

# 246

June 16, 2023 Letting

## Notice to Bidders, Specifications and Proposal



**Illinois Department  
of Transportation**

**Contract No. 74C18  
Various Counties  
Section D7 ELECTRICAL REPAIRS 2023-1  
Various Routes  
District 7 Construction Funds**

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)



- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. June 16, 2023 prevailing time at which time the bids will be publicly opened from the iCX SecureVault.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 74C18  
Various Counties  
Section D7 ELECTRICAL REPAIRS 2023-1  
Various Routes  
District 7 Construction Funds**

**Repairing, replacing, servicing and maintaining various electrical systems throughout District 7.  
Repairing, replacing, servicing and maintaining various electrical systems throughout District 7.**

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.  
  
(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the  
Illinois Department of Transportation

Omer Osman,  
Secretary

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2023

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-22)(Revised 1-1-23)

SUPPLEMENTAL SPECIFICATIONS

<u>Std. Spec. Sec.</u>	<u>Page No.</u>
202 Earth and Rock Excavation .....	1
204 Borrow and Furnished Excavation .....	2
207 Porous Granular Embankment .....	3
211 Topsoil and Compost .....	4
407 Hot-Mix Asphalt Pavement (Full-Depth) .....	5
420 Portland Cement Concrete Pavement .....	6
502 Excavation for Structures .....	7
509 Metal Railings .....	8
540 Box Culverts .....	9
542 Pipe Culverts .....	29
586 Granular Backfill for Structures .....	34
644 High Tension Cable Median Barrier .....	35
782 Reflectors .....	36
801 Electrical Requirements .....	38
821 Roadway Luminaires .....	40
1003 Fine Aggregates .....	41
1004 Coarse Aggregates .....	42
1020 Portland Cement Concrete .....	43
1030 Hot-Mix Asphalt .....	44
1067 Luminaire .....	45
1097 Reflectors .....	52

VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
1	Additional State Requirements for Federal-Aid Construction Contracts .....	53
2	Subletting of Contracts (Federal-Aid Contracts) .....	56
3	<b>X</b> EEO .....	57
4	<b>X</b> Specific EEO Responsibilities Non Federal-Aid Contracts .....	67
5	<b>X</b> Required Provisions - State Contracts .....	72
6	Asbestos Bearing Pad Removal .....	78
7	Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal .....	79
8	Temporary Stream Crossings and In-Stream Work Pads .....	80
9	Construction Layout Stakes .....	81
10	Use of Geotextile Fabric for Railroad Crossing .....	84
11	Subsealing of Concrete Pavements .....	86
12	Hot-Mix Asphalt Surface Correction .....	90
13	Pavement and Shoulder Resurfacing .....	92
14	Patching with Hot-Mix Asphalt Overlay Removal .....	93
15	Polymer Concrete .....	95
16	Reserved.....	97
17	Bicycle Racks .....	98
18	Temporary Portable Bridge Traffic Signals .....	100
19	Nighttime Inspection of Roadway Lighting .....	102
20	English Substitution of Metric Bolts .....	103
21	Calcium Chloride Accelerator for Portland Cement Concrete .....	104
22	Quality Control of Concrete Mixtures at the Plant .....	105
23	Quality Control/Quality Assurance of Concrete Mixtures .....	113
24	Reserved .....	129
25	Reserved .....	130
26	Temporary Raised Pavement Markers .....	131
27	Restoring Bridge Approach Pavements Using High-Density Foam .....	132
28	Portland Cement Concrete Inlay or Overlay .....	135
29	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching .....	139
30	Longitudinal Joint and Crack Patching .....	142
31	Concrete Mix Design – Department Provided .....	144
32	Station Numbers in Pavements or Overlays .....	145

**TABLE OF CONTENTS**

LOCATION OF PROJECT..... 1  
DESCRIPTION OF PROJECT..... 1  
COMPLETION DATE..... 1  
TRAFFIC CONTROL PLAN..... 2  
¼" X ¼" STAINLESS STEEL MESH ..... 3  
ANCHOR BOLT REPAIRS ..... 3  
APPRENTICE ELECTRICIAN ..... 3  
ASSIGNMENT OF WORK..... 4  
BORROW AREAS, USE AREAS, AND/OR WASTE AREAS ..... 4  
CLOSED CIRCUIT TELEVISION COME CAMERA, HD ..... 4  
CONFINED SPACE ENTRY ..... 9  
CONTRACTOR'S REPRESENTATIVE ..... 9  
CONTRACTOR REQUIREMENTS ..... 10  
CONTRACTOR RESPONSIBILITY..... 10  
CONTROL OF WORK ..... 11  
DETECTOR LOOP LEAD-IN CABLE IN CONDUIT, CONOGA-30003..... 11  
DETECTOR LOOP, TYPE I..... 11  
IDOT INSTALLATION INSTRUCTIONS FOR THE ROADTRAX BL TRAFFIC SENSORS (OR APPROVED EQUIVALENT) ..... 14  
ELECTRONIC MAIL AND FACSIMILE MACHINE..... 15  
EXPENSES..... 15  
FLASHING BEACON ASSEMBLY ..... 16  
JOURNEYMAN ELECTRICIAN ..... 16  
KNOCKDOWN DOCUMENTATION..... 16  
LABOR (LABORER) ..... 17  
LABOR, TOOLS, AND EQUIPMENT..... 17  
LED CONVERSION COST INCENTIVE ..... 19  
NUMBERING SYSTEM..... 19  
PARTS AND MATERIALS..... 19  
PAYMENT TERMS AND CONDITIONS ..... 20  
PENALTY DURING PEAK HOURS..... 20  
PIEZO AXLE SENSORS, CLASS-II ..... 20  
POSSIBLE SOURCES FOR ITEMS – PERMANENT ATR ..... 21  
PROSECUTION OF WORK ..... 22  
QUANTITIES..... 22

VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

RESPONSE TIMES .....23

RESPONSE TIME, FAILURE TO MEET.....23

ROUTINE WORK ITEMS .....24

SCHEDULE OF WORK.....32

SMALL TOOLS .....32

SOLAR POWER SYSTEM .....32

STATUS OF UTILITIES TO BE ADJUSTED .....33

SUPERVISION OF WORK FORCE .....33

TAX .....33

TERMINATION FOR CAUSE .....33

TERMINATION FOR CONVENIENCE .....34

TEST EQUIPMENT .....34

TRAFFIC COUNTER – TIRTL .....34

TRAFFIC SIGNS .....37

TRAVEL EXPENSE .....37

TRENCH AND BACKFILL FOR ELECTRICAL WORK .....37

UNDERGROUND FACILITIES .....39

WAIVER OF LIEN.....39

WARRANTIES FOR SUPPLIES AND SERVICES .....40

WORK DURING PEAK HOURS .....40

WORK ORDERS .....40

WORK ORDER, ELECTRICAL MAINTENANCE.....42

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE) .....43

BLENDED FINELY DIVIDED MINERALS (BDE).....44

COMPENSABLE DELAY COSTS (BDE).....44

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE).....47

ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE).....56

SPEED DISPLAY TRAILER (BDE) .....56

STEEL COST ADJUSTMENT (BDE).....57

SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE).....59

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE).....60

SUBMISSION OF PAYROLL RECORDS (BDE) .....60

TRAFFIC SPOTTERS (BDE).....61

VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE).....63

WEEKLY DBE TRUCKING REPORTS (BDE).....63

WORK ZONE TRAFFIC CONTROL DEVICES (BDE) .....63

**STATE OF ILLINOIS**

---

**SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2022", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of Various Routes, Section D7 Electrical Repairs 2023-1, Various Counties, Contract No. 74C18, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Various Routes  
Section D7 Electrical Repairs 2023-1  
Various Counties  
Contract No. 74C18

**LOCATION OF PROJECT**

The work to be done under this contract will be performed in the counties of Macon, Moultrie, Shelby, Fayette, Coles, Cumberland, Clark, Effingham, Jasper, Crawford, Clay, Richland, Lawrence, Wayne, Edwards, and Wabash Counties in their entirety.

**DESCRIPTION OF PROJECT**

The work on this project consists of maintaining the electrical highway lighting and warning systems, intelligent transportation system devices, and fiber optic cable along state-maintained right-of-way. The Contractor shall provide all material, equipment, and labor necessary to perform the electrical needs that are requested at the locations described in a Work Order from the Department of Transportation.

**COMPLETION DATE**

All work on this contract shall be completed on or before June 30, 2024. Should the Contractor fail to complete all work by June 30, 2024, the Contractor shall be liable in accordance with Article 108.09 of the Standard Specifications.

**TRAFFIC CONTROL PLAN**

This work shall include furnishing, installing, maintaining, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic during Contractor operations.

Traffic control shall be in accordance with the applicable sections of the current Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and highway standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 and Section 701 of the Standard Specifications for Road and Bridge Construction and the following highway standards relating to traffic control and the listed Supplemental Specifications and Recurring Special Provisions.

Highway Standards

701001	701006	701011	701101	701106	701201	701206	701301	701400
701401	701406	701411	701421	701426	701427	701428	701456	701501
701502	701601	701602	701606	701611	701701	701801	701901	

Conformance to these traffic control and protection standards and this Traffic Control Plan special provision will not be paid for separately but rather the cost shall be considered included in the various contract items.

It is the intention of the Department that the various routes be kept open to traffic at all times during the construction of this section. A single lane closure will be permitted in the immediate work areas during construction. At all other times, no lane closures are allowed.

The Contractor shall utilize the proper traffic control and protection procedures required by the applicable highway standards listed above, to properly protect its workmen and the motoring public, when work is being performed on or near the roadway

The traffic control standard recommended is based on the Department's estimate of the nature of work, duration, and equipment required to perform the repairs.

**Any deviation must remain in compliance with the Standard Specifications for Road and Bridge Construction, Standard Specifications for Traffic Control Items and the Manual of Uniform Traffic Control Devices, most recent edition, and prior approval by the Department is required.**



**1/4" X 1/4" STAINLESS STEEL MESH**

This work shall consist of cleaning and painting the exposed anchor bolts, if necessary, and installing stainless steel screen wire to enclose the void between the sign support base plates and the foundation.

The exposed part of the anchor bolts shall be cleaned and painted with one coat of primer. The primer shall meet the requirements of Section 4 and 5 of SSPC-PS25 for red iron oxide, zinc oxide, raw linseed oil, and alkyd primer.

The stainless-steel mesh shall meet the requirements of Section 733. The steel mesh shall be installed between the base plate and the foundation and tightly against the bolts or as directed by the Engineer. The Contractor shall take exceptional care in ensuring that there is no gap left open for rodents to get through.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE FEET for 1/4" X 1/4" STAINLESS STEEL MESH, which price shall include cleaning and painting the exposed anchor bolts, installing the stainless steel mesh under each sign support base plate, and providing necessary traffic control.

**ANCHOR BOLT REPAIRS**

Repairs to broken anchor bolts shall be made using rod couplings. The concrete around the broken anchor bolt shall be core drilled and removed to the depth necessary to accommodate the rod coupling. After the coupling is installed, the foundation shall be repaired with a cement grout mixture according to Section 1024 of the Standard Specifications and as approved by the Engineer. Anchor bolts shall not be welded.

**APPRENTICE ELECTRICIAN**

Apprentice electricians utilized as part of this contract must follow the criteria listed below:

1. All apprentice electricians shall work within the guidelines of the Apprentice Program.
2. Apprentice electricians may only be utilized for routine maintenance tasks including, but not limited to, traffic camera lens cleaning, filter cleaning and/or replacement, light post inspection and repair, and other various duties associated with routine maintenance.
3. Apprentice electricians will be allowed to respond to emergency calls to assist a journeyman electrician when needed.
4. Apprentice electricians must be directly supervised at all times by a qualified vendor representative.
5. The Department reserves the right to limit the number of apprentices used in execution of this contract.
6. The Department reserves the right to restrict work performed for this contract by apprentice electricians.

This work shall consist of an apprentice electrician's labor, tools, equipment, and other incidentals necessary or convenient to the successful completion of work orders and the carrying out of all duties and obligations imposed by the contract unless already provided by the journeyman electrician.

Labor will be measured to the nearest 0.25 hour for each apprentice electrician approved for use on the applicable work order. Labor rates for apprentice electrician shall be inclusive of (but not limited to) all regular and premium time, insurance, benefits, overhead, and profit.

This work will be paid for at the contract unit price per HOUR for APPRENTICE ELECTRICIAN.

### **ASSIGNMENT OF WORK**

Nothing in this contract shall be construed to provide the Contractor the exclusive right to service the Department's electrical facilities in District 7. The Department reserves the right to perform any and all work on these electrical devices with its own forces or to assign another Contractor to work within District 7.

### **BORROW AREAS, USE AREAS, AND/OR WASTE AREAS**

In addition to the provisions contained in Article 107.22 of the Standard Specifications, the Contractor shall submit all required documents to the District electronically. All photos shall be in color.

### **CLOSED CIRCUIT TELEVISION COME CAMERA, HD**

Description. This work shall consist of furnishing and installing an integrated closed-circuit television (CCTV-HD) dome camera assembly, camera brackets, and all other items required for installation and operation. This assembly shall contain all components identified in the Materials Section and shall be configured as indicated by the Engineer.

Materials. **The CCTV-HD camera shall be an Axis Model Q6075-E or an approved equal dome camera assembly for integration into the existing District 7 ITS system.**

The Contractor shall provide all materials required to install the proposed camera on the proposed sign structure camera mast as directed by the Engineer. The Contractor shall submit catalog cut sheets to the Department for all items (mounting brackets, hardware, etc.) that will be utilized for review prior to commencing work.

The Department will program the cameras. The camera shall meet or exceed the following specifications:

CAMERA

VIDEO: 60 Hz (NTSC), 50 Hz (PAL)  
IMAGE SENSOR: 1/2.8" progressive scan CMOS  
LENS: 4.44–142.6 mm, F1.6–4.41  
Horizontal angle of view: 62.8°–2.23°  
Vertical angle of view: 36.8°–1.3°  
Autofocus, auto-iris  
DAY AND NIGHT: Automatically removable infrared-cut filter  
MINIMUM ILLUMINATION: Color: 0.3 lux at 30 IRE F1.6  
B/W: 0.03 lux at 30 IRE F1.6  
Color: 0.5 lux at 50 IRE F1.6  
B/W: 0.04 lux at 50 IRE F1.6  
SHUTTER TIME: NTSC: 1/33000 s to 1/3 s with 50 Hz  
1/33000 s to 1/4 s with 60 Hz  
PAN/TILT/ZOOM: Pan: 360° endless, 0.05° - 450°/s  
Tilt: 220°, 0.05°-450°/s  
32x optical zoom and 12x digital zoom, total 384x zoom E-flip, 256 preset positions, tour recording, guard tour, control queue, on-screen directional indicator, set new pan 0°, and adjustable zoom speed

VIDEO

VIDEO COMPRESSION: H.264 (MPEG-4 Part 10/AVC), Motion JPEG  
RESOLUTIONS: HDTV 1080p 1920x1080 to 320x180  
HDTV 720p 1280x720 to 320x180  
FRAME RATE (H.264): Up to 60/50 fps (60/50 Hz) in HDTV 720p  
Up to 30/25 fps (60/50 Hz) in HDTV 1080p  
VIDEO STREAMING: Multiple, individually configurable streams in H.264 and Motion JPEG, Axis' Zipstream technology, controllable frame rate and bandwidth, VBR/MBR H.264  
IMAGE SETTING: Manual shutter time, compression, color, brightness, sharpness, white balance, exposure control, exposure zones, fine tuning of behavior at low light, rotation: 0°, 180°, text and image overlay, 32 individual 3D privacy masks, image freeze on PTZ, automatic defog, and backlight compensation  
Wide Dynamic Range (WDR): up to 120 dB depending on scene and highlight compensation

NETWORK

SECURITY: Password protection, IP address filtering, HTTPSa encryption, IEEE 802.1Xa network access control, digest authentication, user access log, and centralized certificate management

PROTOCOLS: IPv4/v6, HTTP, HTTPSa, SSL/TLSa, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, and NTCIP

SYSTEM INTEGRATION

APPLICATION PROG INTERFACE: Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at [www.axis.com](http://www.axis.com), AXIS Video Hosting System (AVHS) with one-click connection, ONVIF Profile S, and specification at [www.onvif.org](http://www.onvif.org)

ANALYTICS: Video motion detection, autotracking, active gatekeeper Basic Analytics (not to be compared with third-party analytics): object removed, enter/exit detector, fence detector, object counter, highlight compensation, support for AXIS camera application platform enabling installation of third-party applications, see [www.axis.com/acap](http://www.axis.com/acap)

EVENT TRIGGERS: Detectors: live stream accessed, video motion detection, shock detection, object removed, enter/exit detector, fence detector, object counter; hardware: fan, network, temperature, casing open; PTZ: autotracking, error, moving, ready, preset reached; storage: disruption, recording; system: system ready; time: recurrence, use schedule; input signal: manual trigger, virtual input

EVENT ACTIONS: Day/night mode, overlay text, video recording to edge storage, pre- and post-alarm video buffering, send SNMP trap  
PTZ: PTZ preset, start/stop guard tour,  
File Upload via FTP, SFTP, HTTP, HTTPS network share and email; and notification via email, HTTP, HTTPS and TCP

DATA STREAMING Event data  
BUILT IN INSTALLATION Pixel Counter  
AIDS

GENERAL

CASING:	IP66-, NEMA 4X- and IK10-rated Metal casing (aluminum), polycarbonate (PC) clear dome, sunshield (PC/ASA)
SUSTAINABILITY:	PVC free
MEMORY:	512 MB RAM, 128 MB Flash
POWER CAMERA:	Axis High PoE midspan 1-port: 100–240 V AC, max 74 W Camera consumption: typical 16 W, max 60 W
CONNECTORS:	RJ45 10BASE-T/100BASE-TX PoE, RJ45 push-pull connector (IP66) included
EDGE STORAGE:	Support for SD/SDHC/SDXC card Support for recording to dedicated network-attached storage (NAS); For SD card and NAS recommendations see <a href="http://www.axis.com">www.axis.com</a>
OPERATING CONDITIONS:	With 30 W midspan: -20 °C to 50 °C (-4 °F to 122 °F) With 60 W midspan: -50 °C to 50 °C (-58 °F to 122 °F) Maximum temperature (intermittent): 60 °C (140 °F) Arctic Temperature Control: Start-up as low as -40 °C (-40 °F) Humidity 10–100% RH (condensing)
APPROVALS:	EMC: EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, EN 55024, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 22 Class A, KCC KN32 Class A, KN35 Safety: IEC/EN/UL 60950-1, IEC/EN/UL 60950-22 Environment: EN 50121-4, IEC 62236-4, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60721-4-3, NEMA 250 Type 4X, IEC 60068-2-30, IEC 60068-2-60, IEC 60068-2-78, IEC/EN 60529 IP66, NEMA TS-2-2003 v02.06, Subsection 2.2.7, 2.2.8, 2.2.9; IEC 62262 IK10, ISO 4892-2 Midspan: EN 60950-1, GS, UL, cUL, CE, FCC, VCCI, CB, KCC,UL-AR
WEIGHT: INCLUDED	3.7 kg (8.2 lb.) Axis High PoE 60 W midspan 1-port, RJ45 push-pull connector
ACCESSORIES:	(IP66), sunshield, installation guide, windows decoder 1-user license
VIDEO MANAGEMENT: SOFTWARE:	AXIS Camera Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available on <a href="http://www.axis.com/techsup/software">www.axis.com/techsup/software</a>
WARRANTY:	Axis 3-year warranty and AXIS extended warranty option

Environmental Enclosure/Housing: The environmental enclosure shall be designed to physically protect the integrated camera from the outdoor environment and moisture via a sealed enclosure. If the option exists in the standard product line of the manufacturer, the assembly shall be supplied with an integral sun shield. The enclosure shall be fully water and weather resistant with a NEMA 4 rating or better.

The camera dome shall be constructed of distortion free acrylic or approved equivalent material that must not degrade from environmental conditions. The environmental housing shall include a camera mounting bracket. In addition, the environmental housing shall include a heater, blower, and power surge protector. An integral fitting compatible with a standard 1-1/2 in NPT pipe, suitable for outdoor pendant mounting shall also be provided.

The enclosure shall be equipped with a heater controlled by a thermostat. The heater shall turn on when the temperature within the enclosure falls below 40° F. The heater shall turn off when the temperature exceeds 60°F. The heater will minimize internal fogging of the dome faceplate when the assembly is operated in cold weather.

In addition, a fan shall be provided as part of the enclosure. The fan will provide airflow to ensure effective heating and to minimize condensation.

The enclosure shall be equipped with a hermetically sealed, weatherproof connector located near the top for external interface with power, video, and control feeds.

CCTV Dome Camera Mounting Supports: The Contractor shall furnish and install an Axis Pole Mount Bracket T91L61 (Part Number 5801-721) or an approved equal for camera installation on traffic signal mast arms and CCTV camera poles as well as stainless steel banding as required.

Mounting supports shall be configured as shown on the camera support detail plans and as approved by the Engineer. Mount shall be of aluminum construction with enamel or polyester powder coat finish. Braces, supports, and hardware shall be stainless steel. Wind load rating shall be designed for sustained gusts up to 90 mph with a 30% gust factor. Load rating shall be designed to support up to 75 lb (334 N). For roof or structural post/light pole mounting, mount shall have the ability to swivel inward for servicing. The mounting flange shall use standard 1-1/2 inch (38.1 mm) NPT pipe thread.

Connecting Cables: The Contractor shall furnish and install outdoor rated, shielded CAT 5E cable. The cable shall be terminated using the IP66 rated RJ-45 connector on the camera end and a shielded RJ-45 connector in the cabinet. The Contractor shall test the cable prior and after termination.

Construction Requirements:

General: The Contractor shall prepare a shop drawing detailing the complete CCTV dome camera assembly and installation of all components to be supplied for approval of the Engineer. Particular emphasis shall be given to the cabling and the interconnection of all of the components.

The Contractor shall install the CCTV dome camera assembly at the locations indicated in the plans. The CCTV dome camera assembly shall be mounted on a pole, wall, or other structure.

Testing: The Contractor shall test each installed CCTV dome camera assembly. The test shall be conducted from the field cabinet using the standard communication protocol and a laptop computer. The Contractor shall verify that the camera can be fully exercised and moved through the entire limits of pan, tilt, zoom, focus and iris adjustments using both the manual control and presets. The Contractor shall maintain a log of all testing and the results. A representative of the Contractor and a representative of the Engineer shall sign the log as witnessing the results. Records of all tests shall be submitted to the Engineer prior to accepting the installation.

Method of Measurement: The CCTV dome camera bid item will be measured for payment by the actual number of CCTV dome camera assemblies furnished, installed, tested, and accepted.

Basis of Payment: Payment will be made at the contract unit price per EACH for CLOSED CIRCUIT TELEVISION DOME CAMERA, HD including all equipment, material, testing, documentation, and labor detailed in the contract documents for this bid item.

## **CONFINED SPACE ENTRY**

The enclosed areas of bridge structures and pylons are considered to be confined spaces. The Contractor shall comply with all OSHA requirements relative to confined space entry. An oxygen deficient, toxic, explosive, or flammable atmosphere may exist within this confined space. Atmosphere testing shall be conducted prior to entry and continuously while employees are working within a confined space. The Contractor shall inform the Department of who will serve as the rescue responder in an emergency and what system will be used to notify the responder that an emergency exists.

## **CONTRACTOR'S REPRESENTATIVE**

The Contractor shall designate a service representative to serve as the key contact person for the Department in the execution of this contract. The service representative shall monitor the daily activities of the contract and be available to discuss and respond to any problems that may arise. The services of this person shall be included in the contract, and no additional compensation shall be allowed.

## **CONTRACTOR REQUIREMENTS**

The Contractor shall be available to respond to calls for service at all times, including Saturdays, Sundays and holidays, to correct any malfunction of equipment or make any temporary emergency repair to damaged equipment resulting from any cause.

The Contractor shall designate at least two responsible representatives of its organization of whom the Department may issue work orders and instructions. The Contractor shall provide necessary information (names and telephone numbers) of these representatives. One of these representatives shall be available at all times.

The Contractor must occupy an office and be engaged primarily in the provision of electrical services. The business or employees of this business should be located no more than a three hour drive time from the site where services are to be rendered. Response time to an emergency call shall be no more than three and one half hours. Response time begins with the receipt of the call from the Department.

When the Contractor dispatches only one person to perform the work, that person will be an International Brotherhood of Electrical Workers journeyman, tradesman, or equivalent. When the job requires more than one person, an apprentice or aid may accompany the journeyman.

The Contractor shall report the existence of any defective equipment, controls, and/or accessories which may require replacement or repairing. This information shall be given to the Department representative and shall include the location of the defective item and the impact on the project.

The Contractor will be required to perform the specified work with his/her own workforce. Subcontracting of work will not be allowed without prior approval from the Department. The Contractor must provide justification for subcontracting work when requesting approval. In the event subcontracting of work is approved, the Contractor will submit actual invoices and receipts or bills from the subcontractor documenting the cost for labor, materials, supplies, and components.

## **CONTRACTOR RESPONSIBILITY**

When repairing a damaged highway lighting standard, the Contractor shall reinstall any existing pole identification signs which were attached to the standard. If these signs were damaged to the extent that they cannot be reused, the Contractor shall immediately notify the Department so that a replacement sign can be installed. This requirement shall be considered included with this contract, and no additional compensation shall be allowed.

The Contractor shall be solely responsible for any damage to existing structures or to the right-of-way resulting from the operation of his or her equipment or employees while making repairs. The Contractor shall at his/her own expense restore any damage to a condition equal to that of existing before the damage was done as directed by the Engineer.



## CONTROL OF WORK

The Department will conduct frequent inspections of the respective systems and installations to determine if the servicing is being performed by the Contractor promptly, satisfactorily, and in the manner specified in the contract.

## DETECTOR LOOP LEAD-IN CABLE IN CONDUIT, CONOGA-30003

Description: This work consists of furnishing and installing loop detector lead-in cables or interconnect cables of the number of pairs specified in the conduit in accordance with the requirements of Section 886 in the Standard Specifications and the following exceptions or additions:

Materials: The traffic count detector loop lead-in cable shall be Canoga 30003 or an approved equivalent.

Installation: Each end of the cable shall be identified with wire markers as directed by the Engineer.

The drain wire of each pair shall be grounded to chassis ground in the cabinet only for interference suppression.

The electrical values of the cable shall be metered by the Contractor in the presence of the Engineer after they are spliced to the detector loop. Acceptance of the cable as metered shall be determined by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT for ELECTRIC CABLE IN CONDUIT, CONOGA-30003.

## DETECTOR LOOP, TYPE I

Description: This item shall consist of furnishing, installing, and testing 6' X 8' rectangular detector loops at the locations shown on the plans. The detector loops shall be installed in accordance with all details shown on the plans and applicable portions of Section 886 of the Standard Specifications. All saw cutting, detector loop installation, joint sealing, lead-ins, and testing necessary to complete the installation shall conform to the following requirements:

Materials: The cable used for the detector loop shall be #14-7 strand XHHW XLP-600V, encased in orange Detecta-duct tubing manufactured by Kris-Tech Wire Company, Inc or an approved equivalent. All loop wire shall be UL listed. Lead-ins shall be Conoga-30003 cable or an approved equivalent from the handhole to the cabinet. The jacket shall be made of high-density polyethylene.

At ambient air temperatures above 50° F, joint sealer having a minimum tensile strength of 100 P.I.E. when tested. ASTM Method D638-58T shall be used. The sealer shall have sufficient strength and resiliency to withstand stresses caused by vibrations and pavement expansion and

contraction due to temperature changes. Adhesion of the sealer to Portland cement concrete shall be at least equal to the tensile strength of the concrete. The joint sealer shall have a maximum cure time of 30 minutes. Curing shall be defined as the capability of withstanding normal traffic loads without degradation. The sealer shall meet or exceed the specifications of OZ GEDNEY DOZSeal 230 filling compound.

If the ambient air temperature is below 50° F, a hard asphalt-base filling and insulating compound having a high softening point and a high pouring temperature shall be used. The filling compound shall have a softening point of not less than 235° F, a summer pouring temperature of 375° F, and a winter pouring temperature of 425° F.

Installation Details: The Engineer shall be contacted regarding proposed changes in loop locations necessitated by badly deteriorated pavement. The Engineer may relocate such loops. Detector loops may not be installed before permanent striping is completed on a newly resurfaced section of road.

Slots in the pavement shall be cut with a concrete sawing machine in accordance with the applicable portions of Section 420.05 of the Standard Specifications. The slot must be clean, dry, and oil-free. Wire shall be inserted in the pavement slot with a blunt tool which will not damage the insulation. Loops shall not be dry cut. Loops shall not be installed in outside temperatures below 50° F, unless directed by Engineer.

All excess joint sealer shall be removed so that the level of the sealer in the sawcut is at the same level as the adjoining pavement.

Plastic sleeving shall be used to insulate the wire where loop wire crosses cracks and joints in the pavement. The sleeving shall be properly sealed with electrical tape to prevent joint sealer from entering the sleeves. Sleeving shall extend a minimum of 8 inches on each side of the joint.

Detector loops shall be centered in all traffic lanes unless designated otherwise on the plans or by the Engineer. Traffic lanes shall be referred to by number, and loop wire shall be color-coded and labeled accordingly. Lane #1 shall be the southbound (westernmost) or westbound (northernmost) outside lane. Subsequent lanes are to be coded sequentially towards the opposite outside shoulder. A chart which shows the coding for each installation shall be included in each cabinet. Core holes will not be allowed at corners of loops. Saw cuts for all detector loops and lead-ins shall not be greater than 2 3/4 inches in depth.

All detector loops shall contain four turns of #14 wire. Detector loops shall not be connected in series with other loops. Each detector loop shall have its own lead-in cable to the cabinet when said detector loop is over 150 feet from the cabinet. The loop lead-in shall be a Canoga 30003 cable or approved equivalent. Loop and lead-in wires shall be free from kinks or any insulation abrasions. Lead-ins shall be twisted in such a manner so as to prevent mechanical movement between the individual cables. Lead-in cable shall be brought into a cabinet or handhole at the time the detector loop is placed in the pavement.

Where lead-in runs are less than 150 feet, the loop wire shall be utilized as lead-in to the point of termination without splices, being twisted five turns per foot. The loop wire will be paid for as lead-in from the handhole to the point of termination in the cabinet.

Loop lead-ins placed in handholes shall be coiled, taped, and secured to the upper portion of the handhole to protect against water damage. The excess coiled wire should not exceed 6' in length.

Any other method of installation will require prior written approval of the Engineer. Each loop lead-in shall be color coded and tagged at each angled drilled hole, handhole, and junction box through which it passes and at the termination point in the cabinet.

An angled hole shall be drilled at least 12 inches in from the edge of pavement through which the 1 1/4-inch PVC conduit containing the loop lead-in cable shall be installed. See plan detail.

The loop shall be spliced to the lead-in wire with a barrel sleeve, crimped and soldered. Adhesive-lined heat shrink tubing shall be used to provide waterproof protection for the splice. The soldered connection shall be made with a soldering iron or soldering gun. No other method will be acceptable, i.e. the use of a torch to solder. The heat shrink tubing shall be shrunk with a heat gun. No other method will be acceptable, i.e. the use of a torch. No burrs shall be left on the wire when soldering is finished. Cold solder joints will not be acceptable.

The traffic count detector loop color code shall be as follows:

LOOP #1	GRAY
LOOP #2	ORANGE
LOOP #3	PURPLE
LOOP #4	BLUE
LOOP #5	GREEN
LOOP #6	YELLOW
LOOP #7	BROWN
LOOP #8	WHITE

At locations where there are more than eight loops, loops number nine through number sixteen shall repeat the same color code, but all loops shall additionally be marked to identify the lane.

In addition to color codes, each loop shall be identified with a written label attached to the loop wire or lead-in wire. The tags shall be Panduit #MP250W175-C or approved equivalent. All wires and cables shall be identified in each handhole or cabinet that the cable passes through or terminates in. The labels shall be attached to the cable by the use of two cable ties.

Protection of Work: Electrical work, equipment, and appurtenances shall be protected from damage during construction until final acceptance. Electrical duct openings shall be capped or sealed to prevent the entrance of water and dirt. Wiring shall be protected from mechanical injury.

Standards of Installation: Electrical work shall be completed in a neat and workmanlike manner in accordance with the best practices of the trade. Unless otherwise indicated, materials and equipment shall be new and installed in accordance with the manufacturer's recommendations.

Except as specified elsewhere herein, materials and equipment shall be in conformance with the requirements of Section 106 of the Standard Specifications.

Testing: Detector loops shall be tested immediately upon installation at each automated traffic recording station and again at the time of the final acceptance inspection in the presence of the Engineer. Items which fail to test satisfactorily shall be repaired or replaced before final acceptance.

An electronic test instrument capable of measuring large values of electrical resistance, such as a megger, shall be used to measure the resistance of the detector loop and its lead-in. The

resistance of the loop and its lead-in shall be a minimum of 100 megohms above ground under any conditions of weather or moisture. The resistance tests and all electronic tests shall be performed in the presence of the Engineer for any number of times as specified by the Engineer. The loop and loop lead-in shall have an inductance between 100 microhenries and 350 microhenries. The continuity test of the loop and loop lead-in shall not indicate a resistance greater than 2 ohms. The Contractor shall conduct all testing in the presence of the Engineer, and all readings will be recorded by the Engineer. Testing shall be done with an approved loop tester.

Method of Measurement: The detector loop measurement shall be the length of sawcut in the pavement which contains loop wire. The actual length of wire used in the sawcut shall not be considered in any measurement.

Basis of Payment: This item will be paid at the contract unit price per FOOT for DETECTOR LOOP, TYPE I.

## **IDOT INSTALLATION INSTRUCTIONS FOR THE ROADTRAX BL TRAFFIC SENSORS (OR APPROVED EQUIVALENT)**

### Equipment Required

The sensors should be supplied with sufficient lengths of lead-in cable to avoid splicing. NO SPLICES are allowed in the cable. The lead-in cable length should not exceed 300 feet without consulting the manufacturer. Installation brackets are included when the sensors are shipped from the manufacturer. If splicing is required, only similar grades of RG-58 cable should be used. Splices must be soldered, and an approved splice kit used to waterproof the splice.

Personnel from the Illinois Department of Transportation Data Management Lab must be present to supervise installation of the axle sensors.

The following tools and accessories are required for sensor installation:

- A heavy duty (at least 35 horsepower) self-propelled concrete cutting saw equipped with a 3/4" diamond blade. If a blade of this width is not available, multiple blades can be used to form a dado.
- A water supply for blade cooling and slot washing.
- A 1/2-inch electric or air hammer drill, 1/2-inch masonry bit, hand sledgehammer, and 1 inch chisel.
- Air compressor with hose and nozzle for cleaning and drying the slot and to power any air tools used.
- Straight edge, chalk line, minimum 1/8" diameter cord or rope for laying out the lines, upside-down pavement fluorescent spray paint, wax crayon, measuring tape to mark locations of saw cuts to be made for sensor(s), and lead-in wire.
- One half inch variable speed drill and industrial grade mixing paddles (one for mixing sensor grout & hardener and one for mixing loop sealant & hardener). Do not cross contaminate sensor grout and loop sealant by using the same mixing paddles.
- Wire strippers, knife type blade strippers, pliers and diagonal cutters.
- Disk grinder or heavy-duty sander to remove high spots of epoxy after installation and curing.

- Wire brush to remove any remaining debris from the sawed slot and to rough up the sides of the slot after the saw cuts are completed.
- Broom to keep work area clear of debris.
- Clean rags and isopropyl alcohol to clean and prime concrete surface of the sawed slots.
- Plumbers putty or duct seal to form dams at the end of the sensor slot to contain the resin (grout).
- PU 200 Resin (or approved equal) for encapsulating the sensors (one can for every six feet of sensor)
- Two-part cold mix loop sealant for encapsulating the loop and lead wire(s). Hot tar is not acceptable.
- Duct tape (2" minimum width) to protect the pavement edge from excess resin end loop sealant along edges of sawed slots during installation of sensors and lead wire.
- Putty knives (3" to 4") to remove excess epoxy or work epoxy around sensor and small point trowel for putting resin (grout) into the slot if necessary.
- The Contractor must provide a generator suitable for any power tools since AC power is not available at most traffic count stations.
- One-hundred-foot fish tape.
- Heavy duty extension cord.
- Chemical proof rubber work gloves, heavy duty work gloves, dust filter mask, and goggles & safety glasses for eye protection.
- Trenching equipment as required to bury conduit.
- Cleaning materials for hands and equipment.
- All necessary instructions.
- All necessary safety data (MSDS, etc)

## **ELECTRONIC MAIL AND FACSIMILE MACHINE**

The Contractor shall have electronic mail receiving and sending capabilities and a facsimile (fax) machine available. The Department will utilize these communication mediums to reduce errors in communications, to send/receive work orders, receive daily contract work activity sheets, various drawings, and estimate sheets as needed. This requirement shall be included in the contract, and no additional compensation shall be allowed.

## **EXPENSES**

Unless otherwise agreed upon and stated herein, this Contract does not allow for reimbursement of any expense incurred by the Contractor including, but not limited to, telephone or other communications devices, postage, copying, travel, transportation, lodging, food, and per diem.

### **FLASHING BEACON ASSEMBLY**

This item shall consist of furnishing and installing a one section, bracket mounted flashing beacon assembly and LED signal head as specified in the work order in accordance to the applicable portions of Section 880 and Section 1078 of the Standard Specifications. The flashing beacon assembly item will be measured for payment by the number of flashing beacon assemblies furnished, installed, activated, tested, and accepted.

This work will be paid for at the contract unit price per EACH for FLASHING BEACON ASSEMBLY of the type specified.

### **JOURNEYMAN ELECTRICIAN**

This work shall consist of a journeyman electrician's labor, tools, equipment, and other incidentals necessary or convenient to the successful completion of work orders and the carrying out of all duties and obligations imposed by the contract. Also, the journeyman electrician shall be required to carry a cellular telephone to facilitate communications with work crews and to verify operation conditions of essential Intelligent Transportations System facilities. The Department reserves the rights to use the cellular telephone to contact the journeyman electrician for his or her location and to request a report on the status of a work order.

This work will be measured to the nearest 0.25 hour for each journeyman electrician approved for use on the applicable work order. Labor rates for journeyman electrician shall be inclusive of (but not limited to) all regular and premium time, insurance, benefits, overhead, and profit.

This work will be paid for at the contract unit price per HOUR for JOURNEYMAN ELECTRICIAN.

### **KNOCKDOWN DOCUMENTATION**

The Contractor shall provide the Department with photographs of all onsite knockdown debris to document the damage for third party claims. The photographs shall be digital images and should have the number of views necessary to properly detail the motorist causing damage. Three or more photographs are required for adequate documentation. Identifying information should be included in the photographs as much as possible.

This requirement shall be considered included with this contract, and no additional compensation shall be allowed.

## **LABOR (LABORER)**

This unit shall be eligible for payment only when labor is performed onsite by a laborer at the appropriate work location. Labor will be measured to the nearest 0.25 hour for each person other than journeyman electrician or apprentice electrician (normally a laborer) approved for use on the applicable work order for items other than routine work items. Labor rates shall be inclusive of (but not limited to) all regular and premium time, insurance, benefits, overhead, and profit.

The laborer shall furnish all labor, tools, equipment, and other incidentals necessary or convenient to the successful completion of work orders and the carrying out of all duties and obligations imposed by the contract. Also, the laborer shall be required to carry a cellular telephone to facilitate communications with work crews. The Department reserves the rights to use the cellular telephone to contact the laborer for his or her location and to request a report on the status of a work order.

If the Department authorizes the Contractor to utilize labor that does not have a contract unit price and is not considered incidental to the contract, payment shall be made in accordance with Article 109.04(b) of the Standard Specifications.

This work for a laborer will be paid for at the contract unit price per HOUR for LABOR.

## **LABOR, TOOLS, AND EQUIPMENT**

The Contractor shall furnish all labor, tools, equipment, and other incidentals necessary or convenient to successfully complete the work orders and carry out all duties and obligations imposed by the contract.

All Contractor work crews shall be equipped with a cellular telephone to facilitate communications with work crews and to verify operating conditions of key electrical facilities. Only the crew leader will be required to be equipped with a cellular telephone. The Contractor shall provide the Department with the cellular telephone number being used in the execution of each work order. The Department reserves the rights to use the cellular telephone to contact a Contractor's work crew for their location and to request a report on the status of a work order. No additional compensation for cellular telephone expenses will be allowed.

Only labor onsite at work locations shall be eligible for payment. Labor rates for journeyman electrician, apprentice electrician, and labor (laborer) shall be inclusive of (but not limited to) all regular and premium time, insurance, benefits, overhead, and profit. The Department will specify if the journeyman electrician and/or apprentice electrician pay items will be utilized on each individual work order.

Overtime work during nights, weekends, and holidays will be performed by the Contractor only at the direction of the Department.

The time allowed for the truck pay items included in this contract shall be the actual time the truck is onsite at the work location (while work is underway). Truck rates include (but not limited to) the

VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals.

Arrowboard (trailer mounted) shall meet the requirements of Articles 701.15(i) and 1106.02. The time allowed for arrowboard (trailer mounted) shall be the actual time the arrow board is in use at the work location.

Attenuator, crash (truck mounted) shall meet the requirements of Articles 701.15(h) and 1106.02. The time allowed for the attenuator, crash (trailer mounted) shall be the actual time the attenuator is in use at the work location.

Individual pieces of equipment not listed in the "Equipment Watch Rental Rate Blue Book" and having a replacement value of \$2500.00 or less shall be considered as tools or small equipment, and no payment will be made for their use on this contract.

The Contractor should utilize the appropriate equipment to complete the repair as authorized by the Department. If the Contractor chooses to use equipment that in the opinion of the Department is above and beyond what is required, the Contractor shall be compensated at the appropriate amount as determined by the Department of what was necessary to complete the work order.

Method of Measurement: Labor will be measured to the nearest 0.25 hour for each journeyman electrician, apprentice electrician, or labor (laborer) approved for use on the applicable work order.

Truck usage will be measured to the nearest 0.25 hour for each pick-up truck, bucket truck (length less than 35 feet), or bucket truck (length 35 feet to 65 feet) approved for use on the applicable work order.

Arrow board usage will be measured to the nearest 0.25 hour for each arrowboard (trailer mounted) approved for use on the applicable work order.

Truck mounted attenuator usage will be measured to the nearest 0.25 hour for each attenuator, crash (truck mounted) approved for use on the applicable work order.

Basis of Payment: Labor will be paid for at the contract unit price per HOUR for JOURNEYMAN ELECTRICIAN, APPRENTICE ELECTRICIAN, or LABOR (Laborer).

Truck usage will be paid for at the contract unit price per HOUR for PICK-UP TRUCK, BUCKET TRUCK (LENGTH LESS THAN 35 FEET), or BUCKET TRUCK (LENGTH 35 FEET TO 65 FEET).

Arrowboard usage will be paid for at the contract unit price per HOUR for ARROWBOARD (TRAILER MOUNTED).

Truck mounted attenuator usage will be paid for at the contract unit price per HOUR for ATTENUATOR, CRASH (TRUCK MOUNTED) and shall include the cost of the truck driver.



## **LED CONVERSION COST INCENTIVE**

When work orders are submitted to replace existing HPS luminaires with LED luminaires, there is an eligibility for cost incentives from the energy provider. The Contractor shall contact the electric provider and complete the required paperwork and application for these incentives as part of the contract and submit it to the utility provider. The reimbursement the Contractor receives from the energy provider shall be deducted from the invoice submitted to the Department for that work order. Documentation of the cost incentive reimbursement shall be provided with the invoices submitted to the Department for that work order.

## **NUMBERING SYSTEM**

The Contractor shall maintain the Department's highway lighting numbering systems on all knockdowns. These numbers are to be used on all reports, correspondence, and billing invoices.

## **PARTS AND MATERIALS**

Parts and materials supplied by the Contractor which have a retail value under \$25.00 per unit shall be considered incidental to the contract, and no additional compensation is allowed.

If parts and materials are required to complete a work order and are not already considered incidental within an existing contract pay item, then the Contractor shall receive the actual cost for parts and materials supplied (including transportation charges paid by the Contractor). To this actual cost, a maximum of 15 percent will be added for invoice amounts up to \$2,500, 10 percent for invoice amounts from \$2,500 to \$5,000, and 5 percent for invoice amounts greater than \$5,000. The cost of all parts and materials shall be itemized on the invoice for each work order. The actual billing invoices from the suppliers of items greater than \$25.00 for any single unit must be submitted as documentation of parts and materials costs.

When such parts and materials are furnished by the Contractor, the material shall be of the best grade of its respective kind for the intended purpose. The Contractor is expected to make a good faith effort to purchase the parts and materials supplied by them at the lowest possible price. The transportation of the parts and materials to the location on the work order by the Contractor shall be considered included with the contract, and no additional compensation shall be paid (except for when a special piece of equipment is required to properly transport the items). All materials provided by the Contractor shall be new, unless otherwise stipulated, and in accordance with the standards specified.

The Department may request to the Contractor in writing to order parts and materials not to be installed by the Contractor. These parts and materials will be used by the Department in the repair and/or maintenance completed by the Department work force.

Parts and materials may be furnished by the Department when available and practical, unless otherwise specified by this contract. The transportation of the supplied parts and materials to the location on the work order by the Contractor shall be considered included with the contract, and

no additional compensation shall be paid (except for when a special piece of equipment is required to properly transport the items). The Department, at its discretion, may expedite the repair of an installation and reserves the right to deliver parts, materials, and equipment directly to the Contractor's shop or to the jobsite.

## **PAYMENT TERMS AND CONDITIONS**

By submitting an invoice, the Contractor certifies that the supplies or services provided meet all requirements of the Contract and that the amount billed and expenses incurred are as allowed in the Contract. Invoices for services performed and expenses incurred through June 30 of any year must be submitted to the State no later than July 31 of that year. Otherwise, the Contractor may have to seek payment through the Illinois Court of Claims (30 ILCS 105/25). All invoices are subject to statutory offset (30 ILCS 210).

Payments, including late payment charges, will be paid in accordance with the State "Prompt Payment Act" (30 ILCS 540) and rules (74 Ill. Adm. Code 900) when applicable. Payments delayed at the beginning of the State's fiscal year (July and August payments) because of the appropriation process shall not be considered a breach.

## **PENALTY DURING PEAK HOURS**

If the Contractor fails to have all lanes of traffic open during the peak hour for traffic or conducts operations that will impede the flow of traffic during peak hours, a monetary penalty shall be assessed to the Contractor. The penalty shall be \$500 for each 15-minute period or a portion thereof during peak hours.

## **PIEZO AXLE SENSORS, CLASS-II**

Description: This item consists of installing one class II piezo axle sensor (AMP Model No. 0-1004673-0 BLC Sensor Class II or approved equivalent) in each lane indicated on the plans.

The use of Global Resin Epoxy or an approved equivalent is necessary for proper bonding. A minimum of 30 days cure time for new asphalt is required before the epoxy is used for bonding.

Piezo axle sensors may not be installed before permanent striping is completed on a newly resurfaced section of road. Installation of an automated traffic recorder must be completed no later than 60 days after installation has begun.

Materials: The class II axle sensors, necessary RG58C/U transmission cable, and Global Epoxy or approved equivalent for encapsulating sensors shall be furnished by the Contractor. ROADTRAX BLC Traffic Sensors manufactured by AMP Incorporated or an approved equivalent shall be installed at this location. The axle sensor shall be flexible along its longitudinal axis to allow the sensor to easily conform to the profile of the lane in which it is being installed. Class II axle sensors shall be manufactured with suitable lengths of RG58C/U transmission cable for continuous runs from axle sensor through the handhole to the cabinet. Splicing of transmission

VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

cable to an axle sensor shall not be permitted unless approved in advance and supervised by Mr. Rich Marx of the Illinois Department of Transportation.

Installation: Installation shall be in accordance with the attached instructions. The Engineer should be advised at least three days prior to installation. Contact Mr. Rich Marx of the Illinois Department of Transportation, telephone (217) 782-2065, to arrange a time and date for the installation.

**Personnel from the Illinois Department of Transportation Data Management Lab must be present to supervise installation of the axle sensors.**

Heated loop sealers shall not be used to seal the RG58C/U transmission cable in the pavement sawcut. Sealex or an approved equivalent loop sealant shall be used.

Testing: Piezo axle sensors shall be tested immediately upon installation and again at the time of the final acceptance inspection in the presence of the Engineer. The tests shall be performed utilizing an oscilloscope to ensure acceptable clean signals of proper amplitude and polarity. Sensors that fail to test satisfactorily shall be repaired or replaced before final acceptance.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT for PIEZO AXLE SENSOR, CLASS II, measured along the sawcut in the pavement containing the axle sensor. The lead-in measured from the end of the axle sensor to the dive hole shall be paid for at the contract unit price per FOOT for DECTECTOR LOOP, TYPE 1. The lead-in from the dive hole to the cabinet shall be considered incidental since it is provided with the sensor.

**POSSIBLE SOURCES FOR ITEMS – PERMANENT ATR**

Material	Possible Source	Contact	Telephone Number	Location
Loop Detector wire encased in Orange Detecta-Duct Tubing	Kris-Tech Wire Company	Sales	(315) 339-5288	Rome, NY
Conoga 30003 2-pair shielded wire suitable for direct burial	3M Traffic Products Division	Sales	(612) 733-1110	Minneapolis, MI
RL-200 Polyurethane resin	International Road Dynamics Inc.	Scott Sherwood	(815) 675-1430	Spring Grove, IL
60J Solar Panel	Ameresco Solar	Sales	(855)-437-6527	OakBrook , IL

VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

Class-II Peizo Sensor	Measurement Specialties Inc.	Don Halverson	(610) 650-1580	Valley Forge, PA
Class-II Peizo Sensor	International Road Dynamics	Scott Sherwood	(815) 675-1430	Spring Grove, IL
Sun Xtender Battery 12v 104ah Part # PVX-1040T	Concord Battery Corp.	Sales	(626) 813-1234	West Covina, CA
Sun Xtender Battery 12v 34ah Part # PVX-340T	Concord Battery Corp.	Sales	(626) 813-1234	West Covina, CA
SunSaver 10L solar charger Part # SS-10L-12V	Sunwize Power & Battery	Sales	(800)-817-6527	San Jose, CA
Precast Composite Concrete Handhole	Handhole.com	Sales	(800)-332-8114	Cedar Rapids, IA
Solar Panel Bracket Part # 007985	Sunwize Power & Battery	Sales	(800)-817-6527	San Jose, CA
RV 50 Wireless Modem & Antenna	CDS Office	Ron Clark	(217)-541-3410	Springfield, IL

**PROSECUTION OF WORK**

The Contractor shall begin the contract work either on the date of contract execution or July 1, 2023, whichever is later.

**QUANTITIES**

The quantities specified in this contract indicate the estimated amount of work required for the duration of this contract. This is merely an estimate to allow Contractors to establish unit prices and permit the Department to determine the low bidder. It shall be understood that the unit prices of this contract shall prevail throughout the period of this contract regardless of the quantity.

**RESPONSE TIMES**

The Department will define the expected response times at the time of issuing the work order based on the following:

LEVEL 1 – Emergency Service Calls – Work crew/staff shall be at the location on the work order within 3 hours of notification during normal work hours and within 3 ½ hours of notification after normal work hours. Normal work hours, for the purposes of this contract, shall be hours during which the Contractor is not required to pay overtime labor rates.

LEVEL 2 – Priority Non-Emergency Service Calls – respond within 24 hours of issuance and complete work within 5 days.

LEVEL 3 – Routine Work Items – complete work within 15 days of the date work order was issued.

It shall be the Contractor’s responsibility to promptly notify the Department, if for any reason, the Contractor cannot meet either the response time established at the issuance of the work order or the response times established herein. If the emergency response time exceeds three hours, the Department has the option of contacting another Contractor.

**RESPONSE TIME, FAILURE TO MEET**

Should the Contractor fail to respond and/or complete a work order on time, or such extended time as may have been allowed by the Department, a monetary deduction will be applied to monies due or that may become due to the Contractor. The value of the monetary deduction will be as follows:

For LEVEL 1 (Emergency Service Calls):

Work Order Amount	Monetary Deduction for Each 15 Minutes*
From \$0 to \$500	\$25
From \$501 to \$1000	\$50
From \$1001 and over	\$100

\* After applicable response time expires

For LEVEL 2 (Priority Non-Emergency Service Calls) and LEVEL 3 (Routine Work Items):  
\$75.00 per day per work order

For the purpose of calculating the LEVEL 2 and LEVEL 3 monetary deduction, a day shall be any (or portion of) excluding the following:

- (a) When adverse weather at the field work site prevents work on the controlling item of a work order.
- (b) When job conditions at the field work site due to recent weather conditions prevent work on the controlling item of a work order.

- (c) When work on the controlling item has been suspended by an act or omission by the Department or Engineer.

## **ROUTINE WORK ITEMS**

The following are considered routine work items and are detailed as described in their sections:

- REPAIR HIGHWAY LIGHT POLE KNOCKDOWN
- REPAIR HIGH MAST LIGHT TOWER
- REPAIR FLASHING BEACON KNOCKDOWN
- REPAIR ILLUMINATED SIGN, LED
- REPAIR RADAR SPEED SIGN
- REPAIR DYNAMIC MESSAGE SIGN
- REPAIR CCTV CAMERA
- HIGH MAST LIGHT TOWER INSPECTION
- DYNAMIC MESSAGE SIGN INSPECTION
- REPLACE SERVICE INSTALLATION, COMPLETE
- REPLACE FLASHING BEACON KNOCKDOWN, COMPLETE
- REPLACE ILLUMINATED SIGN, LED KNOCKDOWN, COMPLETE
- REPLACE RADAR SPEED SIGN KNOCKDOWN, COMPLETE
- REPLACE HIGHWAY LIGHT POLE KNOCKDOWN, COMPLETE
- REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLINGS
- REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE
- ILLUMINATED SIGN, LED
- RADAR SPEED SIGN

Repair Highway Light Pole Knockdown: This work shall consist of repairing a highway light pole at a designated intersection or location listed in a work order. The highway light pole could consist of a single or multiple sections.

In addition to the repair, the Contractor shall conduct a thorough inspection of the light pole. This inspection is to certify the proper operation and aiming of the highway light pole and to ensure that fasteners, conduits, clamps, supporting cables, and accessories are intact and in good condition. The Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR HIGHWAY LIGHT POLE KNOCKDOWN. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair High Mast Light Tower: This work shall consist of repairing a high mast light tower at a designated intersection or location listed in a work order.

In addition to the repair, the Contractor shall conduct a thorough inspection of the highway light tower. This inspection is to certify the proper operation and aiming of the highway lighting and to

ensure that fasteners, conduits, clamps, supporting cables, and accessories are intact and in good condition. The Contractor shall examine all pole supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR HIGH MAST LIGHT TOWER. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair Flashing Beacon Knockdown: This work shall consist of repairing a flashing beacon at a designated intersection or location listed in a work order. The flashing beacon could consist of a single or multiple beacon sections.

In addition to the repair, the Contractor shall conduct a thorough inspection of the installation. This inspection is to certify the proper operation and aiming of the beacons and to ensure that fasteners, conduits, clamps, supporting cables and accessories are intact and in good condition. The Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR FLASHING BEACON KNOCKDOWN. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair Illuminated Sign, LED: This work shall consist of repairing an illuminated sign at a designated intersection or location listed in a work order.

In addition to the repair, the Contractor shall conduct a thorough inspection of the illuminated sign. This inspection is to certify the proper operation and aiming of the illuminated sign and to ensure that fasteners, conduits, clamps, supporting cables, and accessories are intact and in good condition. The Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR ILLUMINATED SIGN, LED. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair Radar Speed Sign: This work shall consist of repairing a radar speed sign at a designated intersection or location listed in a work order.

In addition to the repair, the Contractor shall conduct a thorough inspection. This inspection is to certify the proper operation and aiming of the radar speed sign and to ensure that fasteners, conduits, clamps, supporting cables, and accessories are intact and in good condition. The

Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR RADAR SPEED SIGN. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair Dynamic Message Sign: This work shall consist of repairing a dynamic message sign at a designated intersection or location listed in a work order.

In addition to the repair, the Contractor shall conduct a thorough inspection. This inspection is to certify the proper operation and aiming of the dynamic message sign and to ensure that fasteners, conduits, clamps, supporting cables, and accessories are intact and in good condition. The Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR DYNAMIC MESSAGE SIGN. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Repair CCTV Camera: This work shall consist of repairing a CCTV camera at a designated intersection or location listed in a work order.

In addition to the repair, the Contractor shall conduct a thorough inspection of the CCTV camera. This inspection is to certify the proper operation and aiming of the CCTV cameras and to ensure that fasteners, conduits, clamps, supporting cables and accessories are intact and in good condition. The Contractor shall examine all pole or post supports and confirm that they are sound. The service installation shall also be inspected for damaged or deteriorating components.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed.

This work shall be paid for at the contract unit price per EACH for REPAIR CCTV CAMERA. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

High Mast Light Tower Inspection: This work shall consist of inspecting tower lighting at a designated location or listed in a work order.

The Contractor shall lower the lighting ring and fully inspect each tower for: proper operation of the lowering and lifting devices, cable (support, guide, and power) deterioration, lamp illumination, and any other items needing maintenance attention or repair. A maintenance inspection checklist will be provided by the Department. This checklist requires a complete inspection of the tower facility, lubrication of moving parts, and cleaning of the luminaire refractors. A checklist form shall



be completed for each tower inspection, attached to the billing invoice, and returned to the Department.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed. In order to repair any minor deficiencies found, the Contractor shall equip service vehicles with a supply of the following parts: lamps, starter boards, fuses, and ballast kits.

This work will be paid for at the contract unit price per EACH for HIGH MAST LIGHT TOWER INSPECTION. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Dynamic Message Sign Inspection: This work shall consist of inspecting a dynamic message sign at a designated location or listed in a work order.

The Contractor shall fully inspect each dynamic message sign for: proper operation of devices, deterioration, lamp illumination, and any other items needing maintenance attention or repair. A maintenance inspection checklist will be provided by the Department. This checklist requires a complete inspection of the dynamic message sign facility and cleaning of the equipment cabinet. A checklist form shall be completed for each dynamic message sign inspection, attached to the billing invoice, and returned to the Department.

The Contractor shall replace any defective parts found during the inspection and make minor repairs as needed. In order to repair any minor deficiencies found, the Contractor shall equip service vehicles with a supply of the necessary parts to complete the repair.

This work will be paid for at the contract unit price per EACH for DYNAMIC MESSAGE SIGN INSPECTION. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Service Installation, Complete: This work shall consist of the replacement of an electrical service at a location designated in a work order including the removal and disposal of the existing service installation and complete replacement of an existing wood pole in accordance with Section 805 of the Standard Specifications.

This work will be paid for at the contract unit price per EACH for REPLACE SERVICE INSTALLATION, COMPLETE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Flashing Beacon Knockdown, Complete: This work consists of replacing a flashing beacon knockdown at a location designated in a work order.

Flashing beacon knockdowns shall be replaced onsite at the time of the Contractor's initial response if it is possible to reestablish the beacon support at that time. If the beacon was mounted on a wood signpost, the Contractor shall re-erect the flashing beacon temporarily, if possible, and notify the Department that the post needs to be replaced.

All required parts and materials shall be itemized on the Contractor's billing invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

All flashing beacon knockdowns shall be considered emergency service calls. Knockdown replacements shall be completed as soon as possible, regardless of weekends and holidays. The

Contractor shall clear the electrical circuit, remove knockdown debris, and complete the replacement or re-erect the beacon temporarily. If a regulatory sign is knocked down with the beacon, the Contractor shall re-erect the sign. If the sign associated with the flashing beacon is severely damaged or the Contractor is unable to complete the knockdown repair within these guidelines, the Contractor shall notify the Department.

This work will be paid for at the contract unit price per EACH for REPLACE FLASHING BEACON KNOCKDOWN, COMPLETE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Illuminated Sign, LED Knockdown, Complete: This work consists of replacing an illuminated sign knockdown at a location designated in a work order.

Illuminated sign knockdowns shall be replaced onsite at the time of the Contractor's initial response if it is possible to reestablish the illuminated sign support at that time. If the illuminated sign was mounted on a wood signpost, the Contractor shall re-erect the illuminated sign temporarily, if possible, and notify the Department the post needs to be replaced.

All required parts and materials shall be itemized on the Contractor's billing invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

All illuminated sign knockdowns shall be considered emergency service calls. Knockdown replacements shall be completed as soon as possible, regardless of weekends and holidays. The Contractor shall clear the electrical circuit, remove knockdown debris, and complete the replacement or re-erect the illuminated sign temporarily. If the illuminated sign is severely damaged or the Contractor is unable to complete the knockdown repair within these guidelines, the Contractor shall notify the Department.

This work will be paid for at the contract unit price per EACH for REPLACE ILLUMINATED SIGN, LED KNOCKDOWN, COMPLETE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Radar Speed Sign Knockdown, Complete: This work consists of replacing a radar speed sign knockdown at a location designated in a work order.

Radar speed sign knockdowns shall be replaced onsite at the time of the Contractor's initial response if it is possible to reestablish the radar speed sign support at that time. If the radar speed sign was mounted on a wood signpost, the Contractor shall re-erect the radar speed sign temporarily, if possible, and notify the Department the post needs to be replaced.

All required parts and materials shall be itemized on the Contractor's billing invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

All radar speed sign knockdown replacements shall be completed as soon as possible. The Contractor shall clear the electrical circuit, remove knockdown debris, and complete the replacement or re-erect the radar speed sign temporarily. If a regulatory sign is knocked down with the radar speed sign, the Contractor shall re-erect the sign. If the sign associated with the radar speed sign is severely damaged or the Contractor is unable to complete the knockdown repair within these guidelines, the Contractor shall notify the Department.

This work will be paid for at the contract unit price per EACH for REPLACE RADAR SPEED SIGN KNOCKDOWN, COMPLETE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Highway Light Pole Knockdown, Complete: This work shall consist of replacing a highway light pole knockdown at a location designated in a work order, including poles mounted on a foundation, median wall, or bridge parapet.

The Contractor shall clear the electrical circuit, install a uni-safe box to isolate the electrical cables, and remove any knockdown debris from the roadway and shoulder. Knockdown poles shall not be left on the roadway right of way while the Contractor is awaiting parts to complete the replacement. If the initial knockdown callout is at night, on a weekend, or on a holiday, the Contractor may wait until the next working day to clear the pole from the right of way.

All required parts and materials shall be itemized on the Contractor's invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

This work will be paid for at the contract unit price per EACH for REPLACE HIGHWAY LIGHT POLE KNOCKDOWN, COMPLETE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Highway Light Pole Breakaway Device, Couplings: This work shall consist of the replacement of a highway light pole breakaway device, couplings at a location designated in a work order including the removal and disposal of the existing breakaway and complete replacement in accordance with Section 838 of the Standard Specifications.

The required parts and materials shall be itemized on the Contractor's billing invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

This work will be paid for at the contract unit price per EACH for REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, COUPLINGS. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Replace Highway Light Pole Breakaway Device, Transformer Base: This work shall consist of the replacement of a highway light pole breakaway device, transformer base at a location designated in a work order. The unit price shall be inclusive of labor, equipment, transportation of workers and materials, and temporary traffic control required to properly complete the work item.

The parts and materials required to complete the repair shall be charged as detailed in the Parts and Materials provision. The required parts and materials shall be itemized on the Contractor's billing invoice. If a part is provided by the Department, the Contractor shall note this on the invoice.

This work shall consist of the removal and disposal of the existing breakaway and complete replacement in accordance with Section 838 of the Standard Specifications.

This work will be paid for at the contract unit price per EACH for REPLACE HIGHWAY LIGHT POLE BREAKAWAY DEVICE, TRANSFORMER BASE. The unit price shall be inclusive of labor, equipment, materials, and temporary traffic control required to properly complete the work item.

Illuminated Sign, LED: This work shall consist of furnishing and installing a perimeter illuminated LED blinker sign as specified in the work order in accordance to the applicable portions of

Sections 891 and 1084.01 of the Standard Specifications, except as described herein. The signs shall be aluminum with diamond grade (DG3) (ZZ) reflective sheeting. The LED modules shall have a minimum life expectancy of 100,000 hours. The LEDs shall be capable of operating off of 110-volt AC. The illuminated sign, LED item will be measured for payment by the number of signs furnished, installed, activated, tested, and accepted.

This work will be paid for at the contract unit price per EACH for ILLUMINATED SIGN, LED of the type specified.

Radar Speed Sign: The Contractor shall furnish, install, and test a complete radar sign assembly that consists of the following items:

- Variable speed limit display with two 18" full matrix characters and integrated radar sensor
- Large "YOUR SPEED" MUTCD compliant sign, 4:5 ratio
- All software and hardware required for sign programming and configuration.
- All mounting brackets and hardware required for installation.

The radar speed sensor shall be verified by the Department through the use of a radar gun. The Contractor shall calibrate the radar sensor if needed. The radar speed limit signs shall meet or exceed the following minimum specifications:

Display:

- 18" full matrix amber LED characters
- Two characters, (speeds from 1 to 99 MPH can be displayed)
- AllnGaP high intensity LEDs
- Four LEDs per pixel
- Seven-segment signs and signs that employ moving parts will not be approved for use
- Automatic intensity adjustment to ambient lighting conditions

Radar unit:

- Single directional, K-band radar unit (approach only)
- User programmable radar sensitivity, five levels
- Y axial (vertical) position adjustability independent of sign housing

Programmable Options:

- User selectable MPH/KPH setting
- "Dark Mode" of operation for data collection where speed is not displayed, but data is collected and stored
- Minimum Speed Display (does not display speeds below the user defined threshold), settable in 1 MPH increments
- High Speed Blanking (does not display speeds above the user defined threshold), settable in 1 MPH increments
- Flashing Digit Violator Alert (displays and flashes speeds greater than the user defined threshold)

Programming:

- Sign operating parameters set by case mounted push button and including remote RF fob or sign programming via laptop or Bluetooth enabled PDA for remote configuration of speed settings, scheduler, and data collection.
- Sign shall include all required software and hardware (remote RF controller or Bluetooth enabled PDA sign controller)

Sign Construction:

- 0.125" thick welded aluminum NEMA 12 construction
- All stainless-steel hardware
- 3/16" GE Lexan shielding with a tinted, non-glare finish
- All signs include a two-piece variable angle pole- mounting brackets
- Vandal resistant
- Sealed case with access to components through the rear access panel
- Outside dimensions: 40" wide, 4" thick, 28.5" high (nominal)
- Paint and Finish: white polyester powder coat paint inside and out

Mounting and Installation:

- Permanent mounting
- Universal 2 piece mounting brackets; U-bolt, band or wall mount
- All required mounting brackets and hardware shall be included with the sign

Power:

- 12 VDC and 110 VAC 60 Hz power input
- 6-Watt nominal power consumption, 15W peak

MUTCD Compliance:

- Complete MUTCD compliance
- Large "YOUR SPEED" sign included (MUTCD compliant /4:5 ratio (diamond-grade white background with black lettering))

Diagnostics:

- On-screen voltage check
- Built in LED operation diagnostics
- Built in LED intensity operational diagnostics
- Built in battery diagnostics (where applicable)
- Low voltage battery protection mode (where applicable)

Miscellaneous:

- All operating parameters are stored to non-volatile memory and defaults to last settings on power up
- Embedded lifetime run clock
- Single cycle 24 hour ON/OFF clock
- Five-year warranty for sign display and associated components (warranted against defects in materials and workmanship)
- Two-year warranty for radar

Basis of Payment: This work will be paid for at the contract unit price per EACH for RADAR SPEED SIGN.

## **SCHEDULE OF WORK**

Any work performed on state premises shall be done during the hours designated by the State and performed in a manner that does not interfere with the State and its personnel.

## **SMALL TOOLS**

Individual pieces of equipment not listed in the Department's Schedule of Average Annual Equipment Ownership Expense booklet and having a replacement value of \$1,000.00 or less shall be considered to be tools or small equipment. No payment will be made for their use on this contract.

## **SOLAR POWER SYSTEM**

Description: The solar power system shall consist of the solar panel (collector), all necessary mounting hardware, post, SunSaver 10L solar charge controller, and Life line SunXtender battery Model No. PVX-1040T or approved equivalent with bolt terminals. This battery shall be a 12-volt, 105-ampere hour absorbed electrolyte type battery. It shall have a completely sealed valve regulated construction. The battery shall be provided with an attached handle for carrying.

The systems must be of the following capacity: All continuous vehicle ATRs shall be equipped with 60-watt solar panel or larger. The system's capacity should enable it to operate the equipment for 30 consecutive days of heavily overcast weather without the power level of the battery dropping to a point at which it would no longer power or operate the equipment.

Material: The solar panel and all necessary mounting hardware shall be constructed of maintenance free materials which will not require painting. The solar panel surface shall be mounted at an angle of 65° referenced to the south horizon for maximum efficiency in this geographic region. Mounting height shall be a minimum of 9 feet above ground on a pressure-treated 4-inch x 6-inch post. Mounting in any other fashion will be as specified by the Engineer. A pullbox shall be installed in the conduit on the wood post approximately 3 feet above grade level to facilitate splicing the power wires to the solar panel.

Basis of Payment: This work will be paid for at the contract unit price per EACH for SOLAR POWER ASSEMBLY mounted on a new post, which shall be payment in full for furnishing the post, the charge controller, the battery, and the conduit with electric cable attached to the post.

## **STATUS OF UTILITIES TO BE ADJUSTED**

### **NO UTILITIES TO BE ADJUSTED**

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Sections 102 and 103 and Articles 105.07 and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the Contractor's operation, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's operations were affected.

Utility adjustments or relocations should not be required by this project. **The Illinois Underground Utility Facilities Damage Prevention Act** requires persons excavating to contact the one call system (J.U.L.I.E. at 800-892-0123 or 811) before digging.

## **SUPERVISION OF WORK FORCE**

The Contractor shall provide adequate supervision to his or her work force to ensure that workers and materials are utilized in an efficient manner. This is to include, but not limited to, ensuring knowledgeable and experienced workers are matched to related servicing tasks, the proper type of service vehicle is sent for each work order, and service vehicles are equipped with the parts, materials, and equipment required to complete the work order. No additional allowance will be made for general superintendence of the work force used on this contract.

## **TAX**

Contractor shall not bill for any taxes unless accompanied by proof that the State is subject to the tax. If necessary, Contractor may request the applicable Agency's Illinois tax exemption number and federal tax exemption information.

## **TERMINATION FOR CAUSE**

The State may terminate this Contract, in whole or in part, immediately upon notice to the Contractor if it is determined that the actions or failure to act of the Contractor, its agents, employees, or subcontractors have caused or reasonably could cause jeopardy to health, safety or property. If Contractor fails to perform to the State's satisfaction any material requirement of this Contract or is in violation of a material provision of this Contract, the State shall provide written notice to the Contractor requesting that the breach or noncompliance be remedied within the period of time specified in the State's written notice. If the breach or noncompliance is not remedied by that date, the State may either immediately terminate the Contract without additional written notice or enforce the terms and conditions of the Contract. In either event, the State may seek any available legal or equitable remedies and damages.

## **TERMINATION FOR CONVENIENCE**

Following 30 days written notice, the State may terminate this Contract in whole or in part without the payment of any penalty or incurring any further obligation to the Contractor. Following any such termination for convenience, the Contractor shall be entitled to compensation upon submission of invoices and proof of claim for services provided under the Contract up to and including the date of termination.

## **TEST EQUIPMENT**

The Contractor shall provide all of its own testing instruments, as required, to service the facilities of the Department.

The Contractor shall use the established procedures as defined by the manufacturer or standard practice to determine the integrity of the equipment. The Department shall be provided with the testing procedures used upon request.

All required test equipment shall be included in the contract, and no additional compensation will be allowed.

## **TRAFFIC COUNTER – TIRTL**

This work consists of furnishing and installing structural components and traffic counter system components at a location to be determined as directed by the Engineer and as herein specified.

The traffic counter system is installed on breakaway wide flange beam steel sign supports and foundations. The installed components will complete the traffic counter system as herein specified. All hardware, bolts, pipes, and conduits necessary to install the components will be provided by IDOT.

The components to be furnished under this item are as follows:

- Data collection system w/cables
- Wireless modem w/cables and 5' antenna cable
- Dual band cellular/PCS antenna
- TIRTL traffic counter
- TIRTL cabinets
- Solar panels 60W. Two each with mounts
- Solar charge regulators- two each.
- Batteries
- Battery box
- Antenna and modem cables

Components to be furnished under this item shall conform to the following manufacturer's specification or approved equivalent:



COMPONENT

TIRTL ver. 2 Traffic Counter with Cellular Antenna and cable, and external modem cable
TIRTL Cabinets w/ir lenses (15" x 27" x 16") - Quantity 2
External Battery cabinet (16.5" x 16" x 11.5") BBA1M w/ #2 Police Lock
Sierra Wireless RV-50 Mobile 4G XTLE Gateway EVDO-Verizon
Panorama Low Profile Antenna LGAM-BC3G-3SG-26-3SP
SunSaver Solar Controller SS-10L-12V – Quantity 2
SunExtender PVX340T12 Volt 34 AH absorbed electrolyte battery
SunExtender PVX-1040T 12 Volt 104 AH absorbed electrolyte battery
60-Watt Solar Panel (#60J) – Quantity 2
Solar Panel Bracket (007985) – Quantity 2

The number of components necessary to complete each installation is shown on the plans.

**All components shall be sent to the Data Management Lab to be tested, configured, and installed by IDOT personnel.**

The wide flange beam breakaway sign supports will be paid for separately and included for payment at the unit price per POUND for STRUCTURAL STEEL SIGN SUPPORT – BREAKAWAY as specified in Section 727 of the Standard Specifications.

The Office of Planning and Programming Data Management Lab **MUST** be contacted two weeks prior to ANY work being done to ensure proper post placement. If this is not done, any installation discrepancies determined by the Office of Planning and Programming Data Management Lab must be rectified prior to the equipment installation.

Full manufacturer’s specifications of the components to be furnished under this item shall be approved in writing prior to ordering of components. Warranty information shall be provided to the Engineer at the time of delivery of components.

Contact Information for the Office of Planning and Programming Data Management Lab:  
 Mr. Rich Marx  
 126 E. Ash Street  
 Springfield, IL  
 Phone 217 782-2065  
 Richard.marx@illinois.gov

Furnishing of the components necessary to complete the TRAFFIC COUNTER – TIRTL system will be paid for at the contract unit price per EACH for TRAFFIC COUNTER and shall include all components necessary to complete each installation as herein specified.

Method of Installation

1. Mark the position of the sensor slots to be cut perpendicular to the traffic flow. Cable runs on the pavement should also be clearly marked using wax crayons or line and fluorescent pavement paint.
2. Cut a slot 3/4" wide ( $\pm 1/16$  ") and 7/8" deep ( $\pm 1/8$ "). The slot should be 6" longer than the sensor. The lead out should be centered on the slot.
3. The slot must be cut in one pass using one 3/4" wide diamond blade or two 3/8" blades may be ganged together. The slot should be wet cut to minimize damage to the roadway surface.
4. Cut the cable slots to the edge of the roadway.
5. Clear away debris and wash the slots thoroughly. Use air supply to dry. The slots and surrounding surface must be completely clean and dry before any adhesive is poured.
6. Apply two layers of 2" duct tape on the pavement along the perimeter of the slot.
7. Position the sensor on the duct tape next to the slot. Ensure that the sensor is straight and flat. Place the clips on the sensor about every 8".
8. Place the sensor in the slot with the brass element about 1/4" below the road surface and the top of the brackets about 1/8" below the road surface. Ensure the ends of the sensors are pushed down sufficiently.
9. Block the ends of the slot using plumber's putty or duct seal. Ensure that there are adequate 'dams' at both ends so that the encapsulation material (P5G Resin or approved equal) does not flow out. On the passive cable end, dam should be about 3 1/2" past the end of the lead attachment area.
  - a. Ensure that you are wearing rubber gloves suitable for this type of application. The sealant should not come in contact with the skin.
10. Mix the grout according to the manufacturer's instructions. Be sure to pre-mix the resin before combining the two parts since the filled materials have a tendency to settle. Fill the slot full of the encapsulation material. Using a trowel, distribute the encapsulation material along the sensor. Remove the tape on the sides of the slot as soon as the adhesive starts to cure.
11. Carefully remove the plumber's putty or duct seal used to form the dams at both ends of the sensor.
12. Route the lead in cable through the slot cut for it, and cover with loop sealant. Hot Tar must not be used since the temperature is difficult to control, and it can burn the cable. Scatter clean dry sand to prevent sticking.

**Note: The lead-in cable slot shall run to the edge of pavement.**
13. When the encapsulation material is fully cured (see manufacturers recommended cure time), grind the top of the encapsulation material flush with the road using an angle grinder. The profile should be flat or with a slight 'mound', provided that there is no concave portion to the curve.
14. Remove all work-related debris from the site. When the encapsulation material is fully cured, lanes may be opened to traffic.
15. Follow the manufacturers recommended cure time.

**TRAFFIC SIGNS**

When repairing a damaged flashing beacon or highway lighting standard, the Contractor shall reinstall any traffic signs that were attached to the standard. If these signs are damaged to the extent they cannot be reused, the Contractor shall immediately notify the Department so that replacement signs can be installed.

**TRAVEL EXPENSE**

The Contractor shall not be reimbursed for travel expenses, including "port to port" charges, incurred in fulfilling obligations under this contract. All such charges are to be included and paid for as part of the unit costs contained herein.

**TRENCH AND BACKFILL FOR ELECTRICAL WORK**

Description: This work shall consist of constructing and backfilling a trench for the accommodation of raceways, unit duct, and cables.

Materials: Materials shall be according to the following.

Item	Article/Section
(a) Fine Aggregate .....	1003.04
(b) Underground Cable Marking Tape .....	1066.05

CONSTRUCTION REQUIREMENTS

Trench: Trenching shall be as follows.

- (a) Trenches shall have a minimum depth of 2 ft or as otherwise indicated on the plans and shall not exceed 1 ft in width without prior approval of the Engineer.

The trenches shall be constructed to permit easy installation of cable or unit duct without twisting kinks or sharp bends.

The bottom of the trench shall be built up with suitable compacted backfill material so the raceway, unit duct, or cable will have a smooth bed.

If the trench depth is less than 1 ft because of rock or concrete, the Contractor shall cut a groove in the obstructing material, so the trench is 1 ft deep.

The unit duct shall be laid in this groove and covered to grade with class SI concrete.

Where the trench depth exceeds 1 ft but less than 2 ft because of rock, the bottom shall be made smooth and free of short radius dips by filling low sections with fine aggregate.

Where separate circuit runs are to be installed parallel with each other, one common trench shall be used.

At the locations where a trench crosses other existing cable systems, the trench shall be hand dug 6.5 ft to either side of the crossing.

The Contractor shall be responsible for damage incurred in any area of the project such as medians, pavement, shoulders, backslopes, driveways, and sidewalks and shall restore them to their original condition as directed by the Engineer.

- (b) Except where trenching is specifically indicated on the plans, the Contractor shall have the option to plow coilable nonmetallic conduit and unit duct or cable by lay-in plow-feeding.

The installation depth shall be 2 ft below the finished grade or as shown on the plans.

The coilable nonmetallic conduit, duct, or cable shall be round and free of kinks when fed into the plow.

When more than one coilable nonmetallic conduit, duct, or cable is placed into a single plowed cavity, they shall be free of twists.

Before final wire and cable connections are made, the Contractor shall demonstrate that all conductors within the coilable nonmetallic conduit or duct are free to move.

Where another circuit is plowed in parallel to the first, the distance between the two shall not be less than 1 ft nor more than 2 ft.

Backfill: Backfill material shall be free of brick, rock, or any material that could damage the cable, duct, or conduit.

Backfill material for trenches in the subgrade of the proposed improvement and for trenches outside of the subgrade where the inner edge of the trench is within 2 ft of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk shall be fine aggregate gradation FA 6.

Backfill shall be deposited in uniform lifts not exceeding 6 in. thick loose measure.

The material in each lift shall be mechanically compacted by tamping with power tools approved by the Engineer in such a manner as not to disturb, kink, or crush the cables, conductor, duct, or conduit.

Disposal of surplus material shall be according to Article 202.03.

Cable Marking Tape: Underground cable marking tape shall be installed a minimum of 6 in. and not more than 1 ft below finished grade for all underground cable and raceway runs.

Underground cable marking tape with a reinforced metallic detection strip shall be used when specified.

Splicing of the underground cable marking tape shall be accomplished with metal clips to maintain electrical continuity along the entire length of the tape. In addition to metal clips, all splices must be wrapped with a waterproof adhesive tape to prevent corrosion of the metal core.

Method of Measurement: Trench and backfill will be measured for payment in feet along the centerline of the trench.

Measurement will not be made for conduit which is pushed.

Where separate circuit runs are placed in a common trench or plowed cavity, the trench will only be measured once for payment.

Cable marking tape will not be measured for payment

Excavation in rock will be measured for payment according to Article 502.12

Basis of Payment: Trench and backfill will be included in the cost of CONCRETE FOUNDATION, TYPE-D.

Excavation in rock will be paid for according to Article 502.13.

## **UNDERGROUND FACILITIES**

The Contractor's attention is directed to the possible presence of state-owned underground electrical cable within the limits of the proposed improvement. The Contractor shall request the Illinois Department of Transportation in Effingham (217-342-3951) to locate the underground facilities, providing a minimum of 72 hours notice. The Illinois Department of Transportation IS NOT a member of the Joint Utility Locating Information for Excavators (JULIE) System.

Any damage to the underground facilities caused by the Contractor resulting from his failure to contact the Illinois Department of Transportation as specified above or from negligent operation shall be repaired to the satisfaction of the Department at the Contractor's expense, including temporary repairs which may be required to keep the facility operational while material is being obtained to make permanent repairs. Splicing of electric cable will not be allowed. Electric cable shall be replaced from pole to pole or controller.

## **WAIVER OF LIEN**

The Department may, at its discretion, require Waivers of Lien for materials or authorized subcontracted work prior to payment for any goods or services.

## **WARRANTIES FOR SUPPLIES AND SERVICES**

Contractor warrants that the supplies furnished under this Contract will conform to the State's manufacturing standards, specifications, drawing, samples, or descriptions furnished by the State, including but not limited to all specifications attached as exhibits hereto; will be merchantable, of good quality and workmanship, free from defects for a period of 12 months or longer if specified in writing, and fit and sufficient for the intended use; will comply with all federal and state laws, regulations, and ordinances pertaining to the manufacturing, packing, labeling, sale, and delivery of the supplies; will be of good title and be free and clear of all liens and encumbrances; and will not infringe any patent, copyright, or other intellectual property rights of any third party. Contractor agrees to reimburse the State for any losses, costs, damages, or expenses including, without limitations, reasonable attorney's fees and expenses arising from failure of the supplies to meet such warranties. Contractor shall ensure that all manufacturers' warranties are transferred to the State and shall provide a copy of the warranty. These warranties shall be in addition to all other warranties (express, implied, or statutory) and shall survive the State's payment, acceptance, inspection, or failure to inspect the supplies.

## **WORK DURING PEAK HOURS**

Contractor will be permitted to work on any day from dawn to dusk unless work requires a lane restriction in a high-volume area in which work may be restricted to non-rush hours.

Due to high volume of traffic and ongoing construction work in the area between the I-57/70 north tri-level and the I-57/70 south tri-level, the following traffic control restrictions shall apply. Any work in either area needs to be coordinated with any and all existing projects in the area.

The Contractor shall have all lanes of traffic open during peak hours in the appropriate direction. The Contractor will not be allowed to conduct any type of operation in the open lanes or any type of operation that would impede the flow of traffic during peak hours.

Peak hours, if applicable, will be shown on the Work Order and will be determined by the Engineer.

## **WORK ORDERS**

No work of any kind is to be performed by the Contractor unless a work order authorizing the work has been issued by the Engineer. Requests for emergency service calls may be initiated by the Department with a telephone call, faxed message, or email and followed by a written work order authorizing the work. The work order shall show the date and time issuance, type of facility, location, a description of the service required or the problem reported, and pay item(s). The work order will indicate a district contact and telephone number for the Contractor to contact with any questions regarding the work order.

If at the time of service being performed additional work of a minor nature (not to exceed \$500) appears to be needed, the Contractor shall proceed with that work. If it appears that the additional


VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

work could result in a substantial addition or change to the current work order, the Contractor shall contact the Department's district contact before proceeding with the additional work.

The date and time the Contractor's work crew arrives at the location on the work order and the date and time the requested work is completed shall be noted on the Contractor's billing invoice submitted to the Department for payment. If the work is not completed on the first trip, the Contractor shall record on the invoice the arrival and departure dates and times for all subsequent work crews until the work order is completed.

The Contractor shall advise the Department's district contact upon arrival and departure of the site of all service calls and provide the status of work. The Contractor will be provided with an after hours telephone number for the Department's district contact.

**WORK ORDER, ELECTRICAL MAINTENANCE**

 <b>Illinois Department of Transportation</b>  Division of Highways/District 7 400 West Wabash Effingham, IL 62401 Telephone: 217-342-3951				Electrical Maintenance Work Order _____			
<b>Contractor</b>		<b>Date/Time Issued</b>		<b>Contractor Invoice No.</b>			
<b>County/City</b>		<b>Route</b>		<b>Date/Time Completed</b>			
<b>General Location</b>		<b>Date Submitted for Payment</b>		<b>Submitted for</b>			
<b>Work To Be Performed</b>							
<b>Special Instructions</b>							
* Please be reminded to follow the appropriate IDOT Traffic Control Standards when performing							
<b>Is work performed as a result of an accident?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No				<b>Accident Reference Number</b>			
<b>Work Authorized By</b>	<b>Date</b>	<b>Invoice Reviewed By</b>	<b>Date</b>	<b>Supervisor Authorization</b>	<b>Date</b>		



## **AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)**

Effective: January 1, 2008

Revised: April 1, 2023

Description. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement in segments where no sideroads or entrances require deployment of additional flaggers. Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be the STOP/SLOW or Red/Yellow Lens type mounted on a trailer or moveable cart meeting the requirements of the MUTCD and NCHRP 350 or MASH 2016, Category 4.

General. AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The AFAD shall be setup within five degrees of vertical.

Flagger symbol signs as shown on the plans shall be replaced with "BE PREPARED TO STOP" signs when the AFAD is in operation.

Personal communication devices shall not be used to operate the AFAD.

Flagging Requirements. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

Each AFAD shall be operated by a flagger trained to operate the specific AFAD to be deployed. A minimum of two flaggers shall be on site at all times during operation. Each flagger shall be positioned outside the lane of traffic and near each AFAD's location.

Flagging equipment required for traditional flagging shall be available near each AFAD location in the event of AFAD equipment malfunction/failure.

For nighttime flagging, the AFAD and flagger shall be illuminated according to Article 701.13 of the Standard Specifications.

When not in use, AFADs will be considered non-operating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

Basis of Payment. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

**BLENDED FINELY DIVIDED MINERALS (BDE)**

Effective: April 1, 2021

Revise the second paragraph of Article 1010.01 of the Standard Specifications to read:

“Different sources or types of finely divided minerals shall not be mixed or used alternately in the same item of construction, except as a blended finely divided mineral product according to Article 1010.06.”

Add the following article to Section 1010 of the Standard Specifications:

**“1010.06 Blended Finely Divided Minerals.** Blended finely divided minerals shall be the product resulting from the blending or intergrinding of two or three finely divided minerals. Blended finely divided minerals shall be according to ASTM C 1697, except as follows.

- (a) Blending shall be accomplished by mechanically or pneumatically intermixing the constituent finely divided minerals into a uniform mixture that is then discharged into a silo for storage or tanker for transportation.
- (b) The blended finely divided mineral product will be classified according to its predominant constituent or the manufacturer’s designation and shall meet the chemical requirements of its classification. The other finely divided mineral constituent(s) will not be required to conform to their individual standards.”

**COMPENSABLE DELAY COSTS (BDE)**

Effective: June 2, 2017

Revised: April 1, 2019

Revise Article 107.40(b) of the Standard Specifications to read:

- “(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.
  - (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
  - (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.

- (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days.”

Revise Article 107.40(c) of the Standard Specifications to read:

“(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.

- (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).

- (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the Contractor’s yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

- (3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven calendar days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Payment for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be determined according to Article 109.13.”

Revise Article 108.04(b) of the Standard Specifications to read:

“(b) No working day will be charged under the following conditions.

- (1) When adverse weather prevents work on the controlling item.
- (2) When job conditions due to recent weather prevent work on the controlling item.
- (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
- (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.

- (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
- (6) When any condition over which the Contractor has no control prevents work on the controlling item.”

Revise Article 109.09(f) of the Standard Specifications to read:

“(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

The above Basis of Payment is an essential element of the contract and the claim cost recovery of the Contractor shall be so limited.”

Add the following to Section 109 of the Standard Specifications.

“**109.13 Payment for Contract Delay.** Compensation for escalated material costs, escalated labor costs, extended project overhead, and extended traffic control will be allowed when such costs result from a delay meeting the criteria in the following table.

Contract Type	Cause of Delay	Length of Delay
Working Days	Article 108.04(b)(3) or Article 108.04(b)(4)	No working days have been charged for two consecutive weeks.
Completion Date	Article 108.08(b)(1) or Article 108.08(b)(7)	The Contractor has been granted a minimum two week extension of contract time, according to Article 108.08.

Payment for each of the various costs will be according to the following.

- (a) Escalated Material and/or Labor Costs. When the delay causes work, which would have otherwise been completed, to be done after material and/or labor costs have increased, such increases will be paid. Payment for escalated material costs will be limited to the increased costs substantiated by documentation furnished by the Contractor. Payment for escalated labor costs will be limited to those items in Article 109.04(b)(1) and (2), except the 35 percent and 10 percent additives will not be permitted.
- (b) Extended Project Overhead. For the duration of the delay, payment for extended project overhead will be paid as follows.
  - (1) Direct Jobsite and Offsite Overhead. Payment for documented direct jobsite overhead and documented direct offsite overhead, including onsite supervisory and administrative personnel, will be allowed according to the following table.

Original Contract Amount	Supervisory and Administrative Personnel
Up to \$5,000,000	One Project Superintendent
Over \$ 5,000,000 - up to \$25,000,000	One Project Manager, One Project Superintendent or Engineer, and One Clerk
Over \$25,000,000 - up to \$50,000,000	One Project Manager, One Project Superintendent, and One Engineer, One Clerk
Over \$50,000,000	One Project Manager, Two Project Superintendents, One Engineer, and One Clerk

(2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.

(c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

When an extended traffic control adjustment is paid under this provision, an adjusted unit price as provided for in Article 701.20(a) for increase or decrease in the value of work by more than ten percent will not be paid.

Upon payment for a contract delay under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this provision."

**DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)**

Effective: September 1, 2000

Revised: March 2, 2019

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities

Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract the Contractor signs with a subcontractor.

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform **0.00%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at: <http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

The bidder shall submit a DBE Utilization Plan (form SBE 2026), and a DBE Participation Statement (form SBE 2025) for each DBE company proposed for the performance of work to achieve the contract goal, with the bid. If the Utilization Plan indicates the contract goal will not be met, documentation of good faith efforts shall also be submitted. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract. The required forms and documentation must be submitted as a single .pdf file using the "Integrated Contractor Exchange (iCX)" application within the Department's "EBids System".

The Department will not accept a Utilization Plan if it does not meet the bidding procedures set forth herein and the bid will be declared not responsive. In the event the bid is declared not responsive, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty and may deny authorization to bid the project if re-advertised for bids.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan is approved. All information submitted by the bidder must be complete, accurate and adequately document enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. This means the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts the bidder has made. Mere *pro forma* efforts, in other words efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
  - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.



- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.
- (c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "[DOT.DBE.UP@illinois.gov](mailto:DOT.DBE.UP@illinois.gov)" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR Part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR Part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at [DOT.DBE.UP@illinois.gov](mailto:DOT.DBE.UP@illinois.gov).
- (b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) SUBCONTRACT. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
- (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for

which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

**ILLINOIS WORKS APPRENTICESHIP INITIATIVE – STATE FUNDED CONTRACTS (BDE)**

Effective: June 2, 2021  
Revised: September 2, 2021

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of \$500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. The Contractor may seek from the Department of Commerce and Economic Opportunity (DCEO) a waiver or reduction of this goal in certain circumstances pursuant to 30 ILCS 559/20-20(b). The Contractor shall ensure compliance during the term of the contract and will be required to report on and certify its compliance. An apprentice use plan, apprentice hours, and a compliance certification shall be submitted to the Engineer on forms provided by the Department and/or DCEO.

**SPEED DISPLAY TRAILER (BDE)**

Effective: April 2, 2014 Revised: January 1, 2022

Revise the last paragraph of Article 701.11 of the Standard Specifications to read:

“When not being utilized to inform and direct traffic, sign trailers, speed display trailers, arrow boards, and portable changeable message boards shall be treated as nonoperating equipment.”

Add the following to Article 701.15 of the Standard Specifications:

“(m) Speed Display Trailer. A speed display trailer is used to enhance safety of the traveling public and workers in work zones by alerting drivers of their speed, thus deterring them from driving above the posted work zone speed limit.”

Add the following to Article 701.20 of the Standard Specifications:

“(k) When speed display trailers are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other speed display trailers, this work will be paid for at the contract unit price per calendar month or fraction thereof for each trailer as SPEED DISPLAY TRAILER.”

Add the following to Article 1106.02 of the Standard Specifications:

“(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of  $\pm 1$  mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of "YOUR SPEED" immediately above or below the speed display. The sign letters shall be between 5 and 8 in. (125 and 200 mm) in height. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the work zone posted speed limit is exceeded. The speed indicator shall have a maximum speed cutoff. On roadway facilities with a normal posted speed limit greater than or equal to 45 mph, the detected speeds of vehicles traveling more than 25 mph over the work zone speed limit shall not be displayed. On facilities with normal posted speed limit of less than 45 mph, the detected speeds of vehicles traveling more than 15 mph over the work zone speeds limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, they shall not be displayed. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service."

## **STEEL COST ADJUSTMENT (BDE)**

Effective: April 2, 2004

Revised: January 1, 2022

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

- Metal Piling (excluding temporary sheet piling)
- Structural Steel
- Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars  
Q = quantity of steel incorporated into the work, in lb (kg)  
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where:  $MPI_M$  = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

$MPI_L$  = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $MPI_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the  $MPI_L$  and  $MPI_M$  in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(MPI_L - MPI_M) \div MPI_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.



VARIOUS ROUTES  
SECTION D7 ELECTRICAL REPAIRS 2023-1  
VARIOUS COUNTIES  
CONTRACT NO. 74C18

**Attachment**

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights (masses)
Reinforcing Steel	See plans for weights (masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Welded Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Polew/Mast Arm, 30 - 50 ft (9 – 15.2 m )	13 lb/ft (19 kg/m)
Light Polew/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

**SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)**

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

**“109.14 Subcontractor and Disadvantaged Business Enterprise Payment Reporting.**  
The Contractor shall report all payments made to the following parties:

- (a) first tier subcontractors;
- (b) lower tier subcontractors affecting disadvantaged business enterprise (DBE) goal credit;
- (c) material suppliers or trucking firms that are part of the Contractor’s submitted DBE utilization plan.

The report shall be made through the Department’s on-line subcontractor payment reporting system within 21 days of making the payment.”

**SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017  
Revised: April 1, 2019

Replace the second paragraph of Article 109.12 of the Standard Specifications with the following:

“This mobilization payment shall be made at least seven days prior to the subcontractor starting work. The amount paid shall be at the following percentage of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor’s work.

Value of Subcontract Reported on Form BC 260A	Mobilization Percentage
Less than \$10,000	25%
\$10,000 to less than \$20,000	20%
\$20,000 to less than \$40,000	18%
\$40,000 to less than \$60,000	16%
\$60,000 to less than \$80,000	14%
\$80,000 to less than \$100,000	12%
\$100,000 to less than \$250,000	10%
\$250,000 to less than \$500,000	9%
\$500,000 to \$750,000	8%
Over \$750,000	7%”

**SUBMISSION OF PAYROLL RECORDS (BDE)**

Effective: April 1, 2021 Revised: November 1, 2022

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

“STATEMENTS AND PAYROLLS

The payroll records shall include the worker’s name, the worker’s address, the worker’s telephone number when available, the worker’s social security number, the worker’s classification or classifications, the worker’s gross and net wages paid in each pay period, the worker’s number of hours worked each day, and the worker’s starting and ending times of work each day. However, any Contractor or subcontractor who remits contributions to a fringe benefit fund that is not jointly maintained and jointly governed by one or more employers and one or more labor organization must additionally submit the worker’s hourly wage rate, the worker’s hourly overtime wage rate, the worker’s hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable.

The Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full

social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

STATE CONTRACTS. Revise Item 3 of Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

- "3. Submission of Payroll Records. The Contractor and each subcontractor shall, no later than the 15<sup>th</sup> day of each calendar month, file a certified payroll for the immediately preceding month to the Illinois Department of Labor (IDOL) through the Illinois Prevailing Wage Portal in compliance with the State Prevailing Wage Act (820 ILCS 130). The portal can be found on the IDOL website at <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx>. Payrolls shall be submitted in the format prescribed by the IDOL.

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers shall not be included on weekly submittals. Instead, the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). In addition, starting and ending times of work each day may be omitted from the payroll records submitted. The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <https://lcptracker.com/>. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

## **TRAFFIC SPOTTERS (BDE)**

Effective: January 1, 2019

Revise Article 701.13 of the Standard Specifications to read:

**"701.13 Flaggers and Spotters.** Flaggers shall be certified by an agency approved by the Department. While on the job site, each flagger shall have in his/her possession a current driver's license and a current flagger certification I.D. card. For non-drivers, the Illinois Identification Card issued by the Secretary of State will meet the requirement for a current driver's license. This certification requirement may be waived by the Engineer for emergency situations that arise due to actions beyond the Contractor's control where flagging is needed to maintain safe traffic control on a temporary basis. Spotters are defined as certified flaggers that provide support to workers by monitoring traffic.

Flaggers and spotters shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 2 garments. Flaggers shall be equipped with a stop/slow traffic

control sign. Spotters shall be equipped with a loud warning device. The warning sound shall be identifiable by workers so they can take evasive action when necessary. Other types of garments may be substituted for the vest as long as the garments have a manufacturer's tag identifying them as meeting the ANSI Class 2 requirement. The longitudinal placement of the flagger may be increased up to 100 ft (30 m) from that shown on the plans to improve the visibility of the flagger. Flaggers shall not encroach on the open lane of traffic unless traffic has been stopped. Spotters shall not encroach on the open lane of traffic, nor interact with or control the flow of traffic.

For nighttime flagging, flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 10 fc (108 lux) measured 1 ft (300 mm) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 10 ft (3 m) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties. Nighttime flaggers shall be equipped with fluorescent orange or fluorescent orange and fluorescent yellow/green apparel meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 3 garments.

Flaggers and spotters shall be provided per the traffic control plan and as follows.

- (a) Two-Lane Highways. Two flaggers will be required for each separate operation where two-way traffic is maintained over one lane of pavement. Work operations controlled by flaggers shall be no more than 1 mile (1600 m) in length. Flaggers shall be in sight of each other or in direct communication at all times. Direct communication shall be obtained by using portable two-way radios or walkie-talkies.

The Engineer will determine when a side road or entrance shall be closed to traffic. A flagger will be required at each side road or entrance remaining open to traffic within the operation where two-way traffic is maintained on one lane of pavement. The flagger shall be positioned as shown on the plans or as directed by the Engineer.

- (b) Multi-Lane Highways. At all times where traffic is restricted to less than the normal number of lanes on a multilane pavement with a posted speed limit greater than 40 mph and the workers are present, but not separated from the traffic by physical barriers, a flagger or spotter shall be furnished as shown on the plans. Flaggers shall warn and direct traffic. Spotters shall monitor traffic conditions and warn workers of errant approaching vehicles or other hazardous conditions as they occur. One flagger will be required for each separate activity of an operation that requires frequent encroachment in a lane open to traffic. One spotter will be required for each separate activity with workers near the edge of the open lane or with their backs facing traffic.

Flaggers will not be required when no work is being performed, unless there is a lane closure on two-lane, two-way pavement."

**VEHICLE AND EQUIPMENT WARNING LIGHTS (BDE)**

Effective: November 1, 2021  
Revised: November 1, 2022

Add the following paragraph after the first paragraph of Article 701.08 of the Standard Specifications:

“The Contractor shall equip all vehicles and equipment with high-intensity oscillating, rotating, or flashing, amber or amber-and-white, warning lights which are visible from all directions. In accordance with 625 ILCS 5/12-215, the lights may only be in operation while the vehicle or equipment is engaged in construction operations.”

**WEEKLY DBE TRUCKING REPORTS (BDE)**

Effective: June 2, 2012 Revised: November 1, 2021

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form “SBE 723” within ten business days following the reporting period. The reporting period shall be Sunday through Saturday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

**WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

“(q) Temporary Sign Supports ..... 1106.02”

Revise the third paragraph of Article 701.14 of the Standard Specifications to read:

“For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees

of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

Revise the first paragraph of Article 701.15 of the Standard Specifications to read:

**"701.15 Traffic Control Devices.** For devices that must meet crashworthiness standards, the Contractor shall provide a manufacturer's self-certification or a FHWA eligibility letter for each Category 1 device and a FHWA eligibility letter for each Category 2 and Category 3 device used on the contract. The self-certification or letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device."

Revise the first six paragraphs of Article 1106.02 of the Standard Specifications to read:

**"1106.02 Devices.** Work zone traffic control devices and combinations of devices shall meet crashworthiness standards for their respective categories. The categories are as follows.

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 1 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include vertical panels with lights, barricades, temporary sign supports, and Category 1 devices with attachments (e.g. drums with lights). Category 2 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 2 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2024.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals, and area lighting supports. It is preferable for Category 4 devices manufactured after December 31, 2019 to be MASH-16 compliant; however, there are currently no crash tested devices in this category, so it remains exempt from the NCHRP 350 or MASH compliance requirement.

For each type of device, when no more than one MASH-16 compliant is available, an NCHRP 350 or MASH-2009 compliant device may be used, even if manufactured after December 31, 2019."

Revise Articles 1106.02(g), 1106.02(k), and 1106.02(l) to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.

(k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.

(l) Movable Traffic Barrier. The movable traffic barrier shall be on the Department’s qualified product list.

Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings. The barrier shall be capable of being moved on and off the roadway on a daily basis.”

## **REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES**

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <http://www.state.il.us/agency/idol/> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.