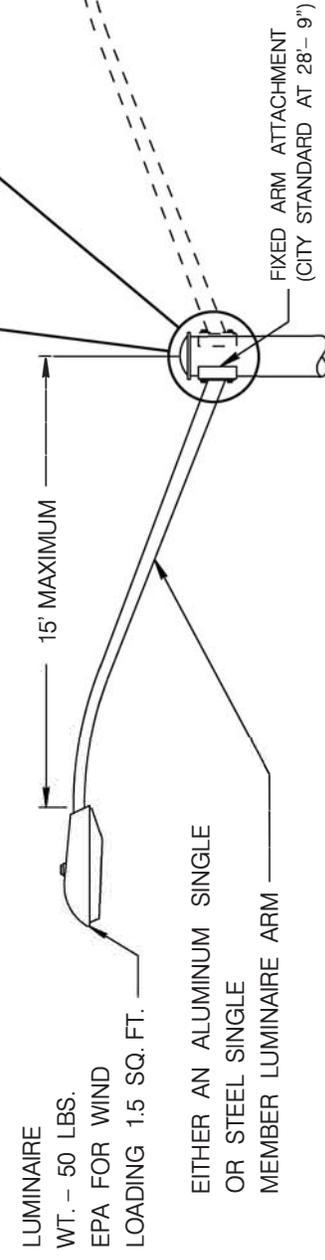
Revised: 21 and 22.

Added: 14A and 14B.

END OF ADDENDUM



ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE  
NOT TO SCALE

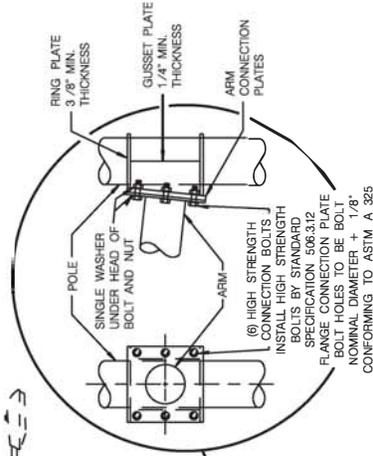


ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE FOR  
 POLES: TYPE 10  
 TYPE 13 SPECIAL  
 TYPE 13

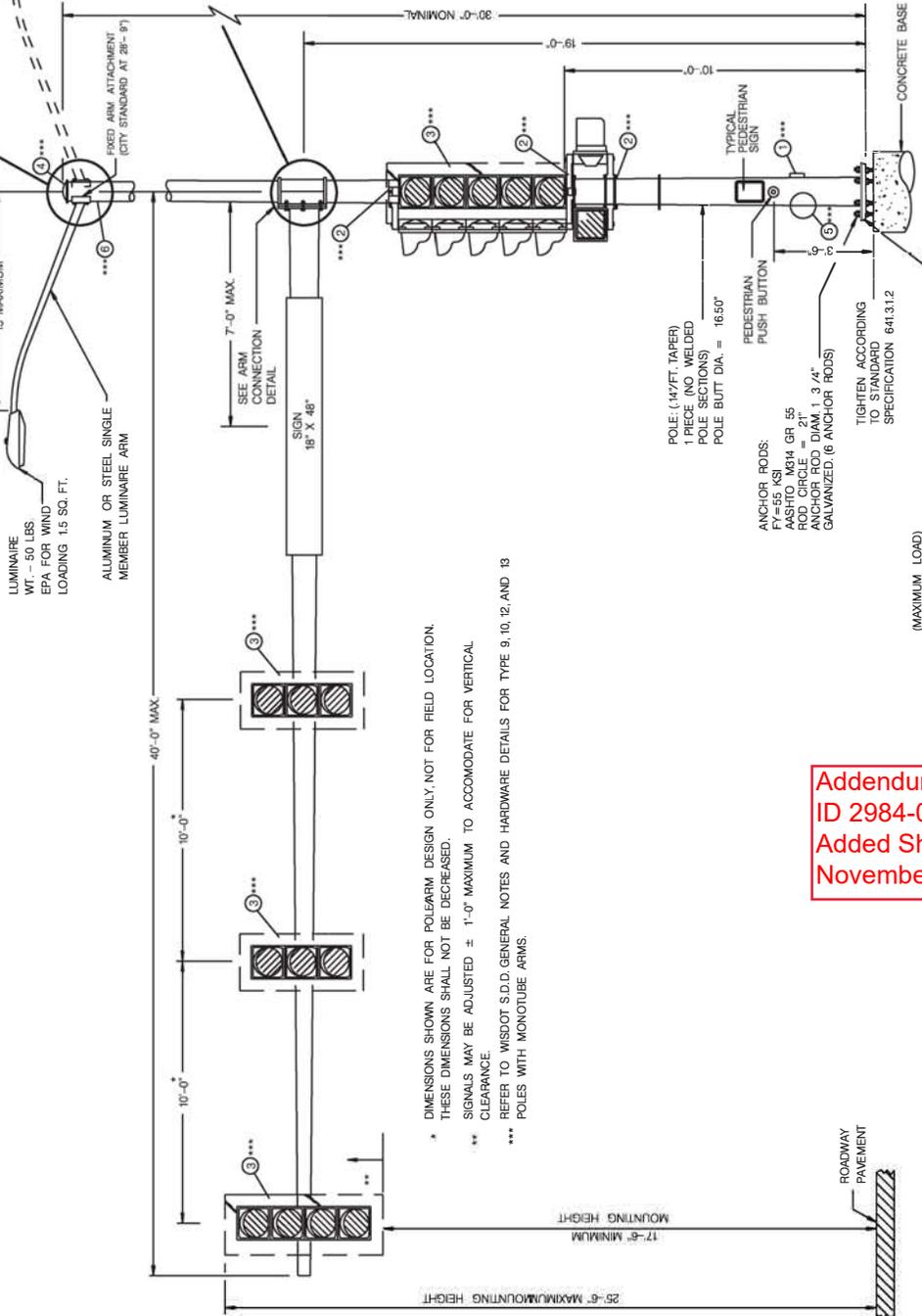
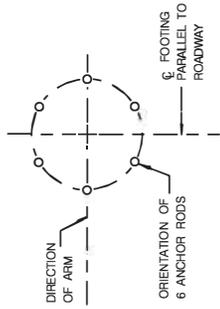
Addendum No. 02  
 ID 2984-04-71  
 Added Sheet 14A  
 November 8, 2017

NOT TO SCALE

SEE STREET LIGHTING & TRAFFIC SIGNAL DETAIL SHEET FOR ADDITIONAL MOUNTING HOLES IN LUMINAIRE MOUNTING PLATE



6 BOLT ARM CONNECTION DETAIL



- \* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.
- \*\* SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE.
- \*\*\* REFER TO WISDOT S.D.D. GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12, AND 13 POLES WITH MONOTUBE ARMS.

Addendum No. 02  
ID 2984-04-71  
Added Sheet 14B  
November 8, 2017

(MAXIMUM LOAD)  
TYPE 13 POLE SPECIAL  
35'- 40' MONOTUBE ARM

TYPE 13 POLE SPECIAL  
35'- 40' MONOTUBE ARM

CITY OF MILWAUKEE  
DEPARTMENT OF PUBLIC WORKS  
REVISIONS:  
DATE: \_\_\_\_\_  
BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
BY: \_\_\_\_\_

MISCELLANEOUS LANDSCAPING ITEMS

TOPSOIL	SOD	FERTILIZER
LAWN	TYPE B	
625.0100 SY	631.1000 SY	629.0210 CWT
6	6	
<b>GRAND TOTAL</b>		
6	6	0.5

ALL ITEMS CATEGORY 0010

REMOVALS

REMOVING	SAWING
CONCRETE	CONCRETE
204.0155 SY	690.0250 LF
10	20
<b>GRAND TOTAL</b>	
10	20

ALL ITEMS ARE CATEGORY 0010

CONCRETE CONSTRUCTION ITEMS

CONCRETE	
SIDEWALK	
602.0410 5-INCH SF	
27	
<b>GRAND TOTALS</b>	
27	

ALL ITEMS ARE CATEGORY 0010

MISCELLANEOUS ITEMS

MANAGEMENT OF SOLID WASTE TON	FINISHING ROADWAY (PROJECT) EACH	BACKFILL GRANULAR CY	MOBILIZATION EACH	TRAFFIC CONTROL (PROJECT) EACH	INLET SCREEN TYPE M EACH
SPV.0195.01	213.0100	209.1100	619.1000	643.0100	SPV.0060.07
30	1	17	1	1	32
<b>GRAND TOTAL</b>					
30	1	17	1	1	32

ALL ITEMS ARE CATEGORY 0010

CONSTRUCTION STAKING ROADWAY ITEMS

CONST. STAKING ELECTRICAL INSTALLATIONS (PROJECT)	CONST. STAKING SUPPLEMENTAL CONTROL (PROJECT)
650.8500	650.9910
LUMP SUM	LUMP SUM
1	1
<b>GRAND TOTAL</b>	
1	1

ALL ITEMS ARE CATEGORY 0010

Addendum No. 02  
ID 2984-04-71  
Revised Sheet 23  
November 8, 2017

TRAFFIC & LIGHTING MISCELLANEOUS QUANTITIES

Item No.	Description	Unit	Quantity
652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	40
654.011	Concrete Base Type 10	EACH	1
SPV.0060.01	Concrete Base Type 10 Special	EACH	3
SPV.0060.27	Poles Type 10 Black	EACH	1
SPV.0060.28	Poles Type 12 Special Black	EACH	2
SPV.0060.30	Monotube arms 30-FT Black	EACH	1
SPV.0060.31	Monotube arms 35-FT Black	EACH	3
SPV.0060.06	Fiberglass Polymer Concrete Puff Box 13-inch x 24-inch x 24-inch	EACH	1
SPV.0060.08	Utility Line Opening (ULO)	EACH	4
SPV.0060.29	Poles Type 13 Special Black	EACH	1

ALL ITEMS CATEGORY 0010

**NOTE:**  
 TYPICAL RECTANGULAR PULLBOX SHOULD BE INSTALLED AS SHOWN ON PLAN BUT WHEN IT IS NOT POSSIBLE A 5 FT. TO 6 FT. OFFSET FROM STREET LIGHT POLES, SIGNAL STANDARDS, AND FIRE HYDRANTS SHOULD BE USED.  
 CONDUIT END CAPS REQUIRED ON ALL EMPTY CONDUIT.  
 PULL ROPE (3/8" NYLON) REQUIRED IN ALL CONDUIT.  
 ALL POLES WILL BE RELOCATED BY CITY FORCES.  
 GENERAL NOTES SHALL BE FOLLOWED WHEN INSTALLING MATERIALS FOR TRAFFIC.

MEASUREMENTS FROM SW QUADRANT  
 55.0' WEST S.R.O.B.  
 2.0' NORTH E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 6'-3.0', 4'-0" LI  
 TYPE 12 SPECIAL POLE (BLACK)

WEST FOND DU LAC AVENUE

MEASUREMENTS FROM NE QUADRANT  
 44.0' WEST S.R.O.B.  
 5.0' SOUTH E.R.O.B.  
 TYPE 10 SPECIAL POLE (BLACK)

WEST MC KINLEY AVENUE

MEASUREMENTS FROM SE QUADRANT  
 55.6' NORTH S.R.O.B.  
 2.0' EAST E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 7'-5.0', 5'-2" LI  
 TYPE 13 SPECIAL POLE (BLACK)

NORTH 6TH

MEASUREMENTS FROM SW QUADRANT  
 20.0' WEST S.R.O.B.  
 2.0' NORTH E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 6'-6.15', 7'-2.7" LI  
 TYPE 13 SPECIAL POLE (BLACK)

MEASUREMENTS FROM SE QUADRANT  
 55.6' NORTH S.R.O.B.  
 2.0' EAST E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 7'-5.0', 5'-2" LI  
 TYPE 13 SPECIAL POLE (BLACK)

REMOVE CONCRETE SIDEWALK AND REPAIR WITH CONCRETE WALK AS DETERMINED BY THE CONSTRUCTION ENGINEER  
 MEASUREMENTS FROM SE QUADRANT  
 55.6' NORTH S.R.O.B.  
 2.0' EAST E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 7'-5.0', 5'-2" LI  
 TYPE 13 SPECIAL POLE (BLACK)

REMOVE CONCRETE SIDEWALK AND REPAIR WITH CONCRETE WALK AS DETERMINED BY THE CONSTRUCTION ENGINEER  
 MEASUREMENTS FROM SE QUADRANT  
 55.6' NORTH S.R.O.B.  
 2.0' EAST E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 7'-5.0', 5'-2" LI  
 TYPE 13 SPECIAL POLE (BLACK)

REMOVE CONCRETE SIDEWALK AND REPAIR WITH CONCRETE WALK AS DETERMINED BY THE CONSTRUCTION ENGINEER  
 MEASUREMENTS FROM SE QUADRANT  
 55.6' NORTH S.R.O.B.  
 2.0' EAST E.R.O.B.  
 TYPE 10 SPECIAL POLE BASE  
 7'-5.0', 5'-2" LI  
 TYPE 13 SPECIAL POLE (BLACK)

Addendum No. 02  
 ID 2984-04-71  
 Revised Sheet 24  
 November 8, 2017

- LEGEND**
- ⊕ MONOTUBE MAST ARM BASE TO BE INSTALLED
  - ⊕ TRAFFIC SIGNAL MOUNTED ON LIGHT POLE
  - ⊕ TRAFFIC SIGNAL CABINET
  - ⊕ 13"x24"x24" PULLBOX TO BE INSTALLED
  - ⊕ MAST ARM
  - ⊕ SIGNAL HEAD LOCATION ON MAST ARM
  - ⊕ EYP DETECTOR LOCATION ON MAST ARM
  - ⊕ STREET LIGHT LUMINAIRE (INSTALLED BY OTHERS)

PROJECT NO: 2984-04-71

HWY: S.T.H. 145 / S.T.H. 59

COUNTY: MILWAUKEE

TRAFFIC SIGNAL BASE AND CONDUIT PLAN

SHEET 24

E

SCALE: FEET 0 30

SHEET 1 OF 1

FILE NAME: W:\Info\Signal\PAVING AND DESIGN\State Projects-EPA\Provisionary Engineering\2984-04-71 Mast Arms #13 Intersections\Updated\_SignalPlan\_08h & McArthur\12-5-6.dwg PLOT DATE: 03-NOV-2017 08:54 PLOT BY: BOBBO PLOT SCALE: -46.963661100000 PLOT NAME: WISDOT\CADDIS SHEET 42



Proposal Schedule of Items

Proposal ID: 20171114015 Project(s): 2230-00-74, 2984-04-71

Federal ID(s): WISC 2017511, N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0306	690.0250 Sawing Concrete	6,498.000 LF		
0308	715.0415 Incentive Strength Concrete Pavement	10,075.000 DOL	1.00000	10,075.00
0310	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,400.000 HRS	5.00000	12,000.00
0312	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	1,400.000 HRS	5.00000	7,000.00
0314	SPV.0060 Special 01. Concrete Base Type 10 Special	3.000 EACH		
0316	SPV.0060 Special 02. Poles Type 9	4.000 EACH		
0324	SPV.0060 Special 06. Fiberglass Polymer Concrete Pull Box 13-Inch X 24-Inch X 24-Inch	173.000 EACH		
0326	SPV.0060 Special 07. Inlet Screen Type M	170.000 EACH		
0328	SPV.0060 Special 08. Utility Line Opening (ULO)	4.000 EACH		
0330	SPV.0060 Special 09. CONSTRUCTION STAKING CURB RAMPS	127.000 EACH		
0332	SPV.0060 Special 10. INLET SCREEN TYPE R	131.000 EACH		
0334	SPV.0060 Special 11. CATCH BASINS TYPE 44A	81.000 EACH		
0336	SPV.0060 Special 12. CATCH BASINS TYPE 44B	14.000 EACH		
0338	SPV.0060 Special 13. MANHOLE COVERS TYPE 58A	42.000 EACH		
0340	SPV.0060 Special 14. INLET COVERS TYPE 57	119.000 EACH		



Proposal Schedule of Items

Proposal ID: 20171114015 Project(s): 2230-00-74, 2984-04-71

Federal ID(s): WISC 2017511, N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0342	SPV.0060 Special 15. ADJUSTING WATER BOXES	239.000 EACH	_____.	_____.
0344	SPV.0060 Special 16. WATER MAIN PROTECTION	2.000 EACH	_____.	_____.
0346	SPV.0060 Special 17. FIBERGLASS POLYMER CONCRETE PULL BOX 17-INCH X 30-INCH X 24-INCH	22.000 EACH	_____.	_____.
0348	SPV.0060 Special 18. ADJUSTING TES MANHOLE COVERS	13.000 EACH	_____.	_____.
0350	SPV.0060 Special 19. INSTALLING CONDUIT INTO EXISTING MANHOLE	2.000 EACH	_____.	_____.
0352	SPV.0060 Special 20. 4' DIAMETER MANHOLE TYPE TES	9.000 EACH	_____.	_____.
0354	SPV.0060 Special 21. SAWING CONCRETE-ENCASED DUCT PACKAGE	1.000 EACH	_____.	_____.
0356	SPV.0060 Special 22. PEDESTRIAN COUNTDOWN SIGNAL FACE 12-INCH	16.000 EACH	_____.	_____.
0358	SPV.0060 Special 23. MONOTUBE ARMS 25-FT	4.000 EACH	_____.	_____.
0360	SPV.0060 Special 24. EVP DETECTOR HEAD	4.000 EACH	_____.	_____.
0362	SPV.0060 Special 25. EVP PHASE SELECTOR CARD	2.000 EACH	_____.	_____.
0364	SPV.0060 Special 26. EVP CONFIRMATION LIGHT ASSEMBLY	4.000 EACH	_____.	_____.
0366	SPV.0090 Special 01. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 6-DUCT	3,888.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20171114015 Project(s): 2230-00-74, 2984-04-71

Federal ID(s): WISC 2017511, N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0368	SPV.0090 Special 02. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 5-DUCT	19.000 LF	_____.	_____.
0370	SPV.0090 Special 03. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 4-DUCT	37.000 LF	_____.	_____.
0372	SPV.0090 Special 04. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 3-DUCT	32.000 LF	_____.	_____.
0374	SPV.0090 Special 05. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 2-DUCT	279.000 LF	_____.	_____.
0376	SPV.0090 Special 06. 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT 1-DUCT	25.000 LF	_____.	_____.
0378	SPV.0090 Special 07. CABLE TYPE UF 2-14 AWG	901.000 LF	_____.	_____.
0380	SPV.0090 Special 08. CONCRETE CURB & GUTTER INTEGRAL 31-INCH	92.000 LF	_____.	_____.
0382	SPV.0090 Special 09. Construction Staking Concrete Sidewalk	10,898.000 LF	_____.	_____.
0384	SPV.0090 Special 10. Fiber Optic Cable Outdoor Plant 72-CT	7,450.000 LF	_____.	_____.
0386	SPV.0105 Special 01. VEHICULAR MICROWAVE DETECTION SYSTEM S. 31ST ST & W. GREENFIELD AVE	LS	LUMP SUM	_____.
0388	SPV.0105 Special 02. VEHICULAR MICROWAVE DETECTION SYSTEM S. 21ST ST & W. GREENFIELD AVE	LS	LUMP SUM	_____.
0390	SPV.0105 Special 03. INST CITY-FURN TRAF SIG CAB TRAF SIG CONT & FOUND S 31ST & W GREENFIELD AVE	LS	LUMP SUM	_____.



Proposal Schedule of Items

Proposal ID: 20171114015 Project(s): 2230-00-74, 2984-04-71

Federal ID(s): WISC 2017511, N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0392	SPV.0105 Special 04. INST CITY-FURN TRAF SIG CAB TRAF SIG CONT & FOUND S 21ST & W GREENFIELD AVE	LS	LUMP SUM	_____.
0394	SPV.0105 Special 05. CONCRETE PAVEMENT JOINT LAYOUT	LS	LUMP SUM	_____.
0396	SPV.0165 Special 01. COLORED CONCRETE SIDEWALK 5-INCH	8,422.000 SF	_____.	_____.
0398	SPV.0170 Special 01. TEST ROLLING	132.000 STA	_____.	_____.
0400	SPV.0180 Special 01. JOINT SEALING	33,582.000 SY	_____.	_____.
0402	SPV.0195 Special 01. Management Of Solid Waste	30.000 TON	_____.	_____.
0404	SPV.0060 Special 27. Poles Type 10 Black	1.000 EACH	_____.	_____.
0406	SPV.0060 Special 28. Poles Type 12 Special Black	2.000 EACH	_____.	_____.
0408	SPV.0060 Special 29. Poles Type 13 Special Black	1.000 EACH	_____.	_____.
0410	SPV.0060 Special 30. Monotube Arms 30-FT Black	1.000 EACH	_____.	_____.
0412	SPV.0060 Special 31. Monotube Arms 35-FT Black	3.000 EACH	_____.	_____.
<b>Section: 0001</b>			<b>Total:</b>	_____.
			<b>Total Bid:</b>	_____.

