June 13, 2025 Letting

## Notice to Bidders, Specifications and Proposal



Contract No. 66R71
Various Counties
Section D3 HWY DAMAGE REPAIR FY26
Various Routes
District 3 Construction Funds

# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 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 13, 2025 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. 66R71
Various Counties
Section D3 HWY DAMAGE REPAIR FY26
Various Routes
District 3 Construction Funds

One year contract to repair damaged High Tension Cable Median Barrier, Guardrail, Attenuators, etc., caused by motorists along various routes in District 3.

- 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

Gia Biagi, Acting Secretary

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2025

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 1-1-25)

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#### 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 D3 HWY DAMAGE REPAIR FY 26, Various Counties, Contract No. 66R71 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### **LOCATION OF PROJECT**

Locations of repair will be determined by District 3. The nine counties that comprise District 3 are Bureau, DeKalb, Ford, Grundy, Iroquois, Kankakee, Kendall, LaSalle, and Livingston. This also covers any other locations maintained by District 3.

#### **DESCRIPTION OF PROJECT**

The work in this contract consists of furnishing all labor, equipment, and materials necessary for the installation, repair, maintenance or replacement of damaged guardrail, fence, attenuators, and other highway appurtenances; the repair of high-tension cable median barrier; and minor concrete repairs at locations throughout District 3. This includes the minor adjustment of connecting parts of the installation as specified elsewhere. The work to be done at any location will be indicated on the work order by the Engineer. The damage to repair is generally a result of automobile accidents; therefore, the need and locations of any repairs are random in nature. The work also includes providing traffic control.

#### TRAFFIC CONTROL

For work on interstates I-39, I-55, I-57, I-180, and I-80, the contractor will be required to furnish, place, and maintain a changeable message sign(s) at the location(s) as directed by the Engineer during the Contractor's work operations. One (1) changeable message sign will be required for each direction of repair work. This work will not be paid for separately but shall be included with the various contract pay items.

When using traffic control per Highway Standard 701426, an additional TMA truck with arrow board is required. The additional truck with TMA and arrow board will not be paid for separately but will be included in the various pay items utilizing 701426.

Method of Measurement and Basis of Payment. The appropriate traffic control and protection standard shall be used as applicable to the work location. Traffic Control and Protection Standards 701201, 701501, 701502, 701601, 701602, 701606, and 701801 will be paid for at the contract unit price per each for TRAFFIC CONTROL AND PROTECTION, CALL OUT WORK. Traffic Control and Protection Standards 701401, 701406, 701411, 701416, 701421, 701422, 701428, 701446, 701451 and 701456 will be paid for at the contract unit price per each for TRAFFIC CONTROL AND PROTECTION, FREEWAY/EXPRESSWAY, CALL OUT WORK.

#### **VEHICLE PARKING**

(Revised January 1, 2007)

Parking of personal vehicles within the interstate right of way is strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer and never within median area or overnight on any roadway area.

#### **KEEPING ROADS OPEN TO TRAFFIC**

(Effective December 1, 1999; Revised December 14, 2009)

All routes shall be kept open to two-way traffic at all times, except when construction operations require, as directed by the applicable traffic control standards, temporary lane closures. All lanes shall be open to traffic overnight and on holidays specified in Article 107.09 of the Standard Specifications. The contractor shall give the Operations Field Engineer 24-hour's notice before any proposed lane closure Tuesday through Friday. The contractor shall notify the Operations Field Engineer on the preceding Friday of the lane closures proposed for Saturday, Sunday, or Monday. The Operations Field Engineer will be the sole judge to approve lane closures and the length and duration of same. Failure to notify the Operations Field Engineer of a lane closure will result in a Traffic Control Deficiency Deduction as per Article 105.03 of the Standard Specifications.

#### **DURATION OF PROJECT**

Terms, Specifications, and Conditions:

Project Period: This project shall begin September 1, 2025, and continue through to **August 31, 2026**. The Contractor must finish any work orders issued up to and including August 31, 2026. The Contractor is allowed an additional **twenty working days** after August 31, 2026, to complete the required work stated on the work order. Termination and non-appropriation according to section 100 of the Standard Specifications.

#### **REMOVAL OF TRAFFIC CONTROL DEVICES**

All temporary traffic control devices used for lane closures shall be removed from the pavement as soon as the need for the traffic control has ended and the lane shall be re-opened to traffic.

#### **MIDWEST GUARDRAIL SYSTEM**

Effective January 1, 2007, the department adopted the Midwest Guardrail System (MGS) for use on all its state and federal highways. The MGS is reflected in the current Highway Standards in this contract. Some notable differences between MGS and Pre-MGS include:

- The guardrail mounting height has increased 3-7/8", raising the nominal top of rail mounting height to 31" as shown in standard 630001.
- The block out dimension for Type A and B guardrail has increased from 6" to 1'-0".
- Steel blockouts are no longer used. Wood blockouts or plastic blockouts on IDOT's approved list may be used.
- The use of Type "C" rail has been discontinued.
- There is an option for guardrail without blockouts in Highway Standard 630006.
- The splice point for rail pieces is different.
- The length of both Type A and B guardrail posts has been reduced from 6'-9" to 6-0".

Many of the guardrail terminal standards have also changed, the contractor is advised to note changes in specifications and pay limits.

 Contractors are advised to note the list of IDOT approved Type 1 (Special) terminals. The IDOT list of approved TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL for MGS guardrail is shown on the IDOT internet site.

The MGS guardrail is not compatible with earlier versions of Pre-MGS guardrail. Generally, existing Pre-MGS guardrail will be repaired or replaced in kind only if damage is limited to a single section of rail (12.5 Feet or less). Longer sections of damaged rail or any damage to Pre-MGS terminal sections will require replacement with MGS rail and/or terminals that are from the current IDOT approved list. Newly installed MGS will be transitioned to match the remainder of the existing installation as needed with no additional compensation.

The pay items in this contract do not differentiate between MGS and Pre-MGS guardrail. There will be one pay item of guardrail work regardless of whether it's an MGS or Pre-MGS guardrail assembly. The contractor shall include any extra labor, equipment, or material costs to repair or replace either MGS or Pre-MGS guardrail and to transition from MGS to existing Pre-MGS in the contract unit price of the appropriate pay item.

#### RAILROAD PROTECTIVE LIABILITY INSURANCE

The Contractor is advised any repair work within 25' of a railroad track shall not begin until Railroad Protective Liability Insurance is obtained and that a railroad flagger must be present when the repair work is performed. This work will be paid for in accordance with Article 109.05 of the Standard Specifications. Notification to the railway and request for a railroad flagger should be accomplished through the Resident Engineer.

#### INTERPRETATION OF QUANTITIES

The quantities appearing in the Summary of Quantities of the plans is a one-year estimate of damage for bidding purposes.

#### **COMPLETION OF WORK**

The work in accordance with this contract shall be considered either Regular Work, Expedited Work or Emergency Work.

The Contractor is allowed thirty (30) calendar days after the work authorization to complete Regular Work and have it accepted by the Engineer. The Contractor is allowed fourteen (14) calendar days after the work authorization to complete Expedited Work and have it accepted by the Engineer. The Contractor is allowed seven (7) calendar days after the work authorization to complete Emergency Work and have it accepted by the Engineer. If work is not completed and accepted within these time limits, the contractor shall be liable to the Department the amount of \$50.00 per calendar day per job site for Regular Work, \$100.00 per calendar day per job site for Expedited Work, and \$250.00 per calendar day per job site for Emergency work, not as a penalty but as liquidated damages for each day of overrun as specified herein. The time (calendar days) required by the Engineer to inspect the work will not be counted against the balance of days remaining for the contractor to perform the work.

Work associated with replacing damaged sand module impact attenuators REPLACE IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3 shall be specified herein. The Contractor is allowed 36 hours after authorization to complete the work replacing damaged sand modules. Liquidated damages are then charged at \$250 per calendar day per sand module until the work is completed and accepted.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work since the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult to ascertain, and a matter of argument and unprofitable litigation. This said mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the prolonged loss of a safety device or appurtenance for the roadway. The Department will not be required to provide any actual loss in order to recover these liquidated damages provided herein, as said damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No liquidated damages will be assessed for any day less than twenty-four hours.

The Contractor shall keep a daily record of work orders completed and the actual quantities of work performed. A report shall be generated on a weekly basis including all work orders and quantities completed by date that week. This weekly report shall be provided to the Resident within 3 calendar days from the end of the week the work was performed.

#### **EMERGENCY WORK**

Emergency Work means work that is required to correct a condition which is a hazard to the public or is designated by the Engineer to be a hazard of such severity that life and/or property are endangered, and immediate corrective action is required.

Emergency Work can generally be described, but is not limited to damage in one of the following categories:

- a. Guardrail damage consisting of any openings or exposed ends.
- b. Guardrail elements including either posts or panels which are lying in a down position.
- c. Any damage which could cause a spearing effect.
- d. Terminal end sections which have damaged posts or panel elements.
- e. Attenuator damage which exposes a hazardous situation.

The location of all damage to be repaired as Emergency Work shall be determined by the Engineer.

Any extra costs associated with completing the Emergency Work within the time specified after receiving a work order will be included in the costs of the associated pay items.

#### **EXTRA WORK**

Extra work to repair motorist caused damage, not included in this contract as a pay item, may be assigned to the contractor. Extra work will be paid for in accordance with article 109.04 of the Standard Specifications. Items of this type may include culvert end section repair or replacement or providing for temporary aggregate shoulders at guardrail or high-tension cable median barrier damage locations.

#### **WORK ORDERS**

All work will be initiated by a written work order from an authorized representative of the Department. No work is to be performed by the Contractor unless he possesses a work order authorizing the repair at the location.

All work orders will be made out and signed by the Engineer. A work order will show date inspected, job number, location, item description and estimated quantities of removals or repairs to be made. Only the amount of replacement or repairs shown on the work order is to be done by the contractor. If, at the time repairs are being made, additional work is needed, authorization must be obtained from the Engineer before the work is done.

All work orders will be sent, by the Engineer, to the Contractor's place of business, or received at the district office. After the repair work is completed, the Contractor shall record the completion date and pay item quantities to complete the repair on the work order. The Contractor shall retain one copy of the work order for his record and shall return the completed original copy to the Engineer.

Work Order Supplies: The Contractor shall supply marking materials for the duration of the contract so the Engineer can mark the repair at locations indicated on the work order. Initially, the Contractor shall supply 36 aerosol cans of fluorescent pink marking paint, in 17-ounce minimum cans that spray in an inverted position, 500-3" x 6" Tyvek tags (white or yellow), 500 6' zip ties, 40 rolls of pink ribbon and two dozen red paint marking sticks.

Resupply shall be made at the Engineer's request. This work will not be paid for separately but shall be considered included in the unit cost for the various pay items.

#### REMOVAL OR REPAIR OF GUARDRAIL OR FENCE

Guardrail or fence shall not be removed from state right of way under this contract unless each rail element, fence, or post to be removed is designated for removal. The Engineer in charge will advise on each piece.

All damaged material shall be replaced by new material unless otherwise specified.

Guardrail removal will not be allowed unless total and complete removal and replacement can be made during one continuous operation. Damaged guardrail removed shall be replaced on the same day it is removed unless approval is obtained from the Engineer.

#### **REMOVAL OR REPAIR HTC BARRIER**

High-Tension Cable Median Barrier and posts shall not be removed from state right of way under this contract unless each cable element and/or post to be removed is designated for removal. The Engineer in charge will advise on each piece.

All damaged material shall be replaced by new material unless otherwise specified.

HTC Barrier repair shall be finished on the day it began unless approval is obtained from the Engineer.

## REPAIRING AND MAINTENANCE OF HIGH-TENSION CABLE (HTC) MEDIAN BARRIER SYSTEMS

We currently have approximately 602,395 feet of high-tension cable median barrier installed in D-3

HTC LOCATION								
LOCATION	MILE POST/ STATION	CABLE TYPE	MANUFACTURE	LENGTH				
IL 47	SOUTH OF CATON FARM RD TO NORTH OF I-80		TRINITY	17143				
I-39	MP 63.9 TO 69.9	4 CABLE	GIBRALTAR	31256				
I-55	MP 207 TO 210.5	4 CABLE	GIBRALTAR	18480				
I-55	MP 216 TO 227	4 CABLE	GIBRALTAR	58080				
I-55	MP 227 TO 233	4 CABLE	GIBRALTAR	31680				
I-55	JUST INSIDE WILL CO.	3 CABLE	GIBRALTAR	3228				
I-57	MP 277 TO 279	3 CABLE	NUCORE	10560				
I-57	MP 285 TO 290.5	4 CABLE	TRINITY	29040				
I-57	MP 290.5 TO 293	4 CABLE	TRINITY	13200				
I-57	MP 293 TO 302.5	4 CABLE	GIBRALTAR	50160				
I-57	MP 302.4 TO 311	4 CABLE	GIBRALTAR	19540				
I-57	MP 302.5 TO 306.1	4 CABLE	GIBRALTAR	18375				
I-57	MP 306.1 TO 310.1	4 CABLE	TRINITY	21120				
I-57	MP 310.1 TO 312.0	4 CABLE	GIBRALTAR	1165				
I-57	MP 312.0 TO 314.8	4 CABLE	GIBRALTAR	12673				
I-57	MP 322 TO 324	4 CABLE	GIBRALTAR	10560				
I-80	WB STA 661+00 TO 669+42	4 CABLE	GIBRALTAR	406				
I-80	MP 34.9 TO 41.5	4 CABLE	GIBRALTAR	27633				
I-80	MP 41.5 TO 48.1	4 CABLE	GIBRALTAR	34848				
I-80	MP 64 TO 70.1	4 CABLE	GIBRALTAR	32208				
I-80	MP 74.3 TO 80.2	4 CABLE	GIBRALTAR	31152				
I-80	MP 80.55 TO 92.5	4 CABLE	TRINITY	63360				
I-80	MP 92.5 TO 97.1	4 CABLE	TRINITY	24288				
I-80	MP 97.1 TO 105	4 CABLE	TRINITY	42240				

TOTAL 602395

<u>Description</u>: Repair and maintenance shall consist of removing and replacing damaged post(s) and/or removing and replacing damaged cable or end sections. Maintenance includes resetting the cable on the posts, checking the tension and other minor work described below. Work shall be in accordance with the applicable portions of Section 644 of the Standard Specifications for High Tension Cable Median Barrier.

<u>Contacts</u>: It shall be the contractor's responsibility to gain a working knowledge of the systems that need repair so that repair is made according to the manufacturer's specifications.

<u>System integrity</u>: The repair parts from different manufacturers shall not be used interchangeably. Each system shall be repaired using parts from the system's manufacturer.

Repair of High-Tension Cable: The repair of high-tension cable will be paid for at the unit price per foot as REPAIR HIGH TENSION CABLE. Work shall include the removal and disposal of the damaged cable, furnishing new cable, furnishing, and installing turnbuckles and cable splicing hardware, and repairing the cable.

Repair of End Sections: The repair of end sections/terminals will be paid for at the contract unit price each as REPAIR HIGH TENSION CABLE BARRIER TERMINAL. This pay item shall be used when an end section is damaged and/or in need of repair but the existing foundation can be re-used and remain in place. Work shall include repair of the cables and/or hardware of the end section along with disposal of any damaged materials.

Replacement of End Sections: The replacement of the end sections/terminals will be paid for at the contract unit price each as REPLACE HIGH TENSION CABLE END SECTION. The replacement foundations shall be in accordance with the manufacturer's specifications and may be offset slightly from the damaged foundation's location in undisturbed or properly compacted soil. This price includes all hardware, including reflectors, specified to be attached to the post as per the manufacturer, plus backfilling the old foundation cavity with suitable material and compacting as approved by the Engineer.

<u>Post Replacement</u>: The replacement of posts from either socketed or driven systems will be paid for at the contract unit price each for REMOVE AND REPLACE HIGH TENSION CABLE POST which price shall include the removal and disposal of the damaged posts, replacing the posts, and resetting the cable on the new post. This price includes all hardware specified to be attached to the post as per the manufacturer, including reflectors.

Heavy duty post replacement: The CASS-TL3 4-Cable Safety System by Trinity Highway Products on I 80 in LaSalle and Grundy Counties as well as I 57-mile posts 286-292 have posts which fall under this description. The posts are extra-long, heavy, etc., and require other than hand methods to drive the post, typically using equipment which may encroach on the adjacent lane, requiring additional traffic control. The replacement of heavy duty driven posts will be paid for at the contract unit price each for REMOVE AND REPLACE HTC POST (HEAVY DUTY) which price shall include the removal and disposal of the damaged posts, replacing with new posts, and resetting the cable on the new post. This price includes all hardware specified to be attached to the post as per the manufacturer, including reflectors. Only the system specified in this special provision shall be identified and measured as Heavy Duty. Future systems will be classified in writing by the Engineer.

System Maintenance: At a typical accident site, the Contractor will generally be given the beginning and ending limits of repair. Within the identified limits, emergency personnel may have removed cable from undamaged posts adjacent to the damage area to facilitate recovery operations. Maintenance is performed on those undamaged posts that remain, although, the Engineer may select any location to receive System Maintenance (cable on the post or off). Damaged posts are replaced with new posts and aren't counted with posts needing maintenance. Work includes resetting undamaged terminal posts.

System Maintenance work shall include resetting the cable on the existing undamaged posts and checking and resetting the tension in the cable to match the manufacturer's specifications. An IDOT representative may request to be present whenever the tension is set or adjusted. Within the identified limits, it shall be the responsibility of the contractor to repair or replace all missing or damaged nuts, washers, clips, post caps, post spacers, post straps, reflectors, etc. on existing posts. Used hardware in serviceable condition may be used for maintaining existing posts. This maintenance work is to be performed on line posts, transition posts, or end section posts remaining in place as designated by the Engineer. No distinction shall be made between socket

and driven posts. System Maintenance will be measured by counting each existing undamaged post within the identified limits. This work will be paid for at the contract unit price each for HIGH TENSION CABLE SYSTEM MAINTENANCE.

<u>Tension Checks or Adjustment of Cable</u>: Checking and correcting the tension in each cable shall be performed each time work is performed on a section of HIGH-TENSION CABLE MEDIAN BARRIER. The results of each check shall be recorded on a Tension Log Sheet shown in the plans. The completed log sheets shall be submitted along with work order billings. The Contractor is required to verify cable tensions with each manufacturer.

<u>Reflectors</u>: Reflectors, as specified by the manufacturer, shall be furnished on replacement posts to match the existing reflector spacing. Reflectors shall be amber or yellow.

#### **REALIGNING POSTS**

Guardrail posts at designated damage/repair locations which are out of plumb or require realignment are not considered reusable. The out of plumb or misaligned posts shall be removed and replaced. Replacement shall be made with a new post and set in accordance with the requirements of Section 630. Realignment by any method which does not remove and replace the post will not be allowed. All posts which are removed shall become the property of the Contractor and removed from the right of way. Posts which are removed cannot be used again.

#### REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A OR TYPE B

This pay item is to be used for realigning lengths of <u>undamaged</u> guardrail which are out of alignment due to frost heave, erosion, or other side slope failure. This type of work is maintenance in nature and shall only be performed at locations designated by the Engineer.

This work consists of supplying all labor, materials, and equipment to remove and re-erect existing steel plate beam guardrail and/or traffic barrier terminals. Work shall be in accordance with Section 633 of the Standard Specifications.

Existing steel block-outs shall be replaced with wooden or plastic block-outs during the removal and re-erection of steel plate beam guardrail and traffic barrier terminals. The wood block-outs shall be according to the current standard applicable to the type of guardrail or terminal section being re-erected.

The existing steel posts may be drilled to match the bolt pattern shown on standard 630001 for the wood block-out or a new steel post shall be provided.

Any existing "C" posts shall be removed, and new steel posts shall be provided.

Work will be measured and paid for at the contract unit price per foot (meter) for REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL. TYPE A OR TYPE B.

#### **RAIL ELEMENT PLATES**

This work consists of removing and disposing of all sections of damaged or conflicting rail element plates and all bolts, nuts, washers, and other hardware connected with the damaged rail element, and furnishing and installing new 12-gauge guardrail element plates, bolts, nuts, washers, and other hardware necessary to repair a damaged guardrail installation. Elements, plates, nuts, bolts, washers, and other hardware are to match the original and adjacent installation as to type and design and are to be galvanized to match the original and adjacent installation.

The Contractor shall make any necessary adjustments to realign existing rail element plates adjacent to rail elements replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be considered included in the unit price for RAIL ELEMENT PLATES.

The furnishing and installing of all bolts, nuts, washers, blockouts, and other hardware, necessary to comply with the above will not be paid for separately. Removing and disposing of damaged rail element plates will not be paid for separately.

If specified, furnishing, and installing an END SECTION, END SHOE, or ALTERNATE END SHOE as shown in standard 630001 will be included with this pay item.

Rail element plates will be measured for payment in units measured along the top of rail elements, continuous through laps and splices. One unit equals 12.5'. End pieces, as specified above, will be measured as a fraction of a unit.

This work will be paid for at the contract unit price per unit length for RAIL ELEMENT PLATES.

#### STEEL POSTS

This work consists of removing and disposing of damaged posts of the specified length and replacing them with new W6 X 9 or W6 X 8.5 guardrail posts of the correct length.

New steel posts will be galvanized to match the existing installation. All work shall conform with applicable standards and as directed by the Engineer. Removing and disposing of damaged posts will not be paid for separately.

This work will be paid for at the contract unit price each for STEEL POSTS.

#### STEEL POSTS (MODIFIED)

This work consists of replacing posts attached to concrete structures by unbolting the rail elements, removing the post which is to be replaced, and furnishing and setting a new post in accordance with Standard 630101 or 630111 (Guardrail Mounted on Culverts). The replacement posts shall conform to the length, size, and type of the original installation. Sheared expansion bolts shall be replaced in kind. Replacement of sheared bolts will not be paid for separately but shall be considered included in the contract unit price for STEEL POSTS (MODIFIED). New steel posts and base plates shall be galvanized after fabrication and shall match the configuration of the existing installation.

Basis of Payment: This work will be paid for at the contract unit price each for STEEL POSTS (MODIFIED).

#### STEEL POSTS (SPECIAL)

This work consists of removing and disposing of damaged posts and replacing it with new W6 x 9, or W6 x 8.5, 9-foot-long steel posts.

All new steel posts shall be used at guardrail locations directed by the Engineer.

New steel posts shall be in accordance with Section 630 and Article 1006.04 of the Standard Specifications. Removing and disposing of damaged posts will not be paid for separately but shall be considered included in the contract unit price.

This work will be paid for at the contract unit price each for STEEL POSTS (SPECIAL).

#### TRAFFIC BARRIER TERMINALS, TYPE 1, SPECIAL, THROUGH 12

These pay items are included to pay for work to completely replace both MGS and pre-MGS Traffic Barrier Terminals with currently approved MGS terminals.

MGS work consists of furnishing and installing complete assemblies of Traffic Barrier Terminals, Type 1 SPECIAL, 2, 5, 6, 6A, 6B, 10 and 12 in accordance with Section 631 of the Standard Specifications and the current Highway Standards.

Generally, when the Engineer determines about half or more of the terminal is damaged, he/she will order a new terminal installed in lieu of repair. Any damage to pre-MGS terminals shall be considered cause for replacement with an MGS terminal.

If a Traffic Barrier Terminal Type 1, Special is used to replace an existing obsolete type 1 "bull nose or turned down" end section, removal shall include the additional 25' of guardrail necessary to accommodate the full length of the new Type 1, Special. This work will not be paid for separately but shall be included in the contract unit price for a Traffic Barrier Terminal Type 1, Special (tangent or flared).

This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL of the type specified. The contract unit price for Type 1 Special terminals shall include the terminal marker shown in Standard 725001. All posts and blockouts shown within or at the pay limits on the terminal's standard drawing, whether individually numbered or not, shall be included for payment at the contract unit price for TRAFFIC BARRIER TERMINAL, of the type specified.

The Contractor shall provide the Engineer the technical drawing and installation manual for each brand/kind of Traffic Barrier Terminal, Type 1 (Special) Tangent or Flared installed, to keep on file.

#### REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL THROUGH 12

These pay items are included to pay for work to repair Traffic Barrier Terminals that meet MGS specifications.

Work consists of repairing Traffic Barrier Terminal Type 1 SPECIAL, 2, 5, 6, 6A, 6B, 9, and 12 in accordance with Section 631 of the Standard Specifications and the current Highway Standards. Work includes providing all hardware (nuts, bolts, and washers) and re-assembling the terminal in accordance with the manufacturer's instructions.

When the Engineer determines a TBT Type 3 or 3A is damaged beyond repair, it shall be replaced with an IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3, which is described elsewhere herein.

If an existing Traffic Barrier Terminal Type 4 assembly is damaged, a new guardrail layout will need to be requested and designed.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be considered included in the unit price for the repair of the traffic barrier terminal.

This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL of the type specified.

#### IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

This work shall consist of removing and disposing of a damaged IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3, or Traffic Barrier Terminal Type 3 or 3A, and erecting a replacement impact attenuator at the same location. Impact attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for test level 3 and shall be on the Department's approved list for the type specified. Damaged attenuators shall become the property of the Contractor and disposed of off the right of way.

This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3.

#### REPAIR IMPACT ATTENUATORS (FULLY REDIRECTIVE)

This work consists of furnishing all labor and equipment to repair damaged IMPACT ATTENUATORS (FULLY REDIRECTIVE) installations at locations designated by the Engineer. The Engineer shall be the sole judge in determining whether to repair or replace the installation. Repair shall be in accordance with the manufacturer's instruction manuals. Damaged parts shall become the property of the Contractor and disposed of off the right of way.

This work will be paid for at the contract unit price per each for REPAIR IMPACT ATTENUATORS (FULLY REDIRECTIVE).

#### REPLACE IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3

This work includes replacing sand module impact attenuators damaged by traffic at various locations. Impact attenuators shall be in accordance with Section 643 of the Standard Specifications. Impact attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for test level 3 and shall be on the Department's approved list. The attenuators are installed on existing base pads located on various multilane highways throughout the district.

Work shall include removing and disposing of each damaged sand module impact attenuator and its contents off the right of way, cleaning up any remaining debris from the damaged attenuator, and replacing the damaged attenuator with one matching the kind/type of the remaining attenuators. Mixing sand module impact attenuators of different manufacturers at any one location will not be permitted. The replacement module(s) shall be filled with the designated weight of sand matching the number painted on the base pad or the weight shown in the plan detail.

Adjacent sand module impact attenuators that are not damaged, but have been shifted laterally from their original position, shall be realigned, or moved back to their original position, as directed by the Engineer.

This work will be paid for at the contract unit price per each for REPLACE IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3. Each individual replacement module, complete with the required hardware, filled with sand and properly installed, shall constitute one each. Realignment or moving adjacent undamaged modules back to their original positions will not be paid for separately but shall be included in the cost of replacement. The work to realign or shift up to 2 modules shall be included with each replaced sand module impact attenuator.

#### **GUARDRAIL REFLECTORS**

This work shall consist of furnishing and installing replacement one-way or two-way guardrail reflectors with brackets fabricated in accordance with the details shown in the plans. The reflectors shall be circular meeting the requirements of Article 1097.03 of the Standard Specifications. The reflectors shall be amber or crystal in color to match the existing installation.

The brackets shall be installed by loosening the guardrail post bolt, slipping the "foot" of the bracket between the bolt head and the plate washer (or between the bolt head and the guardrail face if no plate washer is present) and retightening the bolt. The reflectors shall be fastened to the brackets with aluminum rivets.

This work will be paid for at the contract unit price per each for GUARDRAIL MARKER, TYPE A.

#### **TUBULAR THRIE BEAM**

This work consists of removing all sections of damaged rail element plates and all bolts, nuts, washers, and other hardware connected with the damaged rail element, where directed by the Engineer, and furnishing and installing new thrie beam elements, bolts, nuts, washers and other hardware necessary to the plate installation. Plates, nuts, bolts, washers, and other hardware are to match the original and adjacent installation in accordance with the plan details for Tubular Thrie Beam Retrofit Rail for Bridges and are to be galvanized to match the original and adjacent installation.

Time requirements associated with work orders are modified for this item due to the custom fabrication needed for thrie beam pieces. The Contractor is allowed 30 calendar days after receipt of materials to complete the repairs.

The Contractor shall adjust and realign existing rail element plates adjacent to rail elements removed and replaced as directed by the Engineer. Unbolting, bolting, adjusting, realigning or any other work necessary to accomplish the desired realignment shall be included in the unit price for tubular thrie beam.

The furnishing and installing of all bolts, nuts, washers, and other hardware necessary to comply with the above-mentioned pay item will not be paid for separately but shall be included in the unit cost of the TUBULAR THRIE BEAM.

This work will be paid for at the contract unit price per foot for TUBULAR THRIE BEAM.

#### **WOOD TERMINAL POST**

Work consists of furnishing all labor, materials, and equipment to replace the damaged wooden breakaway end post for a traffic barrier terminal. Work includes removing the damaged wood post from the steel tube and replacing it with a new post. The wood post shall be in accordance with section 631 and as shown in the current applicable standard or in accordance with the manufacturer's specifications for the Type 1 Special terminals.

This work will be paid for at the contract unit price per each for WOOD TERMINAL POST regardless of the type of terminal.

#### CHAIN LINK FENCE

This work shall consist of removing and disposing of the damaged fence, post, and accessories, and installing new fence fabric and hardware to match the type of existing damaged fence in accordance with Standard 664001.

Removal of brush, vines, and other growth required to make repairs will not be paid for separately.

This work includes all labor and materials, excluding posts, to make the required repairs.

This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE 4' or 6'.

#### **CHAIN LINK FENCE POST**

This work shall consist of installing new posts of the length required for 4' or 6' chain link fence in accordance with Standard 664001 and Section 664 of the Standard Specifications.

Work includes furnishing and supplying the concrete for Chain Link Fence post foundations. The concrete shall be made from one of the commercially available pre-mixed bags of concrete that meets or exceeds the requirements of ASTM C 387. The concrete shall be mixed, cured, and placed in accordance with the manufacturer's specifications. No concrete shall be placed when the ground is frozen. The Engineer shall be supplied with the original bag label for the concrete.

This work will be paid for at the contract unit price each for CHAIN LINK FENCE POST.

#### **WOVEN WIRE FENCE**

This work shall consist of removing and disposing of the damaged fence and posts and installing the complete fence, including line posts, in accordance with Standard 665001 and Section 665 of the Standard Specifications.

Removal and disposal of brush, vines, and other growth required to make repairs will not be paid for separately.

This work will be paid for at the contract unit price per foot (meter) for WOVEN WIRE FENCE 4'.

#### **PULL POST ARRANGEMENT**

This work consists of the complete removal of the damaged pull post arrangement and its new replacement in accordance with Standard 665001 and Section 665, or Standard 664001 and Section 664 of the Standard Specifications.

Work includes furnishing and supplying the concrete for anchoring brace and pull posts. The concrete shall be made from one of the commercially available pre-mixed bags of concrete that meets or exceeds the requirements of ASTM C 387. The concrete shall be mixed, cured, and placed in accordance with the manufacturer's specifications. No concrete shall be placed when the ground is frozen. The Engineer shall be supplied with the original bag label for the concrete.

This work will be paid for at the contract unit price each for PULL POST ARRANGEMENT.

#### **CONCRETE FOR FENCE POST FOUNDATIONS**

The requirements of the Recurring Special Provision for Quality Control/Quality Assurance of Concrete Mixtures shall not apply during the construction of fence post foundations when commercially available pre-mixed bags of concrete are allowed.

#### **CONCRETE STRUCTURE REPAIR**

This work consists of repairing concrete structures at locations determined by the Engineer.

Concrete removal equipment shall comply with the following:

- The concrete saw shall be capable of sawing concrete to a minimum depth of 1 1/2" (38 mm).
- Suitable power-driven hand tools will be permitted with the approval of the Engineer.
- Concrete adhering to reinforcement bars shall be removed with a wire brush or other means approved by the Engineer.

Class SI concrete in accordance with Section 503 shall be used.

Included in this work is the removal and satisfactory disposal of the damaged portions of the structure as directed.

Once the concrete has been poured, three days cure time will be required.

This work will be paid for at the contract unit price per cubic foot for CONCRETE STRUCTURE REPAIR.

#### TIMBER CURB AND HMA CURB REPAIR

This work consists of furnishing all labor, material, and equipment to repair installations of damaged erosion control curb. Work shall be in accordance with the plan detail.

The Contractor shall furnish commercially available treated lumber labeled for ground contact. The material shall arrive at the repair site with the product marking intact. The Engineer shall be supplied with the original invoice for the treated lumber.

The Engineer shall mark the exact location of the repair. Split or damaged boards shall be removed entirely. Loose or damaged shoulder material shall be removed. Damaged materials shall become the property of the Contractor and removed from the site.

HMA CURB REPAIR shall be in accordance with Section 408 of the Standard Specifications and will be measured and paid for at the contract unit contract price per foot measured along the flow line. Prime coat is not required. Temperature requirements are waived. Compaction shall be to the Engineer's satisfaction.

TIMBER CURB will be measured along the board in feet; splices in accordance with the detail will not be deducted but will also be measured. Also, included for payment with TIMBER CURB is all hardware to complete the installation.

Boards in good condition may be re-used with the approval of the Engineer.

#### REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE

This pay item is to be used for replacing a damaged rail element on an otherwise undamaged Traffic Barrier Terminal Type 1 Special. The terminal may be either the Tangent or Flared type and must meet the testing criteria of NCHRP Report 350, test level 3. This work may be considered emergency work and does not include replacing damaged posts. Repair shall only be made at locations designated by the Engineer.

Work includes furnishing and replacing the existing rail element with a matching element of the same type and length that is being replaced. Field cutting and drilling shall not be allowed. After removal of the damaged element the terminal shall be reassembled with the new rail element(s) in accordance with the manufacturer's instructions.

This work will be paid for at the contract unit price per foot for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT PLATE.

#### **WORK ZONE LANE CLOSURE REQUEST**

The Contractor shall submit a lane closure request to the IDOT Operations Field Engineer/Technician prior to 12 noon the day before the closure will be implemented. If the department does not approve the request, the Contractor will not be allowed to implement the work zone. If the Contractor does not submit a request, a Traffic Control Deduction will be assessed per location.

All personnel, equipment and traffic control shall be removed from lanes during the Peak Hours and no additional compensation shall be allowed for meeting these requirements. <u>Peak Hours</u> will be determined and communicated to the contractor prior to the start of the contract.

Peak hour designations restricting lane closures on the following interstates have been set as follows:

I-55 SB & NB I-57 SB & NB I-80 EB & WB

Monday – Thursday 6:00AM – 9:00AM and 3:00PM - 5:00PM Friday 6:00AM – 9:00AM and after 12:00PM (noon)

The Contractor must notify the Resident Engineer/Technician at the supplied email of the scheduling of work prior to start of work. The jobs should be listed in order of repair. A penalty of the loss of traffic control value for the project will be assessed if work is started prior to notification. If no traffic control is associated with the project, a penalty of \$1,000 will be assessed for each start of work prior to notification.

Conformance to these traffic control and scheduling procedures shall not be paid for as a separate item but shall be considered included in the cost of the contract.

#### **PLASTIC DRUMS**

(Effective August 15, 2005; Revised April 27, 2018)

Plastic drums according to Standard 701901 shall be used in lieu of cones, Type I and Type II barricades, and vertical barricades throughout lane closures on the interstate.

#### **LINEAR DELINEATOR PANELS, 4 INCH**

(Effective January 1, 2022)

<u>Description</u>. This work shall consist of furnishing and installing linear delineators at locations where linear delineators were previously installed and steel plate beam guardrail is to be replaced.

#### CONSTRUCTION REQUIREMENTS

<u>General</u>. Linear delineator panels shall be attached to steel plate beam guardrail as shown on plan details and as directed by the Engineer. These panels shall be either white or yellow, matching the color of the adjacent pavement marking edge line. They should be spaced at a minimum of 80 ft centers horizontally, with a minimum of two linear delineator per guardrail run. Linear delineators shall not be place on guardrail terminal sections. Linear delineator spacing through horizontal curves where the normal speed limit is reduced, the spacing of the linear delineators shall be reduced to 40 ft centers. Existing steel plate beam guardrail that contains existing linear delineator panels shall have any damaged or missing panels removed and replaced as directed by the Engineer.

When securing the linear delineator panels to steel plate beam guardrail, the Contractor may use a linear delineation system panel and bracket mounting method approved by the Engineer. Linear delineation system panel and bracket including installation methods shall be according to the manufacture's recommendations.

The Contractor shall be responsible for testing the durability and strength of the method used to ensure permanent adhesion of the linear delineator panel to the bridge rail. Drilling into metal bridge rail or other metal surfaces to secure the linear delineator panels will not be permitted.

When removing and replacing missing or damaged linear delineator panels, the existing linear delineator panels and any adhesive or bracket when used to secure the existing linear delineator panels shall be removed to the satisfaction of the Engineer. All cost and labor associated with the removal and cleanup of the existing linear delineator panels shall not be paid for separately but shall be included in the cost of this work.

Each panel shall not be less than 34 in. in length and 4.0 in. in width. The panels shall be constructed of cube-corner retroreflective material in standard highway colors permanently bonded to an aluminum substrate. The lateral edges of each panel shall be hemmed. The panel assembly shall have a repeating raised lateral ridge every 2.25 in. Each ridge shall be 0.34 in. high with a 45° profile and a 0.28 in. radius top.

Daytime color requirements shall be determined from measurement of the retroreflective sheeting applied to aluminum test panels. Daytime color shall be measured instrumentally using a spectrophotometer employing annular 45/0 (or equivalent 0/45) illuminating and viewing geometry. Measurements shall be made in accordance with ASTM E1164 for ordinary colors or ASTM E2153 for fluorescent colors. Chromaticity coordinates shall be calculated for CIE Illuminant D65 and the CIE 1931 (20) Standard Colorimetric Observer in accordance with ASTM E308 for ordinary colors or ASTM E2152 for fluorescent colors.

#### **Chromaticity Limits for White**

	х	у	Х	У	х	у	Х	у	Limit	Y (%)
									Min	Max
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	40	-

## Chromaticity Limits for Fluorescent Yellow

	x	Y	х	Y	х	у	х	у	Total Luminance Factor YT (%) Min
Fluor. Yellow	0.521	0.424	0.557	0.442	0.479	0.520	0.454	0.491	40

<u>Inspection of Linear Delineator Panels</u>. The linear delineator panels installed under this contract will be inspected following installation. In addition, they will be inspected following a winter performance period that extends 180 days from December 30th.

Within 15 calendar days after the end of the winter performance period, a final performance inspection will be made. If this inspection discloses any work which is not visibly intact and serviceable, the Contractor shall, within 30 calendar days, completely repair or replace such work to the satisfaction of the Engineer.

Measured in its entirety, the work shall be 97 percent intact.

Upon completion of the final performance inspection, or after satisfactory completion of any necessary corrections, the Engineer shall notify the Contractor in writing of the date of such final performance inspection and release him/her from further performance responsibility.

This delay in performance inspection and performance acceptance of the linear delineator panels shall not delay acceptance of the entire project and final payment due if the contractor requires and receives from the subcontractor a third party "performance" bond naming the Department as obligee in the full amount of all linear delineator panels listed in the contract, multiplied by the contract unit price. The bond shall be executed prior to acceptance and final payment of the nonlinear delineator panel items and shall be in full force and effect until final performance inspection and performance acceptance of the linear delineator panels. Execution of the third-party bond shall be the option of the Contractor.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for LINEAR DELINEATOR PANELS, 4 INCH.

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

Effective: January 1, 2008 Revised: April 1, 2023

<u>Description</u>. 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.

<u>Equipment</u>. 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.

<u>General</u>. 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.

<u>Flagging Requirements</u>. 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.

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

#### CEMENT, FINELY DIVIDED MINERALS, ADMIXTURES; CONCRETE, AND MORTAR (BDE)

Effective: January 1, 2025

Revise the first paragraph of Article 285.05 of the Standard Specifications to read:

"285.05 Fabric Formed Concrete Revetment Mat. The grout shall consist of a mixture of cement, fine aggregate, and water so proportioned and mixed as to provide a pumpable slurry. Fly ash or ground granulated blast furnace (GGBF) slag, and concrete admixtures may be used at the option of the Contractor. The grout shall have an air content of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The mix shall obtain a compressive strength of 2500 psi (17,000 kPa) at 28 days according to Article 1020.09."

Revise Article 302.02 of the Standard Specifications to read:

"302.02 Materials. Materials shall be according to the following.

	Item	Article/Section
(a)	Cement	1001
(b)	Water	1002
(c)	Hydrated Lime	1012.01
(d)	By-Product, Hydrated Lime	1012.02
(e)	By-Product, Non-Hydrated Lime	1012.03
(f)	Lime Slurry	1012.04
(g)	Fly Ash	1010
(h)	Soil for Soil Modification (Note 1)	1009.01
(i)	Bituminous Materials (Note 2)	

Note 1. This soil requirement only applies when modifying with lime (slurry or dry).

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 312.07(c) of the Standard Specifications to read:

"(c) Cement	1001"
Add Article 312.07(i) of the Standard Specifications to read:	
"(i) Ground Granulated Blast Furnace (GGBF) Slag	1010"

Revise the first paragraph of Article 312.09 of the Standard Specifications to read:

"312.09 Proportioning and Mix Design. At least 60 days prior to start of placing CAM II, the Contractor shall submit samples of materials to be used in the work for proportioning and testing. The mixture shall contain a minimum of 200 lb (120 kg) of cement per cubic yard (cubic meter). Cement may be replaced with fly ash or ground granulated blast furnace (GGBF) slag according to Article 1020.05(c)(1) or 1020.05(c)(2), respectively, however the minimum cement content in the mixture shall be 170 lbs/cu yd (101 kg/cu m). Blends of coarse and fine aggregates will be permitted, provided the volume of fine aggregate does not exceed the volume of coarse

aggregate. The Engineer will determine the proportions of materials for the mixture according to the "Portland Cement Concrete Level III Technician Course" manual. However, the Contractor may substitute their own mix design. Article 1020.05(a) shall apply, and a Level III PCC Technician shall develop the mix design."

Revise Article 352.02 of the Standard Specifications to read:

#### "352.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement (Note 1)	1001
(b) Soil for Soil-Cement Base Course	
(c) Water	1002
(d) Bituminous Materials (Note 2)	

Note 1. Bulk cement may be used for the traveling mixing plant method if the equipment for handling, weighing, and spreading the cement is approved by the Engineer.

Note 2. The bituminous materials used for curing shall be emulsified asphalt RS-2, CRS-2, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70; or medium curing liquid asphalt MC-70 or MC-250."

Revise Article 404.02 of the Standard Specifications to read:

#### "404.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.08
(d) Bituminous Material (Tack Coat)	1032.06
(e) Emulsified Asphalts (Note 1) (Note 2)	1032.06
(f) Fiber Modified Joint Sealer	1050.05
(g) Additives (Note 3)	

Note 1. When used for slurry seal, the emulsified asphalt shall be CQS-1h according to Article 1032.06(b).

Note 2. When used for micro-surfacing, the emulsified asphalt shall be CQS-1hP according to Article 1032.06(e).

Note 3. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

Revise the last sentence of the fourth paragraph of Article 404.08 of the Standard Specifications to read:

"When approved by the Engineer, the sealant may be dusted with fine sand, cement, or mineral filler to prevent tracking."

Revise Note 2 of Article 516.02 of the Standard Specifications to read:

"Note 2. The sand-cement grout mix shall be according to Section 1020 and shall be a 1:1 blend of sand and cement comprised of a Type I, IL, or II cement at 185 lb/cu yd (110 kg/cu m). The maximum water cement ratio shall be sufficient to provide a flowable mixture with a typical slump of 10 in. (250 mm)."

Revise Note 2 of Article 543.02 of the Standard Specifications to read:

"Note 2. The grout mixture shall be 6.50 hundredweight/cu yd (385 kg/cu m) of cement plus fine aggregate and water. Fly ash or ground granulated blast furnace (GGBF) slag may replace a maximum of 5.25 hundredweight/cu yd (310 kg/cu m) of the cement. The water/cement ratio, according to Article 1020.06, shall not exceed 0.60. An air-entraining admixture shall be used to produce an air content, according to Article 1020.08, of not less than 6.0 percent nor more than 9.0 percent of the volume of the grout. The Contractor shall have the option to use a water-reducing or high range water-reducing admixture."

Revise Article 583.01 of the Standard Specifications to read:

"583.01 Description. This work shall consist of placing cement mortar along precast, prestressed concrete bridge deck beams as required for fairing out any unevenness between adjacent deck beams prior to placing of waterproofing membrane and surfacing."

Revise Article 583.02(a) of the Standard Specifications to read:

"(a		Cement	.10	0	1	ĺ
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Revise the first paragraph of Article 583.03 of the Standard Specifications to read:

**583.03 General.** This work shall only be performed when the air temperature is 45 °F (7 °C) and rising. The mixture for cement mortar shall consist of three parts sand to one part cement by volume. The amount of water shall be no more than that necessary to produce a workable, plastic mortar."

Revise Note 2/ in Article 1003.01(b) of the Standard Specifications to read:

"2/ Applies only to sand. Sand exceeding the colorimetric test standard of 11 (Illinois Modified AASHTO T 21) will be checked for mortar making properties according to Illinois Modified ASTM C 87 and shall develop a compressive strength at the age of 14 days when using Type I, IL, or II cement of not less than 95 percent of the comparable standard.

Revise the second sentence of Article 1003.02(e)(1) of the Standard Specifications to read:

"The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.90 percent or greater."

Revise the first sentence of the second paragraph of Article 1003.02(e)(3) of the Standard Specifications to read:

"The ASTM C 1293 test shall be performed with Type I, IL, or II portland cement having a total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.80 percent or greater."

Revise the second sentence of Article 1004.02(g)(1) of the Standard Specifications to read:

"The test will be performed with Type I, IL, or II portland cement having a total equivalent alkali content ( $Na_2O + 0.658K_2O$ ) of 0.90 percent or greater."

Revise Article 1017.01 of the Standard Specifications to read:

"1017.01 Requirements. The mortar shall be high-strength according to ASTM C 387 and shall have a minimum 80.0 percent relative dynamic modulus of elasticity when tested by the Department according to Illinois Modified AASHTO T 161 or AASHTO T 161 when tested by an independent lab. The high-strength mortar shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the high-strength mortar shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the high-strength mortar shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise the fourth sentence of Article 1018.01 of the Standard Specifications to read:

"The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department."

Revise Article 1019.02 of the Standard Specifications to read:

"1019.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate for Controlled Low-Strength Material (CLSM)	
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag	1010
(f) Admixtures (Note 1)	

Note 1. The air-entraining admixture may be in powder or liquid form. Prior to approval, a CLSM air-entraining admixture will be evaluated by the Department. The admixture shall be able to meet the air content requirements of Mix 2. The Department will maintain a qualified product list."

Revise Article 1019.05 of the Standard Specifications to read:

"1019.05 Department Mix Design. The Department mix design shall be Mix 1, 2, or 3 and shall be proportioned to yield approximately one cubic yard (cubic meter).

Mix 1	
Cement	50 lb (30 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2900 lb (1720 kg)
Water	50-65 gal (248-322 L)
Air Content	No air is entrained

Mix 2	
Cement	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (173-248 L)
Air Content	15-25 %

Mix 3	
Cement	40 lb (24 kg)
Fly Ash – Class C or F, and/or GGBF Slag	125 lb (74 kg)
Fine Aggregate – Saturated Surface Dry	2500 lb (1483 kg)
Water	35-50 gal (179-248 L)
Air Content	15-25 %"

Revise Article 1020.04, Table 1, Note (8) of the Standard Specifications to read:

"(8) In addition to the Type III portland cement, 100 lb/cu yd of ground granulated blast-furnace slag and 50 lb/cu yd of microsilica (silica fume) shall be used. For an air temperature greater than 85 °F, the Type III portland cement may be replaced with Type I, IL, or II portland cement."

Revise Article 1020.04, Table 1 (Metric), Note (8) of the Standard Specifications to read:

"(8) In addition to the Type III portland cement, 60 kg/cu m of ground granulated blast-furnace slag and 30 kg/cu m of microsilica (silica fume) shall be used. For an air temperature greater than 30 °C, the Type III portland cement may be replaced with Type I, IL, or II portland cement."

Revise the second paragraph of Article 1020.05(a) of the Standard Specifications to read:

"For a mix design using a portland-pozzolan cement, portland blast-furnace slag cement, portland-limestone cement, or replacing portland cement with finely divided minerals per Articles 1020.05(c) and 1020.05(d), the Contractor may submit a mix design with a minimum portland cement content less than 400 lbs/cu yd (237 kg/cu m), but not less than 375 lbs/cu yd (222 kg/cu m), if the mix design is shown to have a minimum relative dynamic modulus of elasticity of 80 percent determined according to AASHTO T 161. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete."

Revise the first sentence of the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"Corrosion inhibitors and concrete admixtures shall be according to the qualified product lists."

Delete the fourth and fifth sentences of the second paragraph of Article 1020.05(b) of the Standard Specifications.

Revise the third sentence of the second paragraph of Article 1020.05(b)(5) of the Standard Specifications to read:

"The qualified product lists of concrete admixtures shall not apply."

Revise second paragraph of Article 1020.05(b)(10) of the Standard Specifications to read:

"When calcium nitrite is used, it shall be added at the rate of 4 gal/cu yd (20 L/cu m) and shall be added to the mix immediately after all compatible admixtures have been introduced to the batch. Other corrosion inhibitors shall be added per the manufacturer's specifications."

Delete the third paragraph of Article 1020.05(b)(10) of the Standard Specifications.

Revise Article 1020.15(b)(1)c. of the Standard Specifications to read:

"c. The minimum portland cement content in the mixture shall be 375 lbs/cu yd (222 kg/cu m). When the total of organic processing additions, inorganic processing additions, and limestone addition exceed 5.0 percent in the cement, the minimum portland cement content in the mixture shall be 400 lbs/cu yd (237 kg/cu m). For a drilled shaft, foundation, footing, or substructure, the minimum portland cement may be reduced to as low as 330 lbs/cu yd (196 kg/cu m) if the concrete has adequate freeze/thaw durability. The Contractor shall provide freeze/thaw test results according to AASHTO T 161, and the relative dynamic modulus of elasticity of the mix design shall be a minimum of 80 percent. Testing shall be performed by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. Freeze/thaw testing will not be required for concrete that will not be exposed to freezing and thawing conditions as determined by the Engineer."

Revise Article 1021.01 of the Standard Specifications to read:

"1021.01 General. Admixtures shall be furnished in liquid or powder form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer, the date of manufacture, and trade name of the material. Containers shall be readily identifiable as to manufacturer, the date of manufacture, and trade name of the material they contain.

Concrete admixtures shall be on one of the Department's qualified product lists. Unless otherwise noted, admixtures shall have successfully completed and remain current with the AASHTO Product Eval and Audit Concrete Admixture (CADD) testing program. For admixture

submittals to the Department; the product brand name, manufacturer name, admixture type or types, an electronic link to the product's technical data sheet, and the NTPEP testing number which contains an electronic link to all test data shall be provided. In addition, a letter shall be submitted certifying that no changes have been made in the formulation of the material since the most current round of tests conducted by AASHTO Product Eval and Audit. After 28 days of testing by AASHTO Product Eval and Audit, air-entraining admixtures may be provisionally approved and used on Departmental projects. For all other admixtures, unless otherwise noted, the time period after which provisionally approved status may be earned is 6 months.

The manufacturer shall include the following in the submittal to the AASHTO Product Eval and Audit CADD testing program: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range established by the manufacturer shall be according to AASHTO M 194. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, 1021.07, and 1021.08, the pH allowable manufacturing range established by the manufacturer shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to AASHTO M 194.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass) as determined by an appropriate test method. To verify the test result, the Department will use Illinois Modified AASHTO T 260, Procedure A, Method 1.

Prior to final approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material."

Revise Article 1021.03 of the Standard Specifications to read:

"1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.

- (a) Retarding admixtures shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) Water-reducing admixtures shall be according to AASHTO M 194, Type A.

(c) High range water-reducing admixtures shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding)."

Revise Article 1021.05 of the Standard Specifications to read:

"1021.05 Self-Consolidating Admixtures. Self-consolidating admixture systems shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

High range water-reducing admixtures shall be according to AASHTO M 194, Type F.

Viscosity modifying admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.06 of the Standard Specifications to read:

"1021.06 Rheology-Controlling Admixture. Rheology-controlling admixtures shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. Rheology-controlling admixtures shall be according to AASHTO M 194, Type S (specific performance)."

Revise Article 1021.07 of the Standard Specifications to read:

- "1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.
  - (a) Calcium Nitrite. Corrosion inhibitors shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution and shall comply with either the requirements of AASHTO M 194, Type C (accelerating) or the requirements of ASTM C 1582. The corrosion inhibiting performance requirements of ASTM C 1582 shall not apply.
  - (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582.

For submittals requiring testing according to ASTM M 194, Type C (accelerating), the admixture shall meet the requirements of the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01.

For submittals requiring testing according to ASTM C 1582, a report prepared by an independent laboratory accredited by AASHTO re:source for portland cement concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent accredited lab. All other information in ASTM C 1582 shall be from an independent accredited lab. Test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall instead be submitted directly to the Department."

Add Article 1021.08 of the Standard Specifications as follows:

"1021.08 Other Specific Performance Admixtures. Other specific performance admixtures shall, at a minimum, be according to AASHTO M 194, Type S (specific performance). The

Department also reserves the right to require other testing, as determined by the Engineer, to show evidence of specific performance characteristics.

Initial testing according to AASHTO M 194 may be conducted under the AASHTO Product Eval and Audit CADD testing program according to Article 1021.01, or by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete. In either case, test data and other information required to be submitted to AASHTO Product Eval and Audit according to Article 1021.01, shall also be submitted directly to the Department. The independent accredited lab report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications."

Revise Article 1024.01 of the Standard Specifications to read:

"1024.01 Requirements for Grout. The grout shall be proportioned by dry volume, thoroughly mixed, and shall have a minimum temperature of 50 °F (10 °C). Water shall not exceed the minimum needed for placement and finishing.

Materials for the grout shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fine Aggregate	1003.02
(d) Fly Ash	1010
(e) Ground Granulated Blast Furnace (GGBF) Slag	1010
(f) Concrete Admixtures	1021"

Revise Note 1 of Article 1024.02 of the Standard Specifications to read:

"Note 1. Nonshrink grout shall be according to Illinois Modified ASTM C 1107.

The nonshrink grout shall have a water-soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the grout shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every five years, and the test results shall be provided to the Department. Mixing of the nonshrink grout shall be according to the manufacturer's specifications. The Department will maintain a qualified product list."

Revise Article 1029.02 of the Standard Specifications to read:

" 1029.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Cement	1001
(b) Fly Ash	1010
(c) Ground Granulated Blast Furnace (GGBF) Slag	
(d) Water	
(e) Fine Aggregate	1003
(f) Concrete Admixtures	1021
(g) Foaming Agent (Note 1)	

Note 1. The manufacturer shall submit infrared spectrophotometer trace and test results indicating the foaming agent meets the requirements of ASTM C 869 in order to be on the Department's qualified product list. Submitted data/results shall not be more than five years old."

Revise the second paragraph of Article 1103.03(a)(4) the Standard Specifications to read:

"The dispenser system shall provide a visual indication that the liquid admixture is actually entering the batch, such as via a transparent or translucent section of tubing or by independent check with an integrated secondary metering device. If approved by the Engineer, an alternate indicator may be used for admixtures dosed at rates of 25 oz/cwt (1630 mL/100 kg) or greater, such as accelerating admixtures, corrosion inhibitors, and viscosity modifying admixtures."

Revise the first two sections of Check Sheet #11 of the Supplemental Specifications and Recurring Special Provisions to read:

"<u>Description</u>. This work shall consist of filling voids beneath rigid and composite pavements with cement grout.

<u>Materials</u>. Materials shall be according to the following Articles of Division 1000 - Materials of the Standard Specifications:

Item	Article/Section
(a) Cement	1001
(b) Water	1002
(c) Fly Ash	
(d) Ground Granulated Blast Furnace (GGBF) Slag	
(e) Admixtures	
(f) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise the third paragraph of Materials Note 2 of Check Sheet #28 of the Supplemental Specifications and Recurring Special Provisions to read:

"The Department will maintain a qualified product list of synthetic fibers, which will include the minimum required dosage rate. For the minimum required fiber dosage rate based on the Illinois Modified ASTM C 1609 test, a report prepared by an independent laboratory accredited by AASHTO re:source for Portland Cement Concrete shall be provided. The report shall show results of tests conducted no more than five years prior to the time of submittal."

#### 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, One Engineer, and 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: January 2, 2025

OVERVIEW AND GENERAL 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 in accordance with the requirements of 49 CFR Part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory. Award of the contract is conditioned on meeting the requirements of 49 CFR Part 26, and failure by the Contractor to carry out the requirements of Part 26 is a material breach of the contract and may result in the termination of the contract or such other remedies as the Department deems appropriate.

- 2. <u>CONTRACTOR ASSURANCE</u>. All assurances set forth in FHWA 1273 are hereby incorporated by reference and will be physically attached to the final contract and all subcontracts.
- 3. CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. The Department has determined the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies and that, 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 in accordance with the requirements of 49 CFR 26.53 and SBE Memorandum No. 24-02.
- 4. <u>IDENTIFICATION OF CERTIFIED DBE</u>. Information about certified DBE Contractors can be found in the Illinois UCP Directory. Bidders can obtain additional information and assistance with identifying DBE-certified companies at the Department's website or by contacting the Department's Bureau of Small Business Enterprises at (217) 785-4611.
- 5. <u>BIDDING PROCEDURES</u>. Compliance with this Special Provision and SBE Policy Memorandum 24-02 is a material bidding requirement. The following shall be included with the bid.
  - (a) DBE Utilization Plan (form SBE 2026) documenting enough DBE participation has been obtained to meet the goal, or a good faith effort has been made to meet the goal even though the efforts did not succeed in obtaining enough DBE participation to meet the goal.
  - (b) Applicable DBE Participation Statement (form SBE 2023, 2024, and/or 2025) for each DBE firm the bidder has committed to perform the work to achieve the contract goal.

The required forms and documentation shall 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 bid if it does not meet the bidding procedures set forth herein and the bid will be declared non-responsive. A bidder declared non-responsive for failure to meet the bidding procedures will not give rise to an administrative reconsideration. In the event the bid is declared non-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.

6. <u>UTILZATION PLAN EVALUATION</u>. 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 the bidder has committed to DBE participation sufficient to meet the goal, or that the bidder has made good faith efforts to do so, in the event the bidder cannot

meet the goal, in order for the Department to 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 Department determines, based upon the documentation submitted, that the bidder has made a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A and the requirements of SBE 2026.

If the Department determines that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan of that determination in accordance with SBE Policy Memorandum 24-02.

- 7. <u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work the bidder commits to have performed by the specified DBEs 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 firms. 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 guidelines for counting goal credit are provided in 49 CFR Part 26.55. In evaluating Utilization Plans for award the Department will count goal credit as set forth in Part 26 and in accordance with SBE Policy Memorandum 24-02.
- 8. CONTRACT COMPLIANCE. The Contractor must utilize the specific DBEs listed to perform the work and supply the materials for which each DBE is listed in the Contractor's approved Utilization Plan, unless the Contractor obtains the Department's written consent to terminate the DBE or any portion of its work. The DBE Utilization Plan approved by SBE is a condition-of-award, and any deviation to that Utilization Plan, the work set forth therein to be performed by DBE firms, or the DBE firms specified to perform that work, must be approved, in writing, by the Department in accordance with federal regulatory requirements. Deviation from the DBE Utilization Plan condition-of-award without such written approval is a violation of the contract and may result in termination of the contract or such other remedy the Department deems appropriate. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan.
  - (a) NOTICE OF DBE PERFORMANCE. The Contractor shall provide the Engineer with at least three days advance notice of when all DBE firms are expected to perform the work committed under the Contractor's Utilization Plan.
  - (b) SUBCONTRACT. If awarded the contract, the Contractor is required to enter into written subcontracts with all DBE firms indicated in the approved Utilization Plan and must provide copies of fully executed 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.

- (c) PAYMENT TO DBE FIRMS. 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 goal has been paid to the DBE. The Contractor shall document and report all payments for work performed by DBE certified firms in accordance with Article 109.11 of the Standard Specifications. All records of payment for work performed by DBE certified firms shall be made available to the Department upon request.
- (d) FINAL PAYMENT. After the performance of the final item of work or trucking, or delivery of material by a DBE and final payment 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 (form SBE 2115) to the Engineer. 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.
- (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.

## ILLINOIS WORKS APPRENTICESHIP INITIATIVE - STATE FUNDED CONTRACTS (BDE)

Effective: June 2, 2021 Revised: April 2, 2024

<u>Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.)</u>. 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. Of this goal, at least 50% of the labor hours of each prevailing wage classification performed by apprentices shall be performed by graduates of the Illinois Works Pre-Apprenticeship Program, the Illinois Climate Works Pre-Apprenticeship Program, or the Highway Construction Careers Training Program.

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.

# REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: January 1, 2024 Revised: April 1, 2024

Revise the first paragraph of Article 669.04 of the Standard Specifications to read:

"669.04 Regulated Substances Monitoring. Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities. The excavated soil and groundwater within the work areas shall be managed as either uncontaminated soil, hazardous waste, special waste, or non-special waste.

As part of the regulated substances monitoring, the monitoring personnel shall perform and document the applicable duties listed on form BDE 2732 "Regulated Substances Monitoring Daily Record (RSMDR)"."

Revise the first two sentences of the nineteenth paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall coordinate waste disposal approvals with the disposal facility and provide the specific analytical testing requirements of that facility. The Contractor shall make all arrangements for collection, transportation, and analysis of landfill acceptance testing."

Revise the last paragraph of Article 669.05 of the Standard Specifications to read:

"The Contractor shall select a permitted landfill facility or CCDD/USFO facility meeting the requirements of 35 III. Admin. Code Parts 810-814 or Part 1100, respectively. The Department will review and approve or reject the facility proposed by the Contractor based upon information provided in BDE 2730. The Contractor shall verify whether the selected facility is compliant with those applicable standards as mandated by their permit and whether the facility is presently, has previously been, or has never been, on the United States Environmental Protection Agency (U.S. EPA) National Priorities List or the Resource Conservation and Recovery Act (RCRA) List of Violating Facilities. The use of a Contractor selected facility shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth."

Revise the first paragraph of Article 669.07 of the Standard Specifications to read:

"669.07 Temporary Staging. Soil classified according to Articles 669.05(a)(2), (b)(1), or (c) may be temporarily staged at the Contractor's option. All other soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) shall be managed and disposed of without temporary staging to the greatest extent practicable. If circumstances beyond the Contractor's control require temporary staging of these latter materials, the Contractor shall request approval from the Engineer in writing.

Topsoil for re-use as final cover which has been field screened and found not to exhibit PID readings over daily background readings as documented on the BDE 2732, visual staining or odors, and is classified according to Articles 669.05(a)(2), (a)(3), (a)(4), (b)(1), or (c) may be temporarily staged at the Contractor's option."

Add the following paragraph after the sixth paragraph of Article 669.11 of the Standard Specifications.

"The sampling and testing of effluent water derived from dewatering discharges for priority pollutants volatile organic compounds (VOCs), priority pollutants semi-volatile organic compounds (SVOCs), or priority pollutants metals, will be paid for at the contract unit price per each for VOCS GROUNDWATER ANALYSIS using EPA Method 8260B, SVOCS GROUNDWATER ANALYSIS using EPA Methods 8270C, or RCRA METALS GROUNDWATER ANALYSIS using EPA Methods 6010B and 7471A. This price shall include transporting the sample from the job site to the laboratory."

Revise the first sentence of the eight paragraph of Article 669.11 of the Standard Specifications to read:

"Payment for temporary staging of soil classified according to Articles 669.05(a)(1), (a)(3), (a)(4), (a)(5), (a)(6), or (b)(2) to be managed and disposed of, if required and approved by the Engineer, will be paid according to Article 109.04."

#### SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

Revise Article 703.02(c) of the Standard Specifications to read:

"(c) Pavement Marking Tapes (Note 1) .......1095.06"

Add the following Note to the end of Article 703.02 of the Standard Specifications:

"Note 1. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape."

Revise Article 1095.06 of the Standard Specifications to read:

"1095.06 Pavement Marking Tapes. Type I white or yellow marking tape shall consist of glass spheres embedded into a binder on a foil backing that is precoated with a pressure sensitive adhesive. The spheres shall be of uniform gradation and distributed evenly over the surface of the tape.

Type IV tape shall consist of white or yellow tape with wet reflective media incorporated to provide immediate and continuing retroreflection in wet and dry conditions. The wet retroreflective media shall be bonded to a durable polyurethane surface. The patterned surface shall have approximately  $40 \pm 10$  percent of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed reflective elements or particles.

Blackout tape shall consist of a matte black, non-reflective, patterned surface that is precoated with a pressure sensitive adhesive.

(a) Color. The white and yellow markings shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zero degree geometry, illuminant D65, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color	Daylight Reflectance %Y
White	65 min.
Yellow *	36 - 59

<sup>\*</sup>Shall match Aerospace Material Specification Standard 595 33538 (Orange Yellow) and the chromaticity limits as follows.

Х	0.490	0.475	0.485	0.530
У	0.470	0.438	0.425	0.456

(b) Retroreflectivity. The white and yellow markings shall be retroreflective. Reflective values measured in accordance with the photometric testing procedure of ASTM D 4061 shall not be less than those listed in the table below. The coefficient of retroreflected luminance, R<sub>L</sub>, shall be expressed as average millicandelas/footcandle/sq ft (millicandelas/lux/sq m), measured on a 3.0 x 0.5 ft (900 mm x 150 mm) panel at 86 degree entrance angle.

Coefficient of Retroreflected Luminance, R <sub>L</sub> , Dry					
Type I			Type IV		
Observation Angle	White	Yellow	Observation Angle	White	Yellow
0.2°	2700	2400	0.2°	1300	1200
0.5°	2250	2000	0.5°	1100	1000

Wet retroreflectance shall be measured for Type IV under wet conditions according to ASTM E 2177 and meet the following.

Wet Retroreflectance, Initial R∟		
Color	R <sub>L</sub> 1.05/88.76	
White	300	
Yellow	200	

- (c) Skid Resistance. The surface of Type IV and blackout markings shall provide a minimum skid resistance of 45 BPN when tested according to ASTM E 303.
- (d) Application. The pavement marking tape shall have a precoated pressure sensitive adhesive and shall require no activation procedures. Test pieces of the tape shall be applied according to the manufacturer's instructions and tested according to ASTM D 1000, Method A, except that a stiff, short bristle roller brush and heavy hand pressure will be substituted for the weighted rubber roller in applying the test pieces to the metal test panel. Material tested as directed above shall show a minimum adhesion value of 750 g/in. (30 g/mm) width at the temperatures specified in ASTM D 1000. The adhesive shall be resistant to oils, acids, solvents, and water, and shall not leave objectionable stains or residue after removal. The material shall be flexible and conformable to the texture of the pavement.
- (e) Durability. Type IV and blackout tape shall be capable of performing for the duration of a normal construction season and shall then be capable of being removed intact or in large sections at pavement temperatures above 40 °F (4 °C) either manually or with a roll-up device without the use of sandblasting, solvents, or grinding. The Contractor shall provide a manufacturer's certification that the material meets the requirements for being removed after the following minimum traffic exposure based on transverse test decks with rolling traffic.
  - (1) Time in place 400 days
  - (2) ADT per lane 9,000 (28 percent trucks)
  - (3) Axle hits 10,000,000 minimum

Samples of the material applied to standard specimen plates will be measured for thickness and tested for durability in accordance with ASTM D 4060, using a CS-17 wheel and 1000-gram load, and shall meet the following criteria showing no significant change in color after being tested for the number of cycles indicated.

Test	Type I	Type IV	Blackout
Minimum Initial Thickness, mils (mm)	20 (0.51)	65 (1.65) <sup>1/</sup> 20 (0.51) <sup>2/</sup>	65 (1.65) <sup>1/</sup> 20 (0.51) <sup>2/</sup>
Durability (cycles)	5,000	1,500	1,500

- 1/ Measured at the thickest point of the patterned surface.
- 2/ Measured at the thinnest point of the patterned surface.

The pavement marking tape, when applied according to the manufacturer's recommended procedures, shall be weather resistant and shall show no appreciable fading, lifting, or shrinkage during the useful life of the marking. The tape, as applied, shall be of good appearance, free of cracks, and edges shall be true, straight, and unbroken.

- (f) Sampling and Inspection.
  - (1) Sample. Prior to approval and use of Type IV pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The independent laboratory test report shall state the lot tested, the manufacturer's name, and the date of manufacture.
    - After initial approval by the Department, samples and certification by the manufacturer shall be submitted for each subsequent batch of Type IV tape used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, the manufacturer's name, and the date of manufacture.
  - (2) Inspection. The Contractor shall provide a manufacturer's certification to the Engineer stating the material meets all requirements of this specification. All material samples for acceptance tests shall be taken or witnessed by a representative of the Bureau of Materials and shall be submitted to the Engineer of Materials, 126 East Ash Street, Springfield, Illinois 62704-4766 at least 30 days in advance of the pavement marking operations."

# 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 ±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

<u>Description</u>. 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.

<u>Types of Steel Products</u>. 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.

<u>Documentation</u>. 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 X 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<sub>M</sub> 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.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI<sub>L</sub> and MPI<sub>M</sub> in excess of five percent, as calculated by:

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.

# 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 Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m )	13 lb/ft (19 kg/m)
Light Pole w/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 BIDDERS LIST INFORMATION (BDE)

Effective: January 2, 2025 Revised: March 2, 2025

In accordance with 49 CFR 26.11(c) all DBE and non-DBEs who bid as prime contractors and subcontractors shall provide bidders list information, including all DBE and non-DBE firms from whom the bidder has received a quote or bid to work as a subcontractor, whether or not the bidder has relied upon that bid in placing its bid as the prime contractor.

The bidders list information shall be submitted with the bid using the link provided within the "Integrated Contractor Exchange (iCX)" application of the Department's "EBids System".

# SUBMISSION OF PAYROLL RECORDS (BDE)

Effective: April 1, 2021 Revised: November 2, 2023

<u>FEDERAL AID CONTRACTS</u>. 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, social security number, last known address, telephone number, email address, classification(s) of work actually performed, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), daily and weekly number of hours actually worked in total, deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit certified payroll records to the Department each week from the start to the completion of their respective work, except that full social security numbers, last known addresses, telephone numbers, and email addresses shall not be included on weekly submittals. Instead, the payrolls need only include an identification number for each employee (e.g., the last four digits of the employee's social security number). The submittals shall be made using LCPtracker Pro software. The software is web-based and can be accessed at <a href="https://lcptracker.com/">https://lcptracker.com/</a>. 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."

<u>STATE CONTRACTS</u>. 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 <a href="https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx">https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/Prevailing-Wage-Portal.aspx</a>. 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 <a href="https://lcptracker.com/">https://lcptracker.com/</a>. 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."

#### **SURVEYING SERVICES (BDE)**

Effective: April 1, 2025

Delete the fourth paragraph of Article 667.04 of the Standard Specifications.

Delete Section 668 of the Standard Specifications.

#### **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: January 2, 2025

The following applies to all Disadvantaged Business Enterprise (DBE) trucks on the project, whether they are utilized for DBE goal credit or not.

The Contractor shall notify the Engineer at least three days prior to DBE trucking activity.

The Contractor shall submit a weekly report of DBE trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) 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 Revised: January 1, 2025

Add the following to Article 701.03 of the Standard Specifications:

"(g) 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 shall be MASH compliant.

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 shall be MASH compliant.

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 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350, 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 sign supports, speed feedback displays, 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 compliant is available, an NCHRP 350 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.
- (I) 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 <a href="http://www.state.il.us/agency/idol/">http://www.state.il.us/agency/idol/</a> 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.