27

September 19, 2025 Letting

Notice to Bidders, Specifications and Proposal

Contract No. 62Y32
Various Counties
Section 2025-1083-GRR
Various Routes
District 1 Construction Funds

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)

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. September 19, 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. 62Y32
   Various Counties
   Section 2025-1083-GRR
   Various Routes
   District 1 Construction Funds

This project consists of new guardrail and repair of damaged guardrail and traffic barrier terminals, includes removing damaged guardrail components and replacing all removed guardrail components. This work is located on various State maintained arterial and expressway routes and at other district-wide locations within the counties of Cook, DuPage, Kane, Lake, McHenry and Will.

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,
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.

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

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

TABLE OF CONTENTS

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 2025-1083-GRR, Various Counties, Contract No. 62Y32 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Various Routes
Section 2025-1083-GRR
Various Counties
Contract No. 62Y32

LOCATION OF IMPROVEMENT

This work is located on various State maintained arterial and expressway routes and at other district-wide locations as determined by the Department within the counties of Cook, DuPage, Kane, Lake, McHenry and Will.

DESCRIPTION OF IMPROVEMENT

The work to be completed under this contract consists of installation of new guardrail and repair of damaged guardrail and traffic barrier terminals, performed on a work order basis. This work includes removing damaged guardrail components and replacing all removed guardrail components with new material furnished by the Contractor. Guardrail shall be repaired according to the details and standards in the plans.

This work also includes removing damaged traffic barrier terminal components and replacing all removed traffic barrier terminal components with new material furnished by the Contractor.

COMPLETION DATE

The Contractor shall schedule his/her operations to complete all work issued, including all clean-up work and opening all roadways to traffic, from **contract execution date to completion date**, **December 31, 2026.**

The provisions of Article 108.09 of the Standard Specifications shall apply for this contract's completion date.

PROTECTION FOR DAMAGED LOCATIONS

The Contractor shall be required to install and maintain barricades with flashing lights at priority locations that have not been repaired within (7) seven calendar days after the date of the issuance of the work order.

The Department will initially have barricades installed at the priority locations and the Contractor will have the option to assume the cost of these rented barricades after the (7) seven days referred to above or have the barricades replaced with others. If the Contractor fails to exercise either of the above options, he shall be liable to the Department in the amount of $2.00 per barricade per day, not as a penalty but as liquidated damages.

GUARDRAIL REPAIR
Effective June 1, 2012

PROSECUTION OF THE WORK

The Engineer will issue a work order to the Contractor prior to the Contractor proceeding with any work on this contract.

INTERPRETATION OF QUANTITIES AND PAYMENT

The quantities in the Summary of Quantities are approximate and include items necessary to repair existing damaged guardrail and an estimate of items necessary to repair damage that may occur during the Contract.

Quantities listed are estimates and may be increased, decreased, or omitted at the Department's discretion without adjustment in unit prices.

Payment for the work under this contract shall be made according to the schedule of prices in the contract and as herein after described. Prices shall include all labor, materials, and equipment necessary to complete the work satisfactorily. Before any payment for work is authorized, for a given work order, all repairs must be completed satisfactorily, and the guardrail installation must be functional as intended.

The Contractor is hereby informed and shall understand that payment will be made only for actual quantities utilized and accepted as satisfactory.

WORK ORDER

The Contractor shall not commence any work without an authorized **Work Order**, with the exception of priority work. Work Orders may be issued from the contract execution date until seven (7) calendar days prior to contract completion.

Each Work Order shall specify the following:

- Class of work
- Issue date
- Work order number
- Location
- Item description
- Quantity of removals or repairs

The Contractor shall strictly adhere to the work and quantities enumerated in the Work Order. Should additional work become necessary during repairs, the Contractor shall obtain the **Engineer's prior approval** before proceeding. Work performed without such prior approval shall not be compensated. A sample Work Order is appended to the Special Provisions.

Work Order Procedures

All Work Orders shall be issued by the Engineer to the Contractor. A copy of the Work Order shall be transmitted via email, and the original shall be provided to the Contractor during the subsequent progress meeting. There is **no guaranteed minimum or maximum** number of Work Orders for this contract.

The Contractor shall submit a proposed daily work schedule by **8:00 a.m. on the preceding workday**. Work for the day shall not be approved if this schedule is not submitted punctually. The Contractor shall ensure that multiple personnel are trained to submit all required information by the stipulated deadline to the Engineer and IDOT Expressway Closure System if the Work Order is located on an expressway.

The Contractor shall also submit a list of completed work from the prior workday. The Contractor shall not revise the sequence of daily planned work without the Engineer's approval. The Contractor shall contact the Engineer (Monday through Friday) and provide at least **twenty-four (24) hours' notice** for Saturday, Sunday, or holiday work.

Site Inspection and Traffic Control

The Contractor shall assign personnel qualified in **traffic control and materials** to physically inspect, in detail, all work sites as specified in the Work Order. This inspection shall determine the required traffic control and protection obligations, along with necessary new material requirements, prior to the commencement of work. The Contractor’s markings shall be a different color than the markings placed by the Department of Transportation. In advance of any repair, the Contractor’s supervisory personnel shall be knowledgeable of and fully capable of directing their workforce to all Work Order locations.

Work Completion and Acceptance

When the Engineer is not present, the Contractor shall initial and record the completion date on each newly installed section/panel of guardrail with a permanent marker. The Contractor shall also initial and record the completion date on the Work Order and submit it to the Engineer for final acceptance. The Contractor shall be provided with a copy of the Work Order bearing the signature of final acceptance for their records.

Work Order Initiation

- **High Priority and Priority Work:** Initiated by a verbal order from the Engineer, which shall always be followed by a written Work Order.
- **Regular Work:** Initiated by a written Work Order from the Engineer.
- **Winter Work:** Initiated by a written Work Order from the Engineer.

Classes of Work

1. High Priority Work

High Priority work is defined as work required to correct a condition deemed by the Department to be an immediate hazard to the public, as designated by the Engineer. This pertains to conditions of such severity that life and/or property are potentially endangered, or to a pressing operational need of the Department requiring immediate corrective action.
The Contractor shall be available to respond to service calls at all times, including Saturdays, Sundays, and Holidays. The Department requests that the work be completed within seventy-two (72) hours after the issuance of the High Priority Work Order. The location of guardrail and appurtenances for high priority repair shall be determined by the Engineer and may be required at any time.

2. Priority Work

Priority work is defined as work required to correct a condition that poses a hazard to the public or constitutes a pressing operational need for the Department, necessitating priority corrective action. The location of guardrail and appurtenances for priority repair shall be determined by the Engineer and may be required at any time between the starting date and the completion date.

3. Regular Work

Regular Work is defined as work involving situations where the extent or nature of damage does not pose an immediate hazard to the public. This type of work shall generally be grouped by location for efficiency of repair.

4. Winter Work

Winter work is defined as regular work issued between December 1 and February 28, inclusive. Winter work shall necessitate the Contractor to remove snow and ice at the repair site prior to repair. Additional equipment may also be required to repair the damaged location due to frozen ground. This work, including snow and ice removal and the use of additional equipment, shall not be compensated separately but shall be considered part of the repair work, with no additional compensation provided.

COMPLETION TIME FOR WORK ORDERS

The Contractor shall provide the necessary manpower and equipment to satisfactorily complete all work orders to meet the following deadlines.

Class	Completion Time
High Priority	72 hours from time of issuance
Priority	7 calendar days from date issued
Regular	21 calendar days from date issued
Winter	28 calendar days from date issued

FAILURE TO COMPLETE OR REPAIR – LIQUIDATED DAMAGES

Failure to make timely repairs will endanger public safety, cause public inconvenience, and subject the Department to public criticism. All work shall be completed within the designated completion time for each work order. The Contractor understands and agrees that performance will be expected in varying amounts and at various locations designated in the contract, in accordance with the Work Orders issued by the Engineer.

Should the Contractor fail to complete the work order within the completion time stipulated, the Contractor shall be liable and shall pay to the Department, not as a penalty but as liquidated damages, as specified in the following amounts:

Class	Completion Time
High Priority	$15 per hour
Priority	$100 per calendar day
Regular	$25 per calendar day
Winter	$25 per calendar day

The Department will deduct these liquidated damages from the monies due or to become due to the Contractor from the Department. The provisions of Article 108.09 of the Standard Specifications shall apply to contract completions date.

CALENDAR DAYS.

A calendar day is every day shown on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four (24) hours later.

A calendar day will be charged for every day shown on the calendar except as follows:

a) When the temperature or wind chill factor, as officially reported by the United States Weather Bureau at Chicago O'Hare Field, reaches zero degrees Fahrenheit or below during any portion of that day.

b) When weather conditions, emergency conditions and/or unforeseen highway operational reasons prevent shoulder or lane closures required for the work.

c) When the Contractor requests and is denied approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer for lane, ramp and shoulder closures required for the work on Freeways and/or Expressways in District One.

d) During any legal holiday period as defined Article 107.09.

The Contractor shall petition the Engineer in writing within 48 hours for each non-chargeable calendar day request. Failure to petition in time shall be just cause to deny the petition. Approval of non-chargeable calendar day requests shall be by the sole determination of the Engineer.

SPRAY PAINT

The Contractor shall furnish the necessary spray paint and permanent markers required for the marking of components for removal. The paint shall be iridescent red, iridescent blue, or a color as specified by the Engineer. The furnishing of spray paint will not be paid for separately and the cost will be considered included in the items of work in the contract and no additional compensation will be allowed.

CLEARING

The Contractor is hereby informed and shall understand that at some locations of repairs built up earth and/or debris, water, ice, snow, shrubs, brush, branches, tree limbs, weeds and other vegetation may be encountered that must be removed in order to make the necessary repairs. The clearing of these obstructions as well as any equipment and labor required to deal with existing water regardless of depth shall be considered included as part of the contract and no additional compensation provided. All work shall be done in a neat and workmanlike manner and to the satisfaction of the Engineer.

SEEDING

Damage to turf areas shall be repaired as specified for Seeding, Class 2A in the applicable portions of Section 250 with the following requirements:

Damage occurring after October 1st shall be repaired between April 1st and April 30th of the following year.

This work will not be paid for separately but shall be considered included as part of the contract with no additional compensation provided.

REMOVAL OR REPAIR OF GUARDRAIL

No guardrail sections shall be removed from State right-of-way unless clearly marked for removal. The Engineer will paint an "X" on the section of guardrail to be removed and will indicate the limits of each section of guardrail to be removed by painting a vertical line at each end. The type and quantity of each piece so marked will be listed on a work order. This work order, when presented to the Contractor by the Engineer, will be an authorization for the removal or repair of the guardrail.

All material removed from the State right-of-way must be disposed of by the Contractor. None of this material may be reused on this project. Removal, transportation, and storage costs are not paid separately but are included in the contract unit price for the replacement items.

New material shall conform to the dimensions and shapes of the material to be replaced except as noted, and shall meet the requirements as specified under each item in these Special Provisions and on the plans. Damaged guardrail that has been removed shall be completely replaced on the same day.

Any ground HMA material adjacent to a concrete footing, which is removed or disturbed during the removal operations shall be restored to its original condition and to the satisfaction of the Engineer after the work has been completed. This restoration will not be paid for separately but shall be considered included with this item of work.

After the work is completed, the Contractor shall mark the repaired rail element plate using a permanent marker with the work order number and date of repairs. Immediately after the specified repairs have been made, all nut, bolts, washers, posts, rail elements and any other guardrail components, damaged or undamaged, which are to be scrapped, shall be completely removed from the State right-of-way. Failure to do so will be cause for rejection of work.

CONCRETE

When a Work Order Repair site requires **LESS** than a **yard** of Portland Cement Mix to complete the repair the Contractor will be allowed to use a **HIGH EARLY STRENGTH** Concrete Bag Mix. The **required HIGH EARLY STRENGTH** Concrete Bag Mix shall have a **Compressive strength of 2500 psi at 3 days and 3500 psi at 14 days with a slump range of 2"-3".** When a Work Order Repair site requires a **yard or more** of Portland Cement Mix to complete the repair the Contractor shall provide Portland Cement Mix as accord to the Recurring Special Provision Quality Control/Quality Assurance of Portland Cement Concrete Mixtures requirements.

WOOD RAIL

This work includes removing and disposing all damaged wood rub rail sections and associated hardware from guardrail posts, and furnishing and installing new wood rub rail sections with the required hardware in kind, as directed by the Engineer.

The wood rub rail shall comply with the requirements of Section 1007 of the Standard Specifications. Preservative treatment shall be in accordance with Article 1007.12. Each piece of timber shall carry a grade stamp and quality assurance stamp indicating class of timber and chemical retention.

The wood railing shall match the existing configuration and size of timbers and be installed closely fitted, accurately set in place, and secured using fasteners and braces. All nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation. All joints shall be smooth and closed.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Method of Measurement: Wood rail will be measured for payment in linear feet.

Basis of Payment: This work shall be paid for at the contract unit price per foot for WOOD RAIL.

VERTICAL ADJUSTMENT OF GUARDRAIL POST

This work consists of adjusting existing steel plate beam guardrail vertically to the height specified in the plans at locations determined and marked by the Engineer. It may be necessary for the Contractor to loosen and/or remove and replace the rail elements in order to adjust the guardrail to the required elevation.

Method of Measurement: Steel plate beam guardrail to be adjusted vertically will be measured per each guardrail post adjusted vertically.

Basis of Payment: This work will be paid for at the contract unit price each for GUARDRAIL POST-VERTICAL ADJUSTMENT.

RAIL ELEMENT PLATES

This work encompasses the removal of all damaged rail element plates and associated hardware, followed by the furnishing and installation of new 12-gauge guardrail elements with all necessary hardware as directed by the Engineer. All plates, nuts, bolts, washers, and other hardware shall be galvanized and shall match the type and design of the original and adjacent installation. The Contractor shall adjust and realign existing rail element plates adjacent to those removed and replaced, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, or any other work necessary to achieve the desired realignment is included in this item. The furnishing and installation of all bolts, nuts, washers, and other hardware required for compliance with this Special Provision are included in the contract unit bid price for this pay item and will not be paid for separately.

Method of Measurement: In order to clarify measurement and payment for work, the standard length of rail element plate shall be considered to be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6" length.

Basis of Payment: This work shall be paid for at the contract unit price each for RAIL ELEMENT PLATES.

RAIL ELEMENT PLATES (RADIUS)

This work consists of removing all damaged sections of rail element plates, including all associated hardware, and furnishing and installing new 12-gauge curved guardrail elements with all necessary hardware as directed by the Engineer. Plates, nuts, bolts, washers, and other hardware shall be galvanized and shall match the original and adjacent installation in type and design. 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 contract unit bid price for "Rail Element Plates (Radius)". The furnishing and installation of all bolts, nuts, washers, and other hardware necessary to comply with this Special Provision are included in the contract unit bid price for this pay item and will not be paid for separately. The guardrail element plates will be factory fabricated to the radius of curvature necessary to match the existing guardrail configuration or as specified by the Engineer.

Method of Measurement: In order to clarify measurement and payment for work, the standard length of radial rail element plate shall be considered to be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6".

If any portion of a standard 12'-6" rail element plate is factory fabricated to a radial shape the rail element plate shall be paid as one Radius Element Plate each.

Basis of Payment: This work shall be paid for at the contract unit price per each for RAIL ELEMENT PLATES (RADIUS).

STEEL POSTS, MODIFIED

This work consists of removing the post to be replaced, unbolting the rail elements, and furnishing and setting a new post. Replacement posts, 4" x 6" WF steel with welded base plate, shall conform to the length, size, and type of the original installation of single or double-faced steel plate beam guardrail. Posts mounted on an existing culvert shall be replaced according to the applicable portions of Standard 630101 or as directed by the Engineer. Sheared bolts shall be replaced in kind. Replacement of sheared bolts, concrete work around the bolts, and any culvert cover fill removal and replacement are included with the contract unit price for furnishing and setting steel posts, modified, and will not be paid for separately. New steel posts and base plates shall be galvanized after fabrication and shall match the configuration of the existing installation. This work also includes attaching posts to culvert headwalls, decks, or retaining walls, and shall include any and all post sizes, attachment configurations, methods, or hardware necessary to conform to existing conditions and wall shapes.

Method of Measurement: Steel Posts, Modified, will be measured per each post furnished and set.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS, MODIFIED.

SINGLE END SECTION

This work consists of removing damaged single end sections, including all associated nuts, bolts, washers, and other hardware, as directed by the Engineer. It further includes furnishing and installing new 12-gauge end sections, along with all necessary nuts, bolts, washers, and other hardware for the installation of single end sections on single element guardrail. The end sections shall match the existing and adjacent guardrail in type and design and shall be galvanized to conform with the original and adjacent installation. Refer to Standard 630001. The furnishing and installation of all bolts, nuts, washers, and other hardware necessary to comply with this Special Provision are included in the contract unit bid price for this pay item and will not be paid for separately.

Method of Measurement: Single End Sections will be measured per **each** unit furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for SINGLE END SECTION.

RETURN END SECTION

This work consists of removing damaged return end sections, including all associated nuts, bolts, washers, and other hardware, as directed by the Engineer. It further includes furnishing and installing new 12-gauge end sections, along with all necessary nuts, bolts, washers, and other hardware for the installation of return end sections on double element guardrail. The end sections shall match the existing and adjacent guardrail in type and design and shall be galvanized to conform with the original and adjacent installation. The furnishing and installation of all bolts, nuts, washers, and other hardware necessary to comply with this Special Provision are included in the contract unit bid price for this pay item and will not be paid for separately.

Method of Measurement: Return End Sections will be measured per **each** unit furnished and installed.

Basis of Payment: This work will be paid for at the contract unit price each for RETURN END SECTION.

CONNECTING END SECTION

(Varied Types - Refer to Standard 631046)

This work consists of removing damaged end sections and furnishing and installing new end sections that are connected to an existing concrete structure. Replacement of anchor bolts and concrete repairs, when required, and all nuts, bolts, washers, and other hardware, are included with this item. Other components such as posts and rail elements at the work location, if damaged, will be replaced and paid for according to the provisions in this contract for similar items. All work and material shall conform with applicable plans and specifications in this contract.

Method of Measurement: Connecting End Sections will be measured per **each** unit furnished and installed.

Basis of Payment: This work will be paid for at the contract unit price each for CONNECTING END SECTION.

STEEL RAILING (SPECIAL)

This work shall consist of furnishing and installing Bridge Rail and Bridge Rail Posts according to Section 509 and the following:

This work consists of removing all sections of damaged bridge bicycle rail and bridge rail posts including all associated fabric, hardware, and furnishing and installing new bridge bicycle rail and bridge rail posts including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

The Contractor shall adjust and realign existing bridge rail 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 considered included in the work.

The furnishing and installing of all fabric, bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

Method of Measurement: Steel Railing (Special) will be measured in **linear feet**, measured along the top edge of the rail to the limits designated by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per foot for STEEL RAILING (SPECIAL).

STEEL POSTS

This work consists of removing the damaged guardrail posts (6'-9" or 7'-6" in length) and replacement with new W6 X 9 or W6 X 8.5 or "C" shape steel posts, whichever length conforms with the present installation of single, thrie-beam or double faced steel plate beam guardrail being repaired and according to the standards shown.

The 7'-6" long posts are designed for use at the top of slopes steeper than 3:1 and where single or double beams and channels are to be mounted 2'-6-1/2" above ground level, as measured to the top of the rail.

New steel posts shall be galvanized to match the existing installation. All work shall conform with applicable standards and as directed by the Engineer.

Also, included in this item is any and all hand digging that may be necessary due to (but not limited to), buried utility proximity, and also the coring of an appropriate size hole through Portland Cement Concrete (but not limited to), HMA or other hard finished surface.

Method of Measurement: Steel Posts will be measured per **each** post furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS.

REALIGNING POSTS

At designated locations of steel plate beam guardrail where the existing undamaged posts can be realigned and restored to the proper alignment without removing said posts from the ground, the posts shall be so plumbed and realigned by a method which does not require the pulling of the posts out of the existing post holes. The posts shall be straightened with their front faces on the line shown on the plans, or as ordered by the Engineer and with their tops and bolt holes at the correct height so that the rail element plates bolted to them will be parallel to the surface of the shoulder.

The work as described under this Special Provision entitled "Realigning Posts" shall be included in the contract unit bid price for the pay items involved.

REMOVING AND RESETTING POSTS

Description: This work consists of unbolting rail elements, removing and resetting existing undamaged steel plate beam guardrail posts to the proper alignment and elevation, including excavating and backfilling and refastening all loosened rail elements, all according to the applicable portions of the Standard Specifications at locations directed by the Engineer. The reset posts shall be according to Standard 630001 and as approved by the Engineer.

Method of Measurement**:** Removing and Resetting Posts will be measured per **each** post removed and reset.

Basis of Payment: This work shall be paid for at the contract unit price each for REMOVING AND RESETTING POSTS.

REATTACHING AND REALIGNING TERMINALS AND RAIL ELEMENT PLATES

This work consists of reattaching and realigning existing traffic barrier terminals and guardrail plates at locations as designated by the Engineer where the existing traffic barrier terminals and guardrail plates are undamaged but are loosened or missing bolts or any hardware needed to restore its proper originally installed alignment and function.

This work includes all necessary adjusting, unbolting or refastening of traffic barrier terminals and rail plates to the proper alignment and elevation. This work also includes all cable assemblies, bolts, nuts, washers, and any hardware necessary, all according to the applicable portions of the Standard Specifications and as directed by the Engineer. No used bolts or any hardware will be permitted.

This work also includes replacement of first post if found damaged, cable assembly if missing or corroded, a terminal marker and guardrail markers.

Method of Measurement**:** Reattaching and Realigning Terminals and Rail Element Plates will be measured per **each** location where the work is performed.

Basis of Payment: This work shall be paid for at the contract unit price per each for REATTACHING AND REALIGNING TERMINALS AND RAIL ELEMENT PLATES.

SPLICE PLATE 12"

This work consists of removing damaged splice plates (Plate "A", Standard 630001), furnishing and installing new splice plates and all nuts, bolts and hardware necessary thereto as directed by the Engineer.

The splice plates will not be paid for separately, but shall be included in the contract unit bid price for "Rail Element Plates".

STEEL POSTS, SPECIAL

This work consists of removing posts set in concrete, unbolting the rail elements, and furnishing and setting a new post in Portland Cement Concrete.

Also, included in this item is any and all hand digging that may be necessary due to (but not limited to), buried utility proximity, and also the coring of an appropriate size hole through Portland Cement Concrete (but not limited to), HMA or other hard finished surface.

Where existing damaged posts are set in concrete the Contractor shall remove the damaged post and concrete, dig or auger a new hole twelve (12) inches in diameter and set a new W6 X 9 or W6 X 8.5 or "C" Shaped Steel post of the same length as that removed in concrete on the same alignment and at the proper height to coincide with the adjacent and adjoining guardrail. New steel posts shall match the existing installation.

Where existing damaged posts are not set in concrete and are shorter than the length specified in the appropriate standard due to impervious material or underground utilities encountered, the new steel posts shall be set in concrete according to the details as shown in Standard 630001 and at the proper height to coincide with the adjacent guardrail. New steel posts shall match the existing installation.

Method of Measurement**:** Steel Posts, Special, will be measured per **each** post furnished and set in concrete.

Basis of Payment: This work shall be paid for at the contract unit price each for STEEL POSTS, SPECIAL.

GUARDRAIL BLOCKS

This work consists of removing and replacing existing damaged guardrail block-outs including unbolting and re-bolting rail elements including three beam rail elements, bolts, nuts, washers and other accessories to be replaced.

Replacement block-outs shall be the same dimensions as the existing damaged block-outs and shall conform to the details and standards included in the plans.

The guardrail block-outs used as replacements at locations of Guardrail Blocks shall be untapered block-outs as shown in the detail included in the plans.

Method of Measurement**: G**uardrail Blocks will be measured per **each** block furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for GUARDRAIL BLOCKS.

TRAFFIC BARRIER TERMINAL TYPE 1, NOSE

This work consists of removing and disposing of the damaged nose piece and related hardware holding it in place, and installing a new nose as directed by the Engineer. If the Engineer determines damage has occurred to other portions of the traffic barrier terminal, the pay item for Furnishing and Installing Traffic Barrier Terminal Type 1, Special will be used. This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker which shall comply with State Standards and the plans.

Method of Measurement**: T**raffic Barrier Terminal Type 1, Nose, will be measured per each unit furnished and installed.

Basis of Payment: This work will be paid for at contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 1, NOSE.

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL

This work shall consist of furnishing and installing Traffic Barrier Terminal Type 1, Special of the type specified (Flared/Tangent) by the Engineer from the approved IDOT qualified products. Note that for all contracts let on or after July 1, 2018, only MASH-compliant devices listed on the qualified products list (QPL) are required. All terminals must meet the testing criteria contained in the Manual for Assessing Safety Hardware (MASH) and be approved by the Department. The terminal shall be installed according to the manufacturer's specifications and include all necessary transitions between the terminal and the item to which it is attached, adhering to manufacturer's specifications for installation, including the type and number of posts, foundation tubes, and soil plates. The terminal section must provide a minimum length of need of 37.5 ft (11.4 m).

This item includes the complete removal of any existing damaged or undamaged terminal section, approximately fifty (50) feet in length, where the rail element is twisted 90 degrees and terminates at an end post flush with the ground. All posts, rail element plates, and related components of the existing terminal section, including the steel end post, shall be removed. If an existing steel end post is set in a concrete anchor, the concrete anchor shall be completely removed, and the resulting hole shall be filled with sand or other suitable material approved by the Engineer. Any loosened material around posts and holes due to post removal shall be filled with suitable material and firmly compacted using appropriate tools.

This item also includes the complete removal of any existing damaged or undamaged Traffic Barrier Terminal Type 1, Traffic Barrier Type 1A, Traffic Barrier Terminal Type 1, Special, and any guardrail necessary to accommodate the new Traffic Barrier Terminal Type 1, Special. The Engineer will determine and inform the Contractor of this requirement prior to commencing repairs. All old posts shall be removed, and the remaining holes shall be filled with sand or other suitable material approved by the Engineer.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This item also includes furnishing and installing a **Direct Applied Reflectorized Terminal Marker** and **guardrail reflectors** which shall comply with State Standards and the plans, and are included in the contract unit bid price for this pay item. When poured concrete is encountered around terminal posts, any additional work required in removing existing posts or installing new ones shall be considered included in the unit price of the pay item.

If the guardrail posts need to be shortened due to the existing utilities, then the posts shall be embedded in 12-inch diameter concrete base and this work shall be included in the unit price of the item.

Method of Measurement**:** Traffic Barrier Terminal Type 1, Special, will be measured per **each** unit furnished and installed, categorized as either tangent or flared.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) TANGENT and for TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) FLARED.

TRAFFIC BARRIER TERMINAL TYPE 2

his work consists of furnishing and installing all new component parts for **Traffic Barrier Terminal Type 2** according to the Standard Specifications and all requirements of the standards, at the locations specified by the Engineer. This item also includes radius installations.

This item includes the complete removal of any existing damaged or undamaged terminal section, approximately twenty-five (25) feet in length, where the rail element is twisted 90 degrees, terminating at an end post flush with the ground. All posts, rail element plates, and related components of the existing terminal section, including the steel end post, shall be removed. If an existing steel end post is set in a concrete anchor, the concrete anchor shall be completely removed, and the resulting hole shall be filled with sand or other suitable material approved by the Engineer.

This item also includes the complete removal of any existing damaged Traffic Barrier Terminal Type 2. The Engineer will determine and inform the Contractor of this requirement prior to commencing repairs.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This work also includes the installation of **guardrail markers**. When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in the unit price of the pay item.

Method of Measurement**:** Traffic Barrier Terminal Type 2 will be measured per each unit furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 2.

TRAFFIC BARRIER TERMINAL TYPE 3, SPECIAL

This work shall consist of furnishing and installing traffic barrier terminals according to Section 631 and the following. Terminals shall be designed for bidirectional impacts and shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 230 for terminals tested prior to May 16, 1994, or Report 350 for terminals tested after that date, and will have been approved by the Department. The terminal shall be installed according to the manufacturer's specifications and shall include all necessary transitions between the terminal and the item to which it is attached. The Contractor may, without additional compensation, use the QuadGuard by Energy Absorption Systems, Inc., REACT 350, or an approved equivalent.

Included in this item is the complete removal of an existing damaged or undamaged, single or double rail terminal section having a length of approximately twenty-five (25) feet, where the rail element is twisted 90 degrees, terminating at an end post flush with the ground. All posts, rail element plates, and related components of the existing terminal section, including the steel end post, shall be removed. The existing steel end post encountered may be set in a concrete anchor or may have been driven according to the alternate requirements permissible at the time of the guardrail installation. In the event a concrete anchor is encountered, said concrete anchor shall be completely removed. After the concrete anchor is removed, the remaining hole shall be filled with sand or other suitable material approved by the Engineer.

Also included in this item is the complete removal of an existing damaged Traffic Barrier Terminal Type 3, 3A or Traffic Barrier Terminal Type 3, Special. The Engineer will make this determination and inform the Contractor prior to commencing repairs. All posts, rail element plates, and related components of the existing terminal section, as well as any length of the guardrail types needed to accommodate the new Traffic Barrier Terminal Type 3 Special, shall be removed.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers and two (2) guardrail markers which shall comply with State Standards and the plans. When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in the unit price of the pay item.

Method of Measurement**:** Traffic Barrier Terminal Type 3, Special, will be measured per **each** unit furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 3 (SPECIAL).

TRAFFIC BARRIER TERMINAL TYPE 3 SPECIAL, NOSE

This work consists of removing and disposing of the damaged nose piece and related hardware holding it in place, and installing a new nose as directed by the Engineer. If the Engineer determines damage has occurred to other portions of the traffic barrier terminal, the pay item for "Traffic Barrier Terminal Type 3, Special" will be used. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers which shall comply with State Standards and the plans.

Method of Measurement**:** Traffic Barrier Terminal Type 3 Special, Nose, will be measured per each unit furnished and installed.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL TYPE 3 (SPECIAL), NOSE.

TRAFFIC BARRIER TERMINAL TYPE 5 AND 6

This work consists of furnishing and installing all new component parts for **Traffic Barrier Terminal Type 5** and **Traffic Barrier Terminal Type 6** according to the Standard Specifications and all requirements of the Standards, at the locations specified by the Engineer.

This item also includes the complete removal of any existing damaged or undamaged substandard Traffic Barrier Terminal Type 5 or Type 6, and any other existing components. The Engineer will make this determination and inform the Contractor before commencing repairs. All posts, rail element plates, and related components of the existing terminal section, as well as any length of the guardrail types needed to accommodate the new Traffic Barrier Terminal Type 5 or 6, shall be removed. All shims and blocks required to facilitate proper attachment to structure walls are included in this item.

The Contractor shall adjust and realign existing rail element plates and posts adjacent to the new traffic barrier terminal, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, guardrail removal, or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This work shall also include any nonstandard sized or shaped blocks or hardware required to fit existing conditions.

If the guardrail posts need to be shortened due to the existing utilities, then the posts shall be embedded in 12-inch diameter concrete base and this work shall be included in the unit price of the item.

Method of Measurement**:** Traffic Barrier Terminal Type 5 and 6 will be measured per **each** unit furnished and installed.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC BARRIER TERMINAL, TYPE 5 and TRAFFIC BARRIER TERMINAL, TYPE 6.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminal Type 1 according to the applicable portions of the Standard Specifications, Standard B.L.R. 23, and the plans, at the locations as specified by the Engineer. This item shall be used primarily at locations where existing utility and/or geometrics preclude the upgrading to current standard Traffic Barrier Terminal Type 1, Special. 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 included in the contract unit bid price for this pay item. This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker and Guardrail Reflectors which shall comply with State Standards and as shown in the plans and shall be included in the contract unit bid price for this pay item. When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in the unit price of the pay item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 1 will be measured per **each** terminal repaired.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL

This work consists of removing and replacing all damaged components from the approach nose of the terminal, up to and including the second post and the first 25 feet of rail element plate according to the Standard Specifications and at the locations as specified by the Engineer. The Contractor shall adjust and realign existing rail element plates and posts adjacent to or within the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating, filling post holes or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This item shall also include the furnishing and installing of a Direct Applied Reflectorized Terminal Marker and Guardrail Reflectors, if needed, which shall comply with State Standards and the plans and shall be included in the contract unit bid price for this pay item. Also included in the cost of this item are cable assemblies, noses and all other hardware. When poured concrete is encountered around posts, any additional work required in removing existing posts or installing new posts shall be considered included in unit price of the pay item.

If the guardrail posts need to be shortened due to the existing utilities, then the posts shall be embedded in 12-inch diameter concrete base and this work shall be included in the unit price of the item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 1, Special, will be measured per **each** terminal repaired.

Basis of Payment: This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL.

When poured concrete is encountered around posts, any additional work required in removing existing posts or installing new posts shall be considered included in unit price of the pay item.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL- POST

This work consists of removal and replacement of a damaged wood post and block and related hardware of a Traffic Barrier Terminal Type 1 Special according to the Standard Specifications and at the locations as specified by the Engineer. 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 included in the contract unit bid price for this pay item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 1, Special - Post, will be measured per **each** post removed and replaced.

Basis of Payment: This work will be paid for at the contract unit price per each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - POST.

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

This work consists of removal and replacement of a damaged 25' rail element plate and related hardware of a Traffic Barrier Terminal Type 1, Special according to the Standard Specifications and at the locations as specified by the Engineer. 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 included in the contract unit bid price for this pay item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 1, Special - Rail Element Plate, will be measured per each 25-foot rail element plate removed and replaced.

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

REPAIR TRAFFIC BARRIER TERMINAL TYPE 2

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminal Type 2 according to applicable portions of the Standard Specifications, Standard 631011, and at the locations as specified by the Engineer. This shall also include radius Type 2 locations. 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, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This item shall also include the furnishing and installing of a direct applied reflectorized Terminal Markers and Guardrail Reflectors. When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in the unit price of the pay item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 2 will be measured per each terminal repaired.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 3, SPECIAL

This work consists of removing and replacing damaged components of existing Traffic Barrier Type 3, Special according to the Standard Specifications and the locations as specified by the Engineer. The Contractor shall adjust and realign rail element plates and posts adjacent to the traffic barrier terminal repaired, as directed by the Engineer. Unbolting, bolting, adjusting, realigning, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for this pay item. This item shall also include the furnishing and installing of two (2) Direct Applied Reflectorized Terminal Markers and two (2) guardrail markers, and shall comply with State Standards and the plans. When concrete is encountered poured around posts, any additional work required in removing existing posts or installing posts or installing new ones shall be considered included in the unit price of the pay item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 3, Special, will be measured per each terminal repaired.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL TYPE 3 SPECIAL.

REPAIR TRAFFIC BARRIER TERMINAL TYPE 5 AND 6

This work consists of removing and replacing damaged components of existing Traffic Barrier Terminals Type 5 and 6 according to the applicable portions of Section 630, Standards 631026, 631031 and the plans, at the locations as specified by the Engineer.

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, excavating or any other work necessary to accomplish the desired realignment shall be included in the contract unit bid price for the pay items involved. This work shall also include any nonstandard sized or shaped blocks or hardware required to fit existing conditions.

If damage occurs only to posts, it shall be paid for according to the THRIE-BEAM POSTS section of this special provision. If damage occurs only to transition plate, it shall be paid for according to the THRIE BEAM GUARDRAIL ELEMENT PLATES section of this special provision.

The furnishing and installing of transition plates (Thrie-Beam to “W” Section) and all necessary hardware will not be paid for separately, but shall be included in the cost of “Thrie-Beam Guardrail Element Plates”.

If the guardrail posts need to be shortened due to the existing utilities, then the posts shall be embedded in 12-inch diameter concrete base and this work shall be included in the unit price of the item.

Method of Measurement**:** Repair Traffic Barrier Terminal Type 5 and 6 will be measured per **each** terminal repaired.

Basis of Payment: This work will be paid for at the contract unit price each for REPAIR TRAFFIC BARRIER TERMINAL, TYPE 5 and REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6.

REPAIR STEEL PLATE BEAM GUARDRAIL TYPE B AND C

This work consists of removing and replacing damaged steel plate beam guardrail Type B and C with all new components according to the applicable portions of the Standard Specifications, Standard 630001 and as directed by the Engineer. This work shall include proper disposal of damaged guardrail.

Steel Plate Beam Guardrail Type B is utilized to stiffen the guardrail as it approaches a more rigid barrier, such as a concrete structure, by utilizing a post spacing of 3'-1½" .
In the event the end section that is connected to the concrete structure is damaged, its replacement will be measured and paid for separately as "Connecting End Section" as described elsewhere in these Special Provisions.

Steel Plate Beam Guardrail Type C consists of guardrail mounted on a concrete structure, with block-outs spaced 3'-1-1/2" and anchored to the concrete structure with two-unit expansion anchors. Steel posts are not utilized in this installation.

If the guardrail posts need to be shortened due to the existing utilities, then the posts shall be embedded in 12-inch diameter concrete base and this work shall be included in the unit price of the item.

Method of Measurement: Repair Steel Plate Guardrail Type B and Type C will be measured in linear feet. The length paid for will be the overall length measured along the top edge of the rail element to the limits as designated and marked by the Engineer. Any posts or blocks replaced will not be paid separately and shall be considered included in the unit price of the pay item.

Basis of Payment: This work will be paid for at the contract unit price per foot for REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE B and REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE C

THRIE-BEAM GUARDRAIL ELEMENT PLATES

This work consists of removing damaged Thrie-Beam Guardrail Element Plates, including all associated hardware, and furnishing and installing new Thrie-Beam Guardrail Element Plates, including all necessary hardware and metal blockouts according to the details as shown on the plans and as directed by the Engineer. The Contractor shall adjust and realign guardrail element plates adjacent to guardrail 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 contract unit bid price for this pay item. The furnishing and installing of transition plates (Thrie-Beam to "W" Section) and all necessary hardware will not be paid for separately, but shall be included in the cost of "Thrie-Beam Guardrail Element Plates". The furnishing and installing of all bolts, nuts, washers and other hardware necessary to complete the installation will not be paid for separately, but shall be included in the contract unit bid price for this pay item.

Method of Measurement: Thrie-Beam Guardrail Element Plates will be measured as each element plate replaced. For clarification of measurement and payment, the standard length of thrie-beam guardrail element plates shall be **12'-6"**. In the event existing damaged guardrail element plates to be removed and replaced measure 25 feet in length, they shall be considered as two (2) guardrail element plates of standard 12'-6" length.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM GUARDRAIL ELEMENT PLATES, which price shall include realigning adjacent guardrail element plates and/or posts and all associated hardware as specified by the Engineer.

NOTE: In the event a thrie-beam connecting end section attached to a concrete structure is damaged, the removal, replacement and basis of payment shall be according to the special provisions titled "CONNECTING END SECTION" found elsewhere in these Special Provisions.

THRIE BEAM POSTS

This work consists of removing damaged guardrail posts (6'-9" or 7'-6" in length) and replacing them with new W6 x 9, W6 x 8.5, or "C" shape steel posts. The chosen length shall conform to the existing installation of thrie-beam faced steel plate beam guardrail being repaired and adhere to the standards shown. The 7'-6" long posts are specifically designed for use at the top of slopes steeper than 3:1 and where single or double beams and channels are to be mounted 2'-6 1/2" above ground level, as measured to the top of the rail. New steel posts shall be galvanized to match the existing installation. All work shall conform with applicable standards and as directed by the Engineer.

Method of Measurement**:** Thrie-Beam Posts will be measured per each post furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM POSTS.

THRIE-BEAM RADIUS ELEMENT PLATES

This work consists of removing all sections of damaged thrie beam guardrail radius plates including all associated hardware, and furnishing and installing new 12-gauge guardrail curved elements including all necessary hardware where directed by the Engineer. Plates, nuts, bolts, washers and other hardware shall be galvanized and shall match the original and adjacent installation as to type and design.

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 contract unit bid price for the pay items involved.

The furnishing and installing of all bolts, nuts, washers and other hardware necessary to comply with the above mentioned Special Provision will not be paid for separately, but shall be included in the contract unit bid price for the pay items involved.

The guardrail element plates will be factory fabricated to the radius of curvature necessary to match the existing guardrail configuration or as specified by the Engineer.

Method of Measurement: Thrie-Beam Radius Element Plates will be measured per each furnished and installed. To clarify measurement and payment for work, the standard length of radial rail element plate shall be 12'-6". In the event existing damaged rail element plates to be removed and replaced measures 25 feet in length, they shall be considered as two (2) rail element plates of standard 12'-6".

If any portion of a standard 12'-6" rail element plate is factory fabricated to a radial shape the rail element plate shall be paid as one Thrie-Beam Radius Element Plate each.

Basis of Payment: This work shall be paid for at the contract unit price per each for THRIE BEAM RADIUS ELEMENT PLATES.

THRIE-BEAM MODIFIED BLOCKS

This work consists of removing the damaged block being replaced, unbolting the thrie-beam rail element or elements, and furnishing and installing a new thrie-beam modified block. The new block shall be as shown in the plans. All nuts, bolts, washers, and other required hardware shall be included in the contract unit bid price for this pay item and will not be paid for separately.

Method of Measurement**:** Thrie-Beam Modified Blocks will be measured per **each** block furnished and installed.

Basis of Payment: This work shall be paid for at the contract unit price each for THRIE-BEAM MODIFIED BLOCKS.

CURB REMOVAL (PARTIAL)

This work shall consist of the partial depth removal of the existing concrete curb to an elevation 1-1/2 inches above the existing gutter flowline where the existing curb and gutter in advance of and adjacent to the guardrail terminal section repair location has a curb height greater than two (2) inches. This work shall be done according to the applicable portions of Section 440 and according to the details and standards in the plans, at locations for "Traffic Barrier Terminal, Type 1 (Special)", and for "Repair Traffic Barrier Terminal Type 1 Special", and as directed by the Engineer.

Included in this work is all related transitional work, grading, shoulder widening, roadside turf restoration and any other work required in advance of and adjacent to traffic barrier terminals to be repaired to comply with all details and standards in the plans.

The Contractor shall remove the top portion of the existing curb in a manner which will provide a smooth straight line by using a self-propelled cold milling process, a concrete sawing process, or a process approved by the Engineer, and shall have an effective means of preventing dust from escaping into the air.

Any curb and gutter damaged by the Contractor's operations shall be replaced at the Contractor's expense.

Traffic barrier terminals shall be repaired according to the details and standards in the plans. Curb removal and all related work in advance of and adjacent to traffic barrier terminals to be repaired that is required to comply with all applicable sections of the standard specifications, the details and standards in the plans shall be paid for as CURB REMOVAL (PARTIAL).

The intent of this contract is to provide prompt repair of damaged guardrail and traffic barrier terminals. The locations of damaged guardrail and traffic barrier terminals to be repaired shall be determined by the Engineer.

Method of Measurement**:** Curb Removal (Partial) will be measured in linear feet along the top of the curb to the limits designated by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per foot for CURB REMOVAL (PARTIAL).

CONTRACTOR'S RESPONSIBILITY FOR DAMAGE TO EXISTING STRUCTURES

Extreme care shall be exercised when driving posts since there are drainage structures, storm sewers, sign foundations, culverts, electrical and surveillance conduit, and other existing objects within the immediate work limits of this project. Operations are to be conducted in a manner which will minimize damage to the surrounding area.

The Contractor shall be held responsible for any damage to existing structures resulting from his operations. The Contractor shall, at his own expense, restore the damaged structures to a condition equal to that existing before such damaged was done by repairing, rebuilding or replacing it as directed by the Engineer. Where, in the opinion of the Engineer, the Contractor through his operations has excessively damaged the surrounding area, the Contractor shall restore the surrounding area to a condition meeting the satisfaction of the Engineer at his own expense.

No extra compensation will be allowed to the Contractor for compliance with this requirement.

THE CONTRACTOR'S LIABILITY

The Contractor is responsible for protecting trees, shrubs, and seeded areas on or adjacent to the work site from damage during operations, to the Engineer's satisfaction. The Contractor is liable for any damage or destruction of property, whether public or private, resulting from negligence, misconduct, or omission in performing or failing to perform the work, or due to defective work or unsatisfactory materials. This responsibility remains until the work is completed and accepted in accordance with these Special Provisions.

Any damage to public or private property must be repaired by the Contractor to its original condition at no additional cost to the Department..

FINAL CLEAN-UP

All final cleaning up shall conform to the requirements set forth in Article 104.06. This will be required at each location where repairs have been completed

SAMPLE WORK ORDER

Illinois Department of Transportation

Guardrail Repair Work Order No. _____

Date: _____ Prepared By: _____ Contract: _____

☐ Cook	☐ DuPage	☐ Kane
☐ Lake	☐ McHenry	☐ Will

☐ North	Team Section Name
☐ South	

Marked Route: _____ Municipality: _____

Location:

Item	Unit	Quantity	Item	Unit	Quantity
F&I Rail Ele Pits	Ea.		F&I Single End Section	Ea.	
F&I Radius Ele Pits	Ea.		Terminal Marker DA	Ea.	
F&I Gdrl Channel	Ea.		Guardrail Marker	Ea.	
F&I Gdrl Blocks	Ea.		Repair Spbgr Ty B	m	
F&S Steel Posts	Ea.		Repair Spbgr Ty C	m	
F&S Steel Post Mod	Ea.		Repair Tr. Bar. Term. T1	Ea.	
Gdrl Post Vert Adj	Ea.		Repair Tr. Bar. Term. T1 Spl	Ea.	
Rem & Reset Posts	Ea.		Repair Tr. Bar. Term. T2	Ea.	
Realign Posts	Ea.		Repair Tr. Bar. Term. T3 Spl	Ea.	
Tr. Bar. Term. T1	Ea.		Repair Tr. Bar. Term. T4	Ea.	
Tr Bar. Term T1 Spl	Ea.		Repair Tr. Bar. Term. T5	Ea.	
F&I Tr. Bar. Term. T1 Nose	Ea.		Repair Tr. Bar. Term. T6	Ea.	
Tr. Bar. Term. T2	Ea.		Repair Tr. Bar. Term. T8	Ea.	
Tr. Bar. Term. T3 Spl	Ea.		Repair Tr. Bar. TISPLPLT	Ea.	
			Repair Tr. Bar. TISPLPST	Ea.	

Note: The contractor shall inspect, in detail, the site of work to determine the required traffic control and protection before proceeding with the work.

Special Instructions: _____

Authorization of Work

Resident Signature

Date Work Order Issued | Contractor Initials

Certification of Completed Work

Contractor Signature

Date Work Order Completed

Distribution

White – Contractor
Canary – Resident
Pink – Resident
Gold - Inspector

Inspection and Acceptance of Completed Work

Inspector Signature

Date Work Order Inspected and Accepted
This is to certify that the work order has been completed

Printed 7/6/2012

D1 OP0032 (04/14/11)

NOTIFICATION OF STATE ELECTRICAL MAINTENANCE CONTRACTOR

The Contractor prior to the commencement of his work shall notify the State Electrical Maintenance Contractor of his intent to perform this work. Upon request from the Contractor, the State Electrical Maintenance Contractor will locate any State-buried cable, conduit or other electrical facility which may interfere with the Contractor's operations, without charge to him.

Should any damage occur to any State electrical facility through the Contractor's operations, the Contractor shall report the known or suspected damage to the State Maintenance Contractor and the Engineer. If repairs are needed, the Engineer will authorize the Electrical Maintenance Contractor to effect repairs. All repairs or replacement of damaged equipment shall conform to the requirements of the original installation.

The Electrical Maintenance Contractor shall invoice the Contractor directly for the cost of the repair. A copy of this invoice shall be forwarded to the Engineer. Final payment of the contract shall not be processed until a release from the Electrical Maintenance Contractor is furnished to the Engineer.

No extra compensation shall be allowed the Contractor for compliance with these requirements or for any expense incurred to effect repairs to damaged electrical facilities.

TRAFFIC CONTROL PLAN
Effective: September 30, 1985
Revised: January 1, 2007

Traffic Control shall be according to the applicable sections of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS:

701006, 701011, 701106, 701201, 701301, 701311, 701336, 701400, 701401, 701411, 701421, 701426, 701427, 701428, 701501, 701502, 701601, 701606, 701701, 701801, 701901.

DETAILS:

Entrance Ramp and Closure Details (TC-08)
Traffic Control Details for Freeway Single and Multi-Lane Weave (TC-09)
Traffic Control and Protection for Side Roads, Intersections and Driveways (TC-10)
Traffic Control and Protection at Turn Bays (To Remain Open to Traffic) (TC-14)
Traffic Control Details for Shoulder and Partial Ramp Closures (TC-17)
Signing for Flagging Operations at Work Zone Openings (TC-18)

SPECIAL PROVISIONS:

Public Convenience and Safety (D-1)
Nighttime Work Zone Lighting (District One)
Work Zone Traffic Control (D-1 Maintenance)
Keeping the Expressway Open to Traffic
Traffic Control for Work Zone Areas
Keeping the Arterial Roadways Open to Traffic (Lane Closures Only)
Speed Display Trailer (D-1)
Short Term and Temporary Pavement Markings (BDE)
Vehicle and Equipment Warning Lights (BDE)
Work Zone Traffic Control Devices (BDE)

PUBLIC CONVENIENCE AND SAFETY (D1)
Effective: May 1, 2012
Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

"If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply."

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

"The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After"

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

NIGHTTIME WORK ZONE LIGHTING (DISTRICT ONE)
Effective: November 1, 2008
Revised: June 15, 2010

Description. This work shall consist of furnishing, installing, maintaining, moving, and removing lighting for nighttime work zones. Nighttime shall be defined as occurring shortly before sunset until after sunrise.

Materials. The lighting shall consist of mobile and/or stationary lighting systems as required herein for the specific type of construction. Mobile lighting systems shall consist of luminaires attached to construction equipment or moveable carts. Stationary lighting systems shall consist of roadway luminaires mounted on temporary poles or trailer mounted light towers at fixed locations. Some lighting systems, such as balloon lights, may be adapted to both mobile and stationary applications.

Equipment. The Contractor shall furnish an illuminance meter for use by the Engineer. The meter shall have a digital display calibrated to NIST standards, shall be cosine and color corrected, and shall have an accuracy of ± five percent. The sensor shall have a level indicator to ensure measurements are taken in a horizontal plane.

CONSTRUCTION REQUIREMENTS

General. At the preconstruction conference, the Contractor shall submit the type(s) of lighting system to be used and the locations of all devices.

Before nighttime construction may begin, the lighting system shall be demonstrated as being operational.

Nighttime Flagging. The requirements for nighttime flagging shall be according to Article 701.13 of the Standard Specifications and the glare control requirements contained herein.

Lighting System Design. The lighting system shall be designed to meet the following.

(a) Lighting Levels. The lighting system shall provide a minimum of 5 foot candles (54 lux) throughout the work area. For mobile operations, the work area shall be defined as 25 ft (9 m) in front of and behind moving equipment. For stationary operations, the work area shall be defined as the entire area where work is being performed.

Lighting levels will be measured with an illuminance meter. Readings will be taken in a horizontal plane 3 ft (1 m) above the pavement or ground surface.

(b) Glare Control. The lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, or inspection personnel. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work and rotated outward no greater than 30 degrees from nadir (straight down). Balloon lights shall be positioned at least 12 ft (3.6 m) above the roadway.

As a large component of glare, the headlights of construction vehicles and equipment shall not be operated within the work zone except as allowed for specific construction operations. Headlights shall never be used when facing oncoming traffic.

(c) Light Trespass. The lighting system shall be designed to effectively light the work area without spilling over to adjoining property. When, in the opinion of the Engineer, the lighting is disturbing adjoining property, the Contractor shall modify the lighting arrangement or add hardware to shield the light trespass.

Construction Operations. The lighting design required above shall be provided at any location where construction equipment is operating or workers are present on foot. When multiple operations are being carried on simultaneously, lighting shall be provided at each separate work area.

The lighting requirements for specific construction operations shall be as follows.

(a) Installation or Removal of Work Zone Traffic Control. The required lighting level shall be provided at each truck and piece of equipment used during the installation or removal of work zone traffic control. Headlights may be operated in the work zone.

(b) Guardrail, Fence and High Tension Cable Barrier Median Repair. The required lighting level shall be provided by mounting a minimum of one balloon light to each piece of mobile construction equipment used in the work zone. This would include all machines but not include trucks used to transport materials and personnel or other vehicles that are continuously moving in and out of the work zone. The headlights of construction equipment shall not be operated within the work zone.

(c) Pavement Marking and Raised Reflective Pavement Marker Removal/Installation. The striping truck and the attenuator/arrow board trucks may by operated by headlights alone; however, additional lighting may be necessary for the operator of the striping truck to perform the work.

For raised reflective pavement marker removal and installation and other pavement marking operations where workers are on foot, the required lighting level shall be provided at each truck and piece of equipment.

(d) Sweeping. The required lighting level shall be mounted on the sweeping train vehicles during the sweeping operations. Headlights may be operated in the work zone.

(e) Layout, Testing, and Inspection. The required lighting level shall be provided for each active area of construction layout, material testing, and inspection. The work area shall be defined as 15 ft (7.6 m) in front and back of the individual(s) performing the tasks.

Nighttime Work Zone Lighting will not be paid for as a separate item, but the cost shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.

WORK ZONE TRAFFIC CONTROL (D-1 MAINTENANCE)
Effective: May 30, 2006
Revised: June 15, 2010

Revise Article 701.19 Method of Measurement to read:

"Traffic Control and Protection will not be measured for payment."

Revise Article 701.20 Basis of Payment to read:

"(a) Traffic Control and Protection will not be paid for as separate items, but the costs shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.

(b) Work or revisions in the phasing of construction or maintenance operations may require traffic control to be installed in accordance with a Standard other than those included in the plans. In such cases, the Standards will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for traffic control required by these added Standards will be according to Article 109.04. Revisions or modifications to increase the traffic control protection shown in the contract shall be submitted by the Contractor for approval by the Engineer. A reduction of the traffic control shown in the contract will not be allowed."

TRAFFIC CONTROL FOR WORK ZONE AREAS
Effective: September 14, 1995
Revised: January 1, 2007

Work zone entry and exit openings shall be established daily by the Contractor with the approval of the Engineer. All vehicles including cars and pickup trucks shall exit the work zone at the exit openings. All trucks shall enter the work zone at the entry openings. These openings shall be signed in accordance with the details shown elsewhere in the plans and shall be under flagger control during working hours.

The Contractor shall plan his trucking operations into and out of the work zone as well as on to and off the expressway to maintain adequate merging distance. Merging distances to cross all lanes of traffic shall be no less than 1/2 mile. This distance is the length from where the trucks enter the expressway to where the trucks enter the work zone. It is also the length from where the trucks exit the work zone to where the trucks exit the expressway. The stopping of expressway traffic to allow trucks to change lanes and/or cross the expressway is prohibited.

Failure to comply with the above requirements will result in a Traffic Control Deficiency charge. The deficiency charge will be calculated as outlined in Article 105.03 of the Standard Specifications. The Contractor will be assessed this daily charge for each day a deficiency is documented by the Engineer.

SPEED DISPLAY TRAILER (D1)

Effective: April 1, 2015
Revised: April 1, 2021

Revise the third 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."

Whenever the speed display trailer is not in use, it shall be considered non-operating equipment and shall be stored according to Article 701.11."

Add the following to Article 701.20 of the Standard Specifications:

"(k) "Speed Display Trailer will NOT be paid for by separate pay item, but its costs shall be included in the contract unit price of the various traffic control pay items.

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. (125mm 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 posted 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 25mph 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 speed limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, speed 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."

KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)
Effective: January 22, 2003
Revised: August 10, 2017

The Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards, and the District Details.

Arterial lane closures shall be in accordance with the Standard Specifications, Highway Standards, District Details, and the direction of the Engineer. The Contractor shall request and gain approval from the Engineer seventy–two (72) hours in advance of all long-term (24 hrs. or longer) lane closures.

Arterial lane closures not shown in the staging plans will not be permitted during **peak traffic volume hours**.

Peak traffic volume hours are defined as weekdays (Monday through Friday) from
6:00 AM to 8:30 AM and 4:30 PM to 6:00 PM.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at locations approved by the Engineer in accordance with Articles 701.08 and 701.11 of the Standard Specifications.

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified above, the Contractor shall be liable to the Department for the amount of:

One lane or ramp blocked = $ 1000 / 15 min

Two lanes blocked = $ 2,500 / 15 min

Not as a penalty but as liquidated and ascertained damages for each and every 15 minute interval or a portion thereof that a lane is blocked outside the allowable time limitations. Such damages may be deducted by the Department from any monies due the Contractor. These damages shall apply during the contract time and during any extensions of the contract time.

KEEPING THE EXPRESSWAY OPEN TO TRAFFIC
Effective: March 22, 1996
Revised: October 9, 2020

Whenever work is in progress on or adjacent to an expressway, the Contractor shall provide the necessary traffic control devices to warn the public and to delineate the work zone as required in these Special Provisions, the Standard Specifications, the State Standards and the District Freeway details. All Contractors' personnel shall be limited to these barricaded work zones and shall not cross the expressway.

The Contractor shall request and gain approval from the Illinois Department of Transportation's Expressway Traffic Operations Engineer at www.idotlcs.com twenty-four (24) hours in advance of all daily lane, ramp and shoulder closures and 7 days in advance of all permanent and weekend closures on all Freeways and/or Expressways in District One. This advance notification is calculated based on workweek of Monday through Friday and shall not include weekends or Holidays.

Temporary shoulder and non-system interchange partial ramp closures are allowed weekdays between 9:00 A.M. and 3:00 P.M. and between 7:00 P.M. and 5:00 A.M or as approved by the Expressway Traffic Operations Engineer. Lane closures are normally not permitted during the day. Exact hours will be determined by the Expressway Traffic Operations Engineer.

Narrow Lanes and permanent shoulder closures will not be allowed between Dec. 1st and April 1st. Permanent shoulder closures per District Detail TC-17 will only be permitted if called for in the plans or as approved by the Expressway Traffic Operations Engineer.

All daily lane closures shall be removed during adverse weather conditions such as rain, snow, and/or fog and as determined by the Engineer. Also, the contractor shall promptly remove their lane closures when Maintenance forces are out for snow and ice removal.

Additional lane closure hour restrictions may have to be imposed to facilitate the flow of traffic to and from major sporting events and/or other events.

Private vehicles shall not be parked in the work zone. Contractor's equipment and/or vehicles shall not be parked on the shoulders or in the median during non-working hours. The parking of equipment and/or vehicles on State right-of-way will only be permitted at the locations approved by the Engineer.

TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)(MAINTENANCE)
Effective: March 8, 1996
Revised: April 1, 2019

Description. This work shall include furnishing, installing, maintaining, replacing, relocating, and removing all traffic control devices used for the purpose of regulating, warning, or directing traffic. Traffic control and protection shall be provided as called for in the plans, applicable Highway Standards, District One Expressway details, Standards and Supplemental Specifications, these Special Provisions, or as directed by the Engineer.

General. The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions on the expressway through the construction zone. The Contractor shall arrange his operations to keep the closing of lanes and/or ramps to a minimum.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices. Special attention shall be given to existing warning signs and overhead guide signs during all construction operations. Warning signs and existing guide signs with down arrows shall be kept consistent with the barricade placement at all times. The Contractor shall immediately remove, completely cover, or turn from the motorist's view all signs which are inconsistent with lane assignment patterns.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices that were furnished, installed, or maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

Additional requirements for traffic control devices shall be as follows.

(a) Traffic Control Setup and Removal. The setting and removal of barricades for the taper portion of a lane closure shall be done under the protection of a vehicle with a truck/trailer mounted attenuator and arrow board per State Standard 701428 and Section 701 of the Standard Specifications. Failure to meet this requirement will be subject to a Traffic Control Deficiency. The deficiency will be calculated as outlined in Article 105.03 of the Standard Specifications. Truck/trailer mounted attenuators shall comply with Article 1106.02(g) or shall meet the requirements of NCHRP 350 Test Level 3 with vehicles used in accordance with manufacturer’s recommendations and requirements.

(b) Sign Requirements

(1) Sign Maintenance. Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply.

(2) Work Zone Speed Limit Signs. Work zone speed limit signs shall be installed as required in Article 701.14(b) and as shown in the plans and Highway Standards. Based upon the exiting posted speed limit, work zone speed limits shall be established and signed as follows.

a. Existing Speed Limit of 55mph or higher. The initial work zone speed limit assembly, located approximately 4200' before the closure, and shall be 55mph as shown in 701400. Additional work zone 45mph assemblies shall be used as required according to Article 701.14(b) and as shown in the Highway Standards and plans. WORK ZONE SPEED LIMIT 55 PHOTO ENFORCED assemblies may be omitted when this assembly would normally be placed within 1500 feet of the END WORK ZONE SPEED LIMIT sign. If existing speed limit is over 65mph then additional signage should be installed per 701400.

b. Existing Speed Limit of 45mph. The advance 55mph work zone speed limit assembly shown in 701400 shall be replaced with a 45mph assembly. Additional work zone 45mph assemblies shall be used as required according to Article 701.14(b) and as shown in the Highway Standards and plans. WORK ZONE SPEED LIMIT 55 PHOTO ENFORCED assemblies shall be eliminated in all cases. END WORK ZONE SPEED LIMIT signs are required.

(3) Exit Signs. The exit gore signs as shown in Standard 701411 shall be a minimum size of 48 inch by 48 inch with 12 inch capital letters and a 20 inch arrow. EXIT OPEN AHEAD signs shown in Standard 701411 shall be a minimum size of 48 inch by 48 inch with 8 inch capital letters.

(4) Uneven Lanes Signs. The Contractor shall furnish and erect "UNEVEN LANES" signs (W8-11) on both sides of the expressway, at any time when the elevation difference between adjacent lanes open to traffic equals or exceeds one inch. Signs shall be placed 500' in advance of the drop-off, within 500' of every entrance, and a minimum of every mile.

(c) Drums/Barricades. Check barricades shall be placed in work areas perpendicular to traffic every 1000', one per lane and per shoulder, to prevent motorists from using work areas as a traveled way. Check barricades shall also be placed in advance of each open patch, or excavation, or any other hazard in the work area, the first at the edge of the open traffic lane and the second centered in the closed lane. Check barricades, either Type I or II, or drums shall be equipped with a flashing light.

To provide sufficient lane widths (10' minimum) for traffic and also working room, the Contractor shall furnish and install vertical barricades, in lieu of Type II or drums, along the cold milling and asphalt paving operations. The vertical barricades shall be placed at the same spacing as the drums.

(d) Vertical Barricades. Vertical barricades shall not be used in lane closure tapers, lane shifts, exit ramp gores, or staged construction projects lasting more than 12 hours. Also, vertical barricades shall not be used as patch barricades or check barricades. Special attention shall be given, and ballast provided per manufacture's specification, to maintain the vertical barricades in an upright position and in proper alignment.

(e) Temporary Concrete Barrier Wall. Prismatic barrier wall reflectors shall be installed on both the face of the wall next to traffic, and the top of sections of the temporary concrete barrier wall as shown in Standard 704001. The color of these reflectors shall match the color of the edgelines (yellow on the left and crystal or white on the right). If the base of the temporary concrete barrier wall is 12 inches or less from the travel lane, then the lower slope of the wall shall also have a 6 inch wide temporary pavement marking edgeline (yellow on the left and white on the right).

(f) Flaggers. One flagger will be required for each separate activity of an operation that requires frequent construction vehicles to enter or leave a work zone to or from a lane open to traffic. Temporary traffic control and flagger position shall be according to District One Detail TC-18 – Expressway Flagging, or as directed by the Engineer.

(g) Full Expressway Closures. Full Expressway Closures will only be permitted for a maximum of 15 minutes during the allowable hours listed in the Keeping the Expressway Open to Traffic Special Provision. During Full Expressway Closures, the Contractor will be required to close off all lanes except one, using Freeway Standard Closures. The Contractor will be required to provide one changeable message sign to be placed at the direction of the Engineer. The sign shall display a message as directed by the Engineer. A Maintenance of Traffic Plan shall be submitted to the District One Expressway Traffic Control Supervisor 14 days in advance of the planned work; including all stage changes. The Maintenance of Traffic Plan shall include, but not be limited to: lane and ramp closures, existing geometrics, and equipment and material location. The District One Expressway Traffic Control Supervisor (847-705-4151) shall be contacted at least 3 working days in advance of the proposed road closure and will coordinate the closure operation with police forces.

Method of Measurement.

Traffic Control and Protection will not be measured for payment.

All work for furnishing, installing, maintaining, replacing, relocating, and removing traffic control devices required in the plans and these Special Provisions shall be included in the contract unit prices for the construction item involved. Traffic control and protection required under Standards 701101, 701400, 701401, 701402, 701406, 701411, 701416, 701426, 701428, 701446, 701901 and District details TC-8, TC-9, TC-17, TC-18 and TC-25 will be included with this item.

Basis of Payment.

(a) Traffic Control and Protection will not be paid for as separate items, but the costs shall be considered as included in the contract unit prices for the construction items involved, and no additional compensation will be allowed.

(b) Work or revisions in the phasing of construction or maintenance operations may require traffic control to be installed in accordance with a Standard other than those included in the plans. In such cases, the Standards will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for traffic control required by these added Standards will be according to Article 109.04. Revisions or modifications to increase the traffic control protection shown in the contract shall be submitted by the Contractor for approval by the Engineer. A reduction of the traffic control shown in the contract will not be allowed.

TRAFFIC CONTROL DEFICIENCY DEDUCTION FOR PEDESTRIAN BARRIER AND GUARDRAIL REPAIR

To ensure a prompt response to incidents involving the integrity of the work zone traffic control devices, the Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis. When the Engineer is notified or determines a deficiency exists, the Engineer shall be the sole judge as to whether the deficiency is an immediate safety hazard. When workers are present, the Contractor shall make needed corrections of deficiencies that constitute an immediate safety hazard within 15 minutes of notification. At all other times, the Contractor shall dispatch sufficient resources within 2 hours of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Engineer will impose a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Resident Engineer's acceptance of the corrections. For this project, the daily deduction will be __*__ per day per deficiency. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

*The cost of the daily deduction will be calculated by dividing three percent of the awarded contract price by the number of calendar days anticipated for this project. The number of days anticipated for this project is 128. This procedure is to be followed regardless of whether the contract is based upon working days, contains a completion date, or has an incentive/disincentive clause.

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)	1032

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	1009.03
(c) Water	1002
(d) Bituminous Materials (Note 2)	1032

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 .....1001"

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 ($Na_2O + 0.658K_2O$) 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 ($Na_2O + 0.658K_2O$) 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)	1003.06
(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 ºF, 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 ºC, 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	1010
(d) Water	1002
(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:

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

Materials. 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	1010
(d) Ground Granulated Blast Furnace (GGBF) Slag	1010
(e) Admixtures	1021
(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."

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: January 1, 2025

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted according to the table below.

Horsepower Range	Model Year and Older
50-99	2003
100-299	2002
300-599	2000
600-749	2001
750 and up	2005

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (https://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel),
or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or

b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices 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. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be $1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)
Effective: September 1, 2000 Revised: January 2, 2025

1. 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. CONTRACTOR ASSURANCE. 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. IDENTIFICATION OF CERTIFIED DBE. 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. BIDDING PROCEDURES. 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. UTILZATION PLAN EVALUATION. 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. CALCULATING DBE PARTICIPATION. 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

Illinois Works Jobs Program Act (30 ILCS 559/20-1 et seq.). For contracts having an awarded contract value of $500,000 or more, the Contractor shall comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules. The goal of the Illinois Apprenticeship Works Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less. 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 Ill. 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 Method 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."

SEEDING (BDE)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

"**250.07 Seeding Mixtures.** The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

TABLE 1 - SEEDING MIXTURES			
Class - Type		Seeds	lb/acre (kg/hectare)
1	Lawn Mixture 1/	Kentucky Bluegrass	100 (110)
		Perennial Ryegrass	60 (70)
		Festuca rubra ssp. r*ubra* (Creeping Red Fescue)	40 (50)
1A	Salt Tolerant Lawn Mixture 1/	Kentucky Bluegrass	60 (70)
		Perennial Ryegrass	20 (20)
		Festuca rubra ssp. *rubra* (Creeping Red Fescue)	20 (20)
		Festuca brevipilla (Hard Fescue)	20 (20)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)
1B	Low Maintenance Lawn Mixture 1/	Turf-Type Fine Fescue 3/	150 (170)
		Perennial Ryegrass	20 (20)
		Red Top	10 (10)
		Festuca rubra ssp. *rubra* (Creeping Red Fescue)	20 (20)
2	Roadside Mixture 1/	*Lolium arundinaceum* (Tall Fescue)	100 (110)
		Perennial Ryegrass	50 (55)
		Festuca rubra ssp. r*ubra* (Creeping Red Fescue)	40 (50)
		Red Top	10 (10)
2A	Salt Tolerant Roadside Mixture 1/	*Lolium arundinaceum* (Tall Fescue)	60 (70)
		Perennial Ryegrass	20 (20)
		Festuca rubra ssp. *rubra* (Creeping Red Fescue)	30 (20)
		Festuca brevipila (Hard Fescue)	30 (20)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	60 (70)
3	Northern Illinois Slope Mixture 1/	*Elymus canadensis* (Canada Wild Rye) 5/	5 (5)
		Perennial Ryegrass	20 (20)
		Alsike Clover 4/	5 (5)
		Desmanthus illinoensis (Illinois Bundleflower) 4/ 5/	2 (2)
		Schizachyrium scoparium (Little Bluestem) 5/	12 (12)
		Bouteloua curtipendula (Side-Oats Grama) 5/	10 (10)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	30 (35)
		Oats, Spring	50 (55)
		Slender Wheat Grass 5/	15 (15)
		Buffalo Grass 5/ 7/	5 (5)
3A	Southern Illinois Slope Mixture 1/	Perennial Ryegrass	20 (20)
		Elymus canadensis (Canada Wild Rye) 5/	20 (20)
		Panicum virgatum (Switchgrass) 5/	10 (10)
		Schizachyrium scoparium (Little Blue Stem) 5/	12 (12)
		Bouteloua curtipendula (Side-Oats Grama) 5/	10 (10)
		Dalea candida (White Prairie Clover) 4/ 5/	5 (5)
		Rudbeckia hirta (Black-Eyed Susan) 5/	5 (5)
		Oats, Spring	50 (55)

Class – Type		Seeds	lb/acre (kg/hectare)
4	Native Grass 2/ 6/	*Andropogon gerardi* (Big Blue Stem) 5/	4 (4)
		Schizachyrium scoparium (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Panicum virgatum (Switch Grass) 5/	1 (1)
		Sorghastrum nutans (Indian Grass) 5/	2 (2)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4A	Low Profile Native Grass 2/ 6/	*Schizachyrium scoparium* (Little Blue Stem) 5/	5 (5)
		Bouteloua curtipendula (Side-Oats Grama) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	1 (1)
		Sporobolus heterolepis (Prairie Dropseed) 5/	0.5 (0.5)
		Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Perennial Ryegrass	15 (15)
4B	Wetland Grass and Sedge Mixture 2/ 6/	Annual Ryegrass	25 (25)
		Oats, Spring	25 (25)
		Wetland Grasses (species below) 5/	6 (6)

Species:	% By Weight
Calamagrostis canadensis (Blue Joint Grass)	12
Carex lacustris (Lake-Bank Sedge)	6
Carex slipata (Awl-Fruited Sedge)	6
Carex stricta (Tussock Sedge)	6
Carex vulpinoidea (Fox Sedge)	6
Eleocharis acicularis (Needle Spike Rush)	3
Eleocharis obtusa (Blunt Spike Rush)	3
Glyceria striata (Fowl Manna Grass)	14
Juncus effusus (Common Rush)	6
Juncus tenuis (Slender Rush)	6
Juncus torreyi (Torrey's Rush)	6
Leersia oryzoides (Rice Cut Grass)	10
Scirpus acutus (Hard-Stemmed Bulrush)	3
Scirpus atrovirens (Dark Green Rush)	3
Bolboschoenus fluviatilis (River Bulrush)	3
Schoenoplectus tabernaemontani (Softstem Bulrush)	3
Spartina pectinata (Cord Grass)	4

Class – Type	Seeds	lb/acre (kg/hectare)
5 Forb with Annuals Mixture 2/ 5/ 6/	Annuals Mixture (Below) Forb Mixture (Below)	1 (1) 10 (10)

Annuals Mixture - Mixture not exceeding 25 % by weight of any one species, of the following:

Coreopsis lanceolata (Sand Coreopsis)
Leucanthemum maximum (Shasta Daisy)
Gaillardia pulchella (Blanket Flower)
Ratibida columnifera (Prairie Coneflower)
Rudbeckia hirta (Black-Eyed Susan)

Forb Mixture - Mixture not exceeding 5 % by weight PLS of any one species, of the following:

Amorpha canescens (Lead Plant) 4/
Anemone cylindrica (Thimble Weed)
Asclepias tuberosa (Butterfly Weed)
Aster azureus (Sky Blue Aster)
Symphyotrichum leave (Smooth Aster)
Aster novae-angliae (New England Aster)
Baptisia leucantha (White Wild Indigo) 4/
Coreopsis palmata (Prairie Coreopsis)
Echinacea pallida (Pale Purple Coneflower)
Eryngium yuccifolium (Rattlesnake Master)
Helianthus mollis (Downy Sunflower)
Heliopsis helianthoides (Ox-Eye)
Liatris aspera (Rough Blazing Star)
Liatris pycnostachya (Prairie Blazing Star)
Monarda fistulosa (Prairie Bergamot)
Parthenium integrifolium (Wild Quinine)
Dalea candida (White Prairie Clover) 4/
Dalea purpurea (Purple Prairie Clover) 4/
Physostegia virginiana (False Dragonhead)
Potentilla arguta (Prairie Cinquefoil)
Ratibida pinnata (Yellow Coneflower)
Rudbeckia subtomentosa (Fragrant Coneflower)
Silphium laciniatum (Compass Plant)
Silphium terebinthinaceum (Prairie Dock)
Oligoneuron rigidum (Rigid Goldenrod)
Tradescantia ohiensis (Spiderwort)
Veronicastrum virginicum (Culver's Root)

Class – Type		Seeds	lb/acre (kg/hectare)
5A	Large Flower Native Forb Mixture 2/ 5/ 6/	Forb Mixture (see below)	5 (5)
		Species:	% By Weight
		Aster novae-angliae (New England Aster)	5
		Echinacea pallida (Pale Purple Coneflower)	10
		Helianthus mollis (Downy Sunflower)	10
		Heliopsis helianthoides (Ox-Eye)	10
		Liatris pycnostachya (Prairie Blazing Star)	10
		Ratibida pinnata (Yellow Coneflower)	5
		Rudbeckia hirta (Black-Eyed Susan)	10
		Silphium laciniatum (Compass Plant)	10
		Silphium terebinthinaceum (Prairie Dock)	20
		Oligoneuron rigidum (Rigid Goldenrod)	10
5B	Wetland Forb 2/ 5/ 6/	Forb Mixture (see below)	2 (2)
		Species:	% By Weight
		Acorus calamus (Sweet Flag)	3
		Angelica atropurpurea (Angelica)	6
		Asclepias incarnata (Swamp Milkweed)	2
		Aster puniceus (Purple Stemmed Aster)	10
		Bidens cernua (Beggarticks)	7
		Eutrochium maculatum (Spotted Joe Pye Weed)	7
		Eupatorium perfoliatum (Boneset)	7
		Helenium autumnale (Autumn Sneeze Weed)	2
		Iris virginica shrevei (Blue Flag Iris)	2
		Lobelia cardinalis (Cardinal Flower)	5
		Lobelia siphilitica (Great Blue Lobelia)	5
		Lythrum alatum (Winged Loosestrife)	2
		Physostegia virginiana (False Dragonhead)	5
		Persicaria pensylvanica (Pennsylvania Smartweed)	10
		Persicaria l*apathifolia* (Curlytop Knotweed)	10
		Pychanthemum virginianum (Mountain Mint)	5
		Rudbeckia laciniata (Cut-leaf Coneflower)	5
		Oligoneuron riddellii (Riddell Goldenrod)	2
		Sparganium eurycarpum (Giant Burreed)	5
6	Conservation Mixture 2/ 6/	*Schizachyrium scoparium* (Little Blue Stem) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	2 (2)
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
6A	Salt Tolerant Conservation Mixture 2/ 6/	*Schizachyrium scoparium* (Little Blue Stem) 5/	5 (5)
		Elymus canadensis (Canada Wild Rye) 5/	2 (2)
		Buffalo Grass 5/ 7/	5 (5)
		Vernal Alfalfa 4/	15 (15)
		Oats, Spring	48 (55)
		Puccinellia distans (Fults Saltgrass or Salty Alkaligrass)	20 (20)
7	Temporary Turf Cover Mixture	Perennial Ryegrass	50 (55)
		Oats, Spring	64 (70)

Notes:

1/ Seeding shall be performed when the ambient temperature has been between 45 ºF (7 ºC) and 80 ºF (27 ºC) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.
2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 ºF (7 ºC) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 ºF (27 ºC) according to the National Weather Service.
3/ Specific variety as shown in the plans or approved by the Engineer.
4/ Inoculation required.
5/ Pure Live Seed (PLS) shall be used.
6/ Fertilizer shall not be used.
7/ Seed shall be primed with KNO_3 to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

SHORT TERM AND TEMPORARY PAVEMENT MARKINGS (BDE)

Effective: April 1, 2024 Revised: April 2, 2024

Revise Article 701.02(d) of the Standard Specifications to read:

"(d) Pavement Marking Tapes (Note 3) .....1095.06"

Add the following Note to the end of Article 701.02 of the Standard Specifications:

"Note 3. White or yellow pavement marking tape that is to remain in place longer than 14 days shall be Type IV tape."

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 ± 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

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

x	0.490	0.475	0.485	0.530
y	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_L, 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_L, 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_L	
Color	R_L 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) 1/ 20 (0.51) 2/	65 (1.65) 1/ 20 (0.51) 2/
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.”

STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: January 1, 2022

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

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

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

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

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

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

(a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.

(b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

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

SCA = Q 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_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

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

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

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

"STATEMENTS AND PAYROLLS

The payroll records shall include the worker's name, 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 https://lcptracker.com/. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate option ("No Work", "Suspended", or "Complete") selected."

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

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

In addition to filing certified payroll(s) with the IDOL, the Contractor and each subcontractor shall certify and submit payroll records to the Department each week from

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

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:

"(q) Temporary Sign Supports ..... 1106.02"

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

"For temporary sign supports, the Contractor shall provide a FHWA eligibility letter for each device used on the contract. The letter shall provide information for the set-up and use of the device as well as a detailed drawing of the device. The signs shall be supported within 20 degrees of vertical. Weights used to stabilize signs shall be attached to the sign support per the manufacturer's specifications."

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

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

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

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

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, plastic drums, and delineators, with no attachments (e.g. lights). Category 1 devices 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.

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

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

REVISIONS TO THE ILLINOIS PREVAILING WAGE RATES

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

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