

# 14

**April 24, 2020 Letting**

## **Notice to Bidders, Specifications and Proposal**



**Illinois Department  
of Transportation**

**Contract No. 62K06  
Various Counties  
Section 2019-110-LS  
Various Routes  
District 1 Construction Funds**

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)



- 1. TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. April 24, 2020 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. 62K06  
Various Counties  
Section 2019-110-LS  
Various Routes  
District 1 Construction Funds**

**Landscape repair work at various expressway & primary locations in District 1.**

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

By Order of the  
Illinois Department of Transportation

Omer Osman,  
Acting Secretary

INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2020

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

ERRATA    Standard Specifications for Road and Bridge Construction                      (Adopted 4-1-16) (Revised 1-1-20)

SUPPLEMENTAL SPECIFICATIONS

<u>Std. Spec. Sec.</u>	<u>Page No.</u>
106 Control of Materials .....	1
107 Legal Regulations and Responsibility to Public .....	2
109 Measurement and Payment .....	3
205 Embankment .....	4
403 Bituminous Surface Treatment (Class A-1, A-2, A-3) .....	5
404 Micro-Surfacing and Slurry Sealing .....	6
405 Cape Seal .....	17
406 Hot-Mix Asphalt Binder and Surface Course .....	27
420 Portland Cement Concrete Pavement .....	28
424 Portland Cement Concrete Sidewalk .....	30
442 Pavement Patching .....	31
502 Excavation for Structures .....	32
503 Concrete Structures .....	35
504 Precast Concrete Structures .....	38
506 Cleaning and Painting New Steel Structures .....	39
522 Retaining Walls .....	40
542 Pipe Culverts .....	41
586 Sand Backfill for Vaulted Abutments .....	42
602 Catch Basin, Manhole, Inlet, Drainage Structure, and Valve Vault Construction, Adjustment, and Reconstruction .....	44
603 Adjusting Frames and Grates of Drainage and Utility Structures .....	45
630 Steel Plate Beam Guardrail .....	46
631 Traffic Barrier Terminals .....	49
670 Engineer's Field Office and Laboratory .....	50
701 Work Zone Traffic Control and Protection .....	51
704 Temporary Concrete Barrier .....	53
780 Pavement Striping .....	55
781 Raised Reflective Pavement Markers .....	56
888 Pedestrian Push-Button .....	57
1001 Cement .....	58
1003 Fine Aggregates .....	59
1004 Coarse Aggregates .....	60
1006 Metals .....	63
1020 Portland Cement Concrete .....	65
1043 Adjusting Rings .....	67
1050 Poured Joint Sealers .....	69
1069 Pole and Tower .....	71
1077 Post and Foundation .....	72
1096 Pavement Markers .....	73
1101 General Equipment .....	74
1102 Hot-Mix Asphalt Equipment .....	75
1103 Portland Cement Concrete Equipment .....	77
1105 Pavement Marking Equipment .....	79
1106 Work Zone Traffic Control Devices .....	81

RECURRING SPECIAL PROVISIONS

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

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
1	Additional State Requirements for Federal-Aid Construction Contracts .....	83
2	Subletting of Contracts (Federal-Aid Contracts) .....	86
3	X EEO .....	87
4	X Specific EEO Responsibilities Non Federal-Aid Contracts .....	97
5	X Required Provisions - State Contracts .....	102
6	Asbestos Bearing Pad Removal .....	108
7	Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal .....	109
8	Temporary Stream Crossings and In-Stream Work Pads .....	110
9	Construction Layout Stakes Except for Bridges .....	111
10	Construction Layout Stakes .....	114
11	Use of Geotextile Fabric for Railroad Crossing .....	117
12	Subsealing of Concrete Pavements .....	119
13	Hot-Mix Asphalt Surface Correction .....	123
14	Pavement and Shoulder Resurfacing .....	125
15	Patching with Hot-Mix Asphalt Overlay Removal .....	126
16	Polymer Concrete .....	128
17	PVC Pipeliner .....	130
18	Bicycle Racks .....	131
19	Temporary Portable Bridge Traffic Signals .....	133
20	Work Zone Public Information Signs .....	135
21	Nighttime Inspection of Roadway Lighting .....	136
22	English Substitution of Metric Bolts .....	137
23	Calcium Chloride Accelerator for Portland Cement Concrete .....	138
24	Quality Control of Concrete Mixtures at the Plant .....	139
25	Quality Control/Quality Assurance of Concrete Mixtures .....	147
26	Digital Terrain Modeling for Earthwork Calculations .....	163
27	Reserved .....	165
28	Preventive Maintenance – Bituminous Surface Treatment (A-1) .....	166
29	Reserved .....	172
30	Reserved .....	173
31	Reserved .....	174
32	Temporary Raised Pavement Markers .....	175
33	Restoring Bridge Approach Pavements Using High-Density Foam .....	176
34	Portland Cement Concrete Inlay or Overlay .....	179
35	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching .....	183
36	Longitudinal Joint and Crack Patching .....	186

## TABLE OF CONTENTS

LOCATION OF PROJECT .....	1
DESCRIPTION OF PROJECT .....	1
COMPLETION DATE .....	1
CONTRACTOR COOPERATION .....	2
LANDSCAPE CONSTRUCTION WORK .....	2
INTERIM COMPLETION DATE FOR PHASE ONE .....	2
INTERIM COMPLETION DATE FOR PHASE TWO.....	2
INTERIM COMPLETION DATE FOR PHASE THREE.....	2
INTERIM COMPLETION DATE FOR PHASE FOUR.....	3
COMPLETION DATE FOR PHASE FIVE.....	3
COMPLETION DATE FOR PHASE SIX .....	3
FAILURE TO COMPLETE LANDSCAPE CONSTRUCTION.....	3
FAILURE TO COMPLETE PLANT CARE AND ESTABLISHMENT WORK ON TIME .....	4
QUANTITIES.....	5
EQUIPMENT .....	5
PROSECUTION OF WORK.....	5
WORK ORDERS.....	5
LAYOUT .....	6
CONTRACTOR'S WEEKLY WORK SCHEDULE.....	6
GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING .....	6
WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL.....	9
MULCH PLACEMENT FOR EXISTING WOODY PLANTS.....	10
SUPPLEMENTAL WATERING .....	11
SEEDING, CLASS 1B (SPECIAL) – FINE FESCUE LOW MAINTENANCE MIX .....	13
SEEDING, CLASS 4A (MODIFIED).....	14
INTERSEEDING, CLASS 4A (MODIFIED) .....	17
INTERSEEDING, CLASS 5 (MODIFIED) .....	19
REQUIRED INSPECTION OF WOODY PLANT MATERIAL .....	23
PLANTING WOODY PLANTS .....	24
PERENNIAL PLANTS, WOODLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG .....	30
PERENNIAL PLANTS, PRAIRIE TYPE, 2" DIAMETER BY 4" DEEP PLUG .....	30
PLANTING PERENNIAL PLANTS.....	35
PERENNIAL PLANT CARE .....	39
SELECTIVE MOWING STAKES.....	41
MOWING (ACRES).....	41
MOWING (UNIT).....	42

MAINTENANCE OF ROADWAYS .....	44
PUBLIC CONVENIENCE AND SAFETY (DIST 1) .....	44
TRAFFIC CONTROL PLAN .....	44
WORK ZONE TRAFFIC CONTROL (D-1 MAINTENANCE) .....	45
KEEPING THE EXPRESSWAY OPEN TO TRAFFIC .....	46
FAILURE TO OPEN TRAFFIC LANES TO TRAFFIC .....	47
TRAFFIC CONTROL AND PROTECTION (ARTERIALS) .....	47
TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) .....	48
KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY) .....	51
KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (WITH 15 MIN FULL STOPS) .....	51
COMPENSABLE DELAY COSTS (BDE).....	53
CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE).....	56
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE) .....	58
DISPOSAL FEES (BDE) .....	67
EQUIPMENT PARKING AND STORAGE (BDE) .....	69
MOBILIZATION (BDE) .....	69
PAVEMENT MARKING REMOVAL (BDE) .....	70
PORTLAND CEMENT CONCRETE (BDE) .....	71
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE) .....	71
SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE) .....	83
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE) .....	83
TRAFFIC CONTROL DEVICES - CONES (BDE).....	84
WEEKLY DBE TRUCKING REPORTS (BDE).....	84
WORK ZONE TRAFFIC CONTROL DEVICES (BDE) .....	85

## STATE OF ILLINOIS

---

### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016, 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 2019-110-LS, Various Counties, Contract No. 62K06, 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 2019-110-LS  
Various Counties  
Contract No. 62K06

#### LOCATION OF PROJECT

This work is located along various state-maintained routes located within the counties of Cook, DuPage, Lake, McHenry, Will, and Kane.

#### DESCRIPTION OF PROJECT

The roadside development work to be completed consists of repairing and installing landscape materials and features.

Roadside work locations proposed by the Department subsequent to final plan preparation shall be repaired as work orders issued by the Engineer.

#### COMPLETION DATE

The completion date for this Contract is June 30, 2023.

## **CONTRACTOR COOPERATION**

The Contractor's attention is directed to the fact that other separate contracts may have construction activities occurring at issued work order locations during the duration of this contract. Contracts may consist of, but are not limited to:

Contract 62F13      Various: Landscape Repair and Restoration

Contract 62K10      Various: Dead Tree Removal

And other contracts.

The Contractor will be governed by Article 105.08 of the Standard Specifications.

The Contractor will coordinate issued work orders and sequence of construction with the Engineer to present an effective and timely schedule for successful completion of the project.

The cooperation between work under this contract with Contract 62F13 and 62K10 is essential.

All maintenance of traffic responsibilities shall be coordinated with the respective Contractors of the above contracts.

## **LANDSCAPE CONSTRUCTION WORK**

The Contractor shall complete each Phase of the work in accordance with the CALENDAR OF CONSTRUCTION specified in the plans.

### **INTERIM COMPLETION DATE FOR PHASE ONE**

The Contractor shall schedule his/her operations in order to complete all Phase I work on or before May 31, 2021.

### **INTERIM COMPLETION DATE FOR PHASE TWO**

The Contractor shall schedule his/her operations in order to complete all Phase II work on or before November 30, 2021.

### **INTERIM COMPLETION DATE FOR PHASE THREE**

The Contractor shall schedule his/her operations in order to complete all Phase III work on or before May 31, 2022.



**INTERIM COMPLETION DATE FOR PHASE FOUR**

The Contractor shall schedule his/her operations in order to complete all Phase IV work on or before November 30, 2022.

**COMPLETION DATE FOR PHASE FIVE**

The Contractor shall schedule his/her operations in order to complete all Phase V work on or before May 31, 2023.

**COMPLETION DATE FOR PHASE SIX**

The Contractor shall schedule his/her operations in order to complete all Phase V work on or before June 30, 2023.

**FAILURE TO COMPLETE LANDSCAPE CONSTRUCTION**

Should the Contractor fail to complete the Phase I work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025, not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase I time or such extended time as may have been allowed.

Should the Contractor fail to complete the Phase II work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025 not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase II time or such extended time as may have been allowed.

Should the Contractor fail to complete the Phase III work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025, not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase III time or such extended time as may have been allowed.

Should the Contractor fail to complete the Phase IV work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025 not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase IV time or such extended time as may have been allowed.

Should the Contractor fail to complete the Phase V work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025, not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase V time or such extended time as may have been allowed.

Should the Contractor fail to complete the Phase VI work on or before the completion date stipulated in the Contract, or within such extended time as may have been allowed, the Contractor shall be liable to the Department in the amount of \$1,025, not as a penalty but as liquidated damages, for each calendar day or portion thereof, of overrun in the Phase VI time or such extended time as may have been allowed.

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 hours later.

### **FAILURE TO COMPLETE PLANT CARE AND ESTABLISHMENT WORK ON TIME**

Should the Contractor fail to complete the plant care and/or supplemental watering work within the scheduled time frame as specified in the Special Provision for "Planting Woody Plants", "Planting Perennial Plants", "Perennial Plant Care", and "Supplemental Watering", or within 36 hours notification from the Engineer, or within such extended times as may have been allowed by the Department, the Contractor shall be liable to the Department in the amount of:

- \$50.00 per tree/per day
- \$40.00 per large shrub/per day
- \$35.00 per small shrub/per day
- \$20.00 per vine/per day
- \$20.00 per perennial/per day

not as penalty but as liquidated damages, for each calendar day or a portion thereof of overrun in the contract time or such extended time as may have been allowed.

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

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

## **QUANTITIES**

The quantities specified in this contract are estimated. The Department reserves the right to terminate the contract at any time or to increase the contract quantities as determined by the Engineer. Payment will be made only for the actual quantities completed.

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

Payment for work will be made in accordance with the items listed in the Summary of Quantities in the plans.

## **EQUIPMENT**

The Contractor shall have sufficient equipment, in good working condition, to perform his work in an expedient manner.

The Contractor's personnel will be required to wear high visibility vests (meeting the requirements of ANSI/ISEA 107-2004 or ANSI/ISEA 107-2010 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have a manufacturer's tag identifying them as meeting the ANSI Class 2 requirements), and steel-toed boots when performing any function relative to this contract.

## **PROSECUTION OF WORK**

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

## **WORK ORDERS**

The Engineer will issue written work orders to the Contractor that authorize work in specific areas and for all work not specifically detailed in the plans. The Contractor shall complete work orders within fifteen (15) calendar days within the Phase the specifications allow the work to be completed.

No work may be started by the Contractor until the Engineer has signed and dated the AUTHORIZATION OF WORK ORDER on the work order, and the Contractor has reviewed the work order and signed the AGREEMENT TO WORK on the work order. If the Contractor does not agree to the work order, they must provide a written statement detailing their concerns within two calendar days of when the Engineer signed the AUTHORIZATION OF WORK ORDER.

A work order will show the date issued to the Contractor, work order number, work location, item description and quantity of work to be completed. Only the amount of work shown on the work order is to be done by the Contractor. If, at the time the work is being done, it appears to the Contractor that work additional to that on the work order is needed, a revised work order must be obtained from the Engineer before any additional work is done. Written authorization of work will be made on forms established for this purpose. The Contractor shall complete work orders within fifteen (15) calendar days within the Phase the specifications allow the work to be completed unless the Engineer has granted a written extension of time.

## **LAYOUT**

Contractor shall provide the following: wooden lathe, flags, and spray paint, to delineate work items. This will not be paid as separate items, but the costs shall be considered as included in the contract prices for landscape items.

## **CONTRACTOR'S WEEKLY WORK SCHEDULE**

The Contractor shall submit a weekly work schedule to the Resident Engineer for the purpose of coordinating the Contractor's activities for the following week. The weekly schedule must be submitted by 10:00 am each Thursday via e-mail, fax or delivered to the Engineer.

### **Method of Measurement:**

This coordination and schedule development work will not be measured for payment.

### **Basis of Payment:**

Preparation and submittal of the Contractor's Weekly Work Schedule shall not be paid for separately but shall be included in the cost of the Contract items of work.

## **GENERAL REQUIREMENTS FOR WEED CONTROL SPRAYING**

### Experience

The Contractor shall have previous experience with the use of weed control chemicals. He/she shall have had at least three (3) season's experience in ecological restoration and the ability to identify and differentiate between targeted weeds and vegetation to remain. The Contractor shall observe and comply with all sections of the Illinois Custom Spray Law, including licensing. Contractor personnel applying herbicides shall have a valid pesticide applicator license issued by the Illinois Department of Agriculture.

**The licensed pesticide applicator shall attend the preconstruction meeting and submit his/her current license to the Engineer. The licensed pesticide applicator shall be qualified at a minimum in Right-of-Way and Aquatics. The licensed applicator shall work on-site for every work order issued and approved.**

### Equipment

The equipment used shall consist of a vehicle-mounted tank, pump, spray bar and handgun, plus any other accessories needed to complete the specified work. Spraying shall be done through multiple low-pressure flooding or broad jet nozzles mounted on spray bars operated not more than 36" above the ground. If different sizes or types of nozzles are used to make up the spray pattern, the pressure, sizes and capacities shall be adjusted to provide a uniform rate of application for each segment of the spray pattern. Hand spray guns may be used for spraying areas around traffic control devices, lighting standard and similar inaccessible areas. Maximum speed of the spray vehicle during application of chemical shall be ten (10) miles per hour.

Pumps used shall have a volume and pressure capacity range sufficient to deliver the mixture at a pressure to provide the required coverage and to keep the spray pattern full and steady without pulsation or excessive pressure as to cause fogging. Maximum pressure for application shall be 15 PSI. Quick acting shut-off valves and spring-loaded ball check valves shall be provided to stop the spray pattern with a minimum of nozzle drip. In areas where the spray vehicle must traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Additional equipment used shall consist of swiping gloves, wicks, wands, hand spray guns and/or backpack sprayers, plus any other accessories needed to complete the specified work as directed by the Engineer. Wick applicators, swiping gloves, or other such devices may be required to ensure herbicides are applied only to target species. If hand spray guns used are attached to spray vehicle, maximum speed of the spray vehicle during application of chemical shall be five (5) miles per hour. In areas where a vehicle is needed to traverse the right-of-way, a four-wheel drive vehicle with flotation tires will be required to minimize damage to the ground surface.

Prior to beginning work, the Contractor shall obtain approval from the Engineer of the spraying equipment proposed for completing this work. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. If requested by the Engineer, the Contractor shall demonstrate the calibration of the equipment.

The equipment must provide consistently uniform coverage and keep the spray mixture sufficiently agitated or the work will be suspended until the equipment is repaired or replaced.

#### Spraying Areas

This work includes roadsides and other types of right-of-way of various widths and gradients. Spray areas often extend more than thirty (30) feet from the edge of the roadway, requiring both spray bar and hand gun applications.

When the description of work requires weed control of a stated species, such as teasel, the chemical shall be applied only to locations where the stated species is present. When the description of work requires general weed control within a bed or area, such as broadleaf weed control in turf, then the chemical shall be applied to the entire bed or area.

#### Exclusion of Spraying Areas

Areas where weed control spraying is inappropriate or detrimental to the environment, desirable planting, or private property shall be excluded from the spray area.

Spraying will not be permitted over any drainage swales or waterways, or other areas where the chemical label prohibits application. Spraying within 150 feet of a natural area or site where endangered or threatened species occur.

### Responsibility for Prevention of Damage to Private Property

The Contractor shall, at all times, exercise extreme caution to prevent damage to residential plantings, flower or vegetable gardens, vegetable crops, farm crops, orchard or desirable plants adjacent to the roadside.

The Contractor or Department receives a complaint; the Contractor shall contact a complaint within ten (10) days after receiving a claim for damages, either in person or by letter. The Contractor, or his authorized representative, shall make a personal contact with the complainant within twenty (20) days. The Engineer shall also be notified by the Contractor of all claims for damage he received and shall keep the Engineer informed as to the progress in arriving at a settlement for such claims.

### Communication with the Engineer

The Contractor is required to communicate with the Engineer to receive all required approvals in a timely way and to assure that the Engineer can accurately document the work performed.

**All work orders with herbicide application shall be directly supervised by the Engineer for quality assurance and for payment purposes.**

It shall be the Contractor's responsibility to assure that all chemical containers are opened and added to the spray mixture in the presence of the Engineer.

The Contractor shall obtain approval from the Engineer to proceed with spraying at each location 24 hours prior to the proposed spray operations.

The Contractor's superintendent shall closely coordinate work with the Engineer at all times in accordance with Article 105.06. The superintendent shall attend weekly progress meetings with the Engineer at the Engineer's office or other mutually agreed upon location. The superintendent shall communicate with the Engineer in the field during weed control activities to facilitate accurate completion of work while it is occurring. At the request of the Engineer, the Contractor shall provide a cell phone number where the superintendent can be reached during working hours. The Contractor shall notify the Engineer at least twenty-four (24) hours in advance of either discontinuing or resuming operations on all work orders.

The Contractor will be required to properly track pesticide applications as required by the ILG87 Permit. Reported data from this form will be collected and compiled annually and reported to the IEPA as required.

Within 48 hours of the application of pesticides, including but not limited to herbicides, insecticides, algaecides, and fungicides, the Contractor shall complete and return to the Engineer, Operations form "OPER 2720". OPER 2720 may be found at the following link:

<http://www.idot.illinois.gov/Assets/uploads/files/IDOT-Forms/OPER/OPER%202720.docx>

## **WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL**

Description: This work shall consist of the application of a non-selective and non-residual herbicide to kill all existing vegetation at designated areas along highway roadsides.

Materials: The non-selective and non-residual herbicide shall have the following formulation:

A. Active Ingredient	
*Glyphosate, N- (phosphonomethyl) glycine, in the form of its isopropylamine salt	41.00%
B. Inert Ingredients (including surfactant)	<u>59.00%</u>
	TOTAL 100.00%

\*Contains 480 grams per liter or 4 pounds per U.S. gallon of the active ingredient Glyphosate, in the form of its isopropylamine salt. Equivalent to 356 grams per liter or 3 pounds per U.S. gallon of the acid, glyphosate.

The Contractor shall submit a certificate, including the following, prior to starting work:

1. The chemical names of the compound and the percentage by volume of the ingredients which must match the above specified formulation.
2. A statement that the material is in a solution which will form a satisfactory emulsion for use when diluted with water for normal spraying conditions.
3. A statement that the herbicide, when mixed with water, will be completely soluble and dispersible and remain in suspension with continuous agitation.
4. A statement describing the products proposed for use when the manufacturer requires that surfactants, drift control agents, or other additives be used with the product. These tank mix additives shall be used as specified by the manufacture. Required additives will not be paid for separately.

**All material shall be brought to the spray area in the original, unopened containers supplied by the manufacturer.**

Schedule: Spraying will not be allowed when temperatures exceed 90° F or under 60° F, when wind velocities exceed fifteen (15) miles per hour, when foliage is wet or rain is eminent, when visibility is poor or during legal holiday periods.

Application Rate: The non-selective and non-residual herbicide shall be applied at the rate of one (1) gallon per acre.

One (1) gallon of herbicide formulation shall be diluted with a minimum of fifty-five (55) gallons of water and applied as a mixture. Water for dilution of the mixture will not be paid for separately.

Method of Measurement: Weed Control, Non-selective and Non-residual will be measured for payment in gallons of undiluted herbicide applied as specified. The gallons for payment will be determined based on the gallons specified on the label attached to the original container supplied by the manufacturer.

Basis of Payment: Weed Control, Non-Selective and Non-residual will be paid for at the contract unit price per gallon for WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL. Water for dilution of the mixture and additives required for application will not be paid for as separate items, but the costs shall be considered as included in the contract unit price for Weed Control, Non-selective and Non-residual, and no additional compensation will be allowed.

## **MULCH PLACEMENT FOR EXISTING WOODY PLANTS**

This work shall be done in accordance with the applicable portion of Section 253.02 (c) and Section 1081.06 of the Standard Specifications for Road and Bridge Construction.

Description. This work shall consist of furnishing, transporting, and spreading approved shredded hardwood bark mulch to the depth specified in areas as shown in the plans or as directed by the Engineer.

Material. Hardwood bark mulch shall be clean, finely shredded mixed-hardwood bark meeting the following requirements:

- Material shall be free of sticks, leaves, stones, dirt clods, and other debris.
- Individual wood chips shall not exceed 2 inches (50 mm) in the largest dimension.

A mulch sample and request for material inspection must be supplied to the Engineer for approval prior to performing any work 72 hours prior to application.

Method. The Engineer will define the bed edge by spray paint or flags. The final grade, depth, and condition of the area must be approved by the Engineer prior to mulch placement.

The Contractor shall remove and properly dispose of all weeds, litter and plant debris before beginning the mulch placement process. The Contractor shall spray glyphosate as per the label to kill the existing turf around the tree being careful not to get any spray on the trunk of the tree. The Contractor shall prepare a neatly spaded 2" edge between the landscaped bed and/or tree ring and the turf. The Contractor shall repair the grade by raking and adding topsoil as needed, before mulching and remove any excess soil from the site.



The shredded mulch shall be placed according at the required depth as specified in the plans for existing trees and shrubs. Care shall be taken not to bury leaves, stems, or vines under mulch material. Mulch shall be tapered from 4" towards the base of the trunk and kept 6" from the base of the trunk.

All finished mulch areas shall be left smooth and level to maintain uniform surface and appearance.

After the mulch placement, any debris or piles of material shall be immediately removed from the right of way, including raking excess mulch out of turf areas.

Method of Measurement. Mulch placement will be measured in place to the depth specified in square yards. Areas not meeting the depth specified shall not be measured for payment.

Glyphosate will be measured for payment as specified in special provision Weed Control, Non-selective and Non-residual.

Basis of Payment. This work will be paid for at the contract unit price per square yard (square meter) for MULCH PLACEMENT, of the thickness specified. The unit price shall include the cost of all materials, mulch, equipment, labor, and disposal required to complete the work as specified herein and to the satisfaction of the Engineer.

Any mulch placement included as part of the work in other work items will not be measured separately for payment.

The use of glyphosate shall be paid for at the contract unit price for WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL.

### **SUPPLEMENTAL WATERING**

This work will include watering turf, trees, shrubs, vines, and perennials at the rates specified and as directed by the Engineer.

Schedule: Watering will only begin after the successful completion of all period of establishment requirements. Water trees every 10 days throughout the growing season (April 1 to November 30). The Engineer may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

Watering must be completed in a timely manner. When the Engineer directs the Contractor to do supplemental watering, the Contractor must begin the watering operation within 48 hours of notice. **The Contractor shall give an approximate time window of twenty-four (24) hour of when they will begin at the work location to the Engineer. The Engineer shall be present during the watering operation.** A minimum of 10 units of water per day must be applied until the work is complete.

Should the Contractor fail to complete the work on a timely basis or within such extended times as may have been allowed by the Department, the Contractor shall be liable to the Department liquidated damages as outlined in the **“Failure to Complete Plant Care and Establishment Work on Time” special provision.**

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

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

Source of Water: The Contractor shall notify the Engineer of the source of water used and provide written certification that the water does not contain chemicals harmful to plant growth.

Rate of Application: The normal rates of application for watering are as follows. The Engineer will adjust these rates as needed depending upon weather conditions.

- 35 gallons per tree
- 25 gallons per large shrub
- 15 gallons per small shrub
- 4 gallons per vine
- 3 gallons per perennial plant (Gallon)
- 2 gallons per perennial plant (Quart)
- 2 gallons per perennial plant (Plug)
- 3 gallons per square foot for Sodded Areas

Method of Application: A spray nozzle that does not damage small plants must be used when watering all vegetation. Water shall be applied at the base of the plant to keep as much water as possible off plant leaves. An open hose may be used to water trees, shrubs, and seedlings if mulch and soil are not displaced by watering. The water shall be applied to individual plants in such a manner that the plant hole shall be saturated without allowing the water to overflow beyond the earthen saucer. Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing the water flow beyond the periphery of the bed. Water shall slowly infiltrate into soil and completely soak the root zone. The Contractor must supply metering equipment as needed to assure the specified application rate of water.

Method of Measurement: Supplemental watering will be measured in units of 1000 gallons (3,785 liters) of water applied as directed.

Basis of Payment: This work will be paid for at the contract unit price per unit of SUPPLEMENTAL WATERING, measured as specified. Payment will include the cost of all water, equipment and labor needed to complete the work specified herein and to the satisfaction of the Engineer.

**SEEDING, CLASS 1B (SPECIAL) – FINE FESCUE LOW MAINTENANCE MIX**

This work shall consist of Seeding, Class 1B (Special) in areas as shown in the plans or as directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 1B (Special) shall be a blend of creeping red, chewings, hard and sheep's fescue; acceptable commercial blends include any of the following:

- Highlands Fescue Mix
- Legend Fine Fescue Blend
- Greenskeeper National Links Mixture

Article 1081.08 Fertilizer – Delete second sentence. Replace with the following:

Fertilizer for all areas to be seeded with Seeding, Class 1B (Special) shall be a balanced (such as 20-20-20) nitrogen – phosphorus – potassium composition that contains a minimum of 25% of the nitrogen component in a slow release form.

Article 1081.08 (a) – Add the following:

(6) Nitrogen release information

(7) Quantity of bags required to provide 2 pounds of nitrogen per 1000 square feet for the specified seeding areas for approval

Add 1081.08 (c) - Provide fertilizer to the site in original unopened bags from the manufacturer showing complete analysis of nitrogen, phosphorus, potassium, minor elements, and major element source types.

Article 250.04 Fertilizer and Agricultural Ground Limestone Application – Revise the first sentence with:

When specified for bare earth areas, fertilizer nutrients and agricultural ground limestone shall be uniformly spread using a calibrated drop spreader or other mechanical method over the designated areas immediately prior to seed bed preparation. Application of the fertilizer by hand is not acceptable.

Article 250.07 Seeding Mixtures – Delete sentence 4.

Add the following to Table 1 – Seeding Mixture, Class 1B (Special) – Fine Fescue Low Maintenance Mix (260 lbs. per ACRE) or (6 lbs. per 1000 SQ. FT.)

Article 250.09 – Add Seeding, Class 1B (Special)

Article 250.10 – Add Seeding, Class 1B (Special)

**SEEDING, CLASS 4A (MODIFIED)**

This work shall consist of preparing the seed bed, placing the seed, and other materials required in the seeding operation in areas as shown in the plans.

All work, materials and equipment shall conform to Section 250 and 1081 of the Standard Specifications except as modified herein.

The Class 4A (Modified) seed mixture shall be supplied in pounds of Pure Live Seed. All native seed species will be local genotype and verified that original seed collection source must originate from a radius of 200 miles from the project site. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Add the following to Table 1:

CLASS – TYPE	SEEDS	PURE LIVE SEED LB/ACRE
4A (Modified) Low Profile Native Grass		10.0
	Bouteloua curtipendula (Side Oats Grama)	5.0
	Andropogon scoparius (Little Bluestem)	5.0
Temporary Cover		30 (lb/acre)
	Spring: Avena sativa (Annual Oats)	25.0
	Elymus canadensis (Canada Wild Rye)	3.0
	Fall: Triticum aestivum (Winter Wheat)	9.0
	Elymus canadensis (Canada Wild Rye)	3.0

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract

**Seeding Time:**

Seeding shall be completed between October 15 to May 15 but not when raining or when the ground is covered with snow, unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for seeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

The Contractor shall schedule work so that final grade is achieved during the specified seeding times. Any seeding installed on or after March 1 must be incorporated into the soil surface, but no deeper than ¼ inch, such as by rangeland type seed drill, harrow, hand rake, or other method approved by the Engineer.

**Bagging, Transporting, and Storing Seed:**

Seed mixtures of the specified classes shall be thoroughly mixed, labeled and bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

**Layout of Seeding:**

The Contractor shall be responsible for field verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The Contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

**Inspection:**

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

**Seed Bed Preparation:**

All area(s) to be seeded must be properly prepared prior to planting seed.

Bare earth seeding refers to sowing seed upon soils with no existing vegetative cover. In areas with existing vegetation, the vegetation shall be eradicated as specified or as directed by the Engineer. Seed bed preparation shall not be started until all requirements of Section 212 have been completed. The area to be seeded shall be worked to a minimum depth of 3 in. (75 mm) with a disk, tiller, box rake, or other equipment approved by the Engineer. In areas with heavy soils, tilling or power raking will be required to achieve the proper depth. All soil clods shall be reduced to a size not larger than ½ in. (13 mm) in the largest dimension to create a friable, pulverized topsoil surface suitable for seeding. Dragging the soil surface with the blade of a loader or dozer will not be an acceptable method of seed bed preparation. The prepared surface shall be relatively free of weeds, stones, roots, sticks, debris, rills, gullies, crusting, caking, and compaction. No seed shall be sown until the seed bed has been approved by the Engineer.

**Seeding Methods:**

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

Seeding Classes 3, 4, 5, and 6 shall be sown with a broadcast seeder or a rangeland type seed drill.

Hand broadcasting and other methods of sowing seed will be allowed in special circumstances as approved by the Engineer. Special circumstances include but are not necessarily limited to steep slopes (over 1:3 (V:H)), inaccessible areas, wet areas, or other unique situations where the use of the specified equipment is not possible.

**Method of Measurement:**

SEEDING, CLASS 4A (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

**Basis of Payment:** SEEDING, CLASS 4A (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

**INTERSEEDING, CLASS 4A (MODIFIED)**

This work shall consist of Interseeding of Class 4A (Modified) in areas as shown in the plans or a directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 4A (Modified) seed mixture shall be supplied in labeled bags which the Resident Engineer will inspect prior to opening the bag. All native species will be local genotype and will be from a radius of 200 miles from the project area. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Delete sentence 4. Add the following to Table 1 – Seeding Mixtures:

CLASS – TYPE	SEEDS	PURE LIVE SEED LB/ACRE
4A (Modified) Low Profile Native Grass		7.0
	Bouteloua curtipendula (Side Oats Grama)	3.0
	Schizachyrium scoparium (Little Bluestem)	4.0

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract

**Seeding Time:**

Interseeding shall be completed between October 15 to May 15 but not when raining or when the ground is covered with snow, unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for interseeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

**Bagging, Transporting, and Storing Seed:**

Seed mixtures of the specified classes shall be thoroughly mixed, labeled and bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified. Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

**Layout of Seeding:**

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

**Inspection:**

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

**Seed Bed Preparation:**

All area(s) to be interseeded must be properly prepared prior to planting seed. Interseeding is the sowing of seed into areas of existing turf or other vegetation. For areas where existing turf or other desirable existing vegetation is to remain and be interseeded to improve cover, prior to interseeding all existing turf or other vegetative cover shall be mowed one or more times to a height of not more than 3 inches. The cut material shall be removed from the site of work to allow penetration of the seed and disposed of according to Article 202.03.

For areas where existing vegetation is specified to be eradicated an application of a non-residual, non-selective herbicide will be required. 10-14 calendar days after the herbicide application, the existing vegetation shall be mowed to a height of not more than 3 inches, removed from the site of work, and disposed of according to Article 202.03.

Debris encountered during the mowing or interseeding operations which hamper the operation or are visible from the roadway shall be removed and disposed of according to Article 202.03. Damage to the right-of-way and turf, such as ruts or wheel tracks more than 2 inches in depth, shall be repaired to the satisfaction of the engineer prior to the time of interseeding.



**Seeding Methods:**

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, interseeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be interseeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

All mixture classes to be interseeded shall be sown using a no-till drill such as rangeland type seed drill specifically manufactured for planting native seeds with an interseeding attachment. Interseeding by slit seeder will not be accepted. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. The Contractor shall demonstrate proper calibration of the equipment. If the site is too wet or muddy to use a no-till drill seeder, the Contractor must submit a written description of alternative installation method(s) and equipment for consideration by the Engineer. No alternative installation method(s) and equipment shall be used prior to receipt of written approval of them from the Engineer.

Hand broadcasting or broadcast seeders will be allowed as approved by the Engineer on steep slopes (1:3 (V:H) or steeper) or in inaccessible areas where use of the equipment specified is physically impossible. Broadcast seeding when snowfall is predicted within 24 hours shall be the preferred method.

**Method of Measurement:**

INTERSEEDING, CLASS 4A (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

**Basis of Payment:**

INTERSEEDING, CLASS 4A (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

**INTERSEEDING, CLASS 5 (MODIFIED)**

This work shall consist of Interseeding of Class 5 (Modified) in areas as shown in the plans or as directed by the Engineer.

All work, materials, and equipment shall conform to Sections 250 and 1081 of the Standard Specifications except as modified herein.

The Class 5 (Modified) seed mixture shall be supplied in labeled bags which the Resident Engineer will inspect prior to opening the bag. All native species will be local genotype and will be from a radius of 200 miles from the project area. The Class 5 (Modified) seed mix shall be supplied with the appropriate inoculants. The seed shall be sown as soon as possible after inoculation. Seed that has been stored more than 30 days after inoculation shall be reinoculated before sowing. Fertilizer is not required.

Article 250.07 Seeding Mixtures – Delete sentence 4. Add the following to Table 1 – Seeding Mixtures:

<u>CLASS – TYPE</u>	<u>SEEDS</u>	<u>LBS/ACRE</u>
5 (Modified) Short Native Forb Mixture:		13.0
	Achillea millefolium (Native Yarrow)	0.50
	Allium cernuum (Nodding Wild Onion)	0.20
	Agastache foeniculum (Lavender Hyssop)	0.20
	Asclepias tuberosa (Butterfly Weed)	0.125
	Baptisia tinctoria (Small Yellow Wild Indigo)	0.20
	Chamaecrista fasciculata (Partridge Pea)	2.5
	Coreopsis lanceolata (Lance-leaf Coreopsis)	0.75
	Dalea candida (White Prairie Clover)	0.60
	Dalea purpurea (Purple Prairie Clover)	0.75
	Echinacea pallida (Pale Purple Coneflower)	0.25
	Echinacea purpurea (Purple Coneflower)	0.75
	Liatris aspera (Rough Blazing Star)	0.125
	Monarda fistulosa (Wild Bergamot)	0.15
	Parthenium integrifolium (Wild Quinine)	0.25
	Penstemon digitalis (Foxglove Beard Tongue)	0.50
	Rudbeckia hirta (Black-Eyed Susan)	4.0
	Symphyotrichum oolentangiense (Sky Blue Aster)	0.15
	Verbena stricta (Hoary Vervain)	0.50
	Zizia aptera (Heart-leaved Alexander)	0.50

Variation in the Class 3, 4, 5, or 6 seed quantities or varieties may be allowed in the event of a crop failure or other unforeseen conditions. Quantities of proposed substitutions shall be determined by seed count. The Contractor shall provide for the approval of the Engineer a written description of the proposed changes to the Class 3, 4, 5, or 6 Mixture(s), the reasons for the change, and the name of the seed suppliers who were contacted in an effort to obtain the specified species. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract

**Seeding Time:**

Interseeding shall be completed between October 15 to May 15 but not when raining or when the ground is covered with snow, unless prior written approval is received from Engineer. No seed shall be sown when the ground is not in proper condition for interseeding. Seeding done outside of this time frame will not be measured for payment unless approved in writing by Engineer in advance.

**Bagging, Transporting, and Storing Seed:**

Seed mixtures of the specified classes shall be thoroughly mixed, labeled and bagged by the supplier. Purity and germination tests no older than twelve months old must be submitted for all seed supplied to verify quantities of bulk seed required to achieve LB PLS specified.

Seed shall be thoroughly mixed, labeled and bagged by the supplier. Seed shall be bagged, transported, and stored in such a manner to protect it from damage and to maintain the viability of the seed. All seed mixtures shall be brought to the site in clearly labeled and unopened bags.

Seed shall be adequately protected from rain, temperature extremes, rodents, insects, and other such factors that could adversely affect seed viability during transport or while being stored prior to planting. Bags of seed that are leaking, wet, moldy, or otherwise damaged shall be rejected and promptly removed from the site of work. Prior to application, the Engineer must approve the seed mix in the bags on site.

**Layout of Seeding:**

The Contractor shall be responsible for filed verifying the acreage of the area(s) to be seeded. The amount of seed ordered shall match the area(s) to be seeded during the pending planting season. A minimum of 30 days shall be allowed for seed acquisition, testing, and inspection.

The Contractor shall demarcate all areas to be seeded and estimate quantities of each area to determine the quantity of seed necessary to achieve the specified seed rate per acre. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place. The contractor shall provide a minimum of seven calendar days notice to the Engineer to allow for review and approval of seeding layout.

**Inspection:**

The Engineer must witness the delivery of seed with original labels attached in the field. A bag ticket must be affixed to each bag of seed upon delivery and shall not be removed until the Engineer has reviewed and accepted each bag of seed. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test.

**Seed Bed Preparation:**

All area(s) to be interseeded must be properly prepared prior to planting seed. Interseeding is the sowing of seed into areas of existing turf or other vegetation. For areas where existing turf or other desirable existing vegetation is to remain and be interseeded to improve cover, prior to interseeding all existing turf or other vegetative cover shall be mowed one or more times to a height of not more than 3 inches. The cut material shall be removed from the site of work to allow penetration of the seed and disposed of according to Article 202.03.

For areas where existing vegetation is specified to be eradicated an application of a non-residual, non-selective herbicide will be required. 10-14 calendar days after the herbicide application, the existing vegetation shall be mowed to a height of not more than 3 inches, removed from the site of work, and disposed of according to Article 202.03.

Debris encountered during the mowing or interseeding operations which hamper the operation or are visible from the roadway shall be removed and disposed of according to Article 202.03. Damage to the right-of-way and turf, such as ruts or wheel tracks more than 2 inches in depth, shall be repaired to the satisfaction of the engineer prior to the time of interseeding.

**Seeding Methods:**

No seed shall be sown when wind gusts exceed 25 miles per hour or when the ground is not in a proper condition for seeding, nor shall any seed be sown until the purity test has been completed for the seeds to be used, and said tests show that the seed meets the noxious weed seed requirements. All equipment shall be approved by the Engineer prior to being used. Prior to starting work, interseeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be interseeded. The Engineer shall be notified 48 hours prior to beginning the seeding operations so that the Engineer may determine by trial runs that a calibration of the seeder will provide uniform distribution at the specified rate per acre.

All legumes (Canada Milk Vetch, White Prairie Clover, Purple Prairie Clover, White Wild Indigo, and Illinois Bundleflower) shall be inoculated with the proper rhizobial bacteria in the amounts and manner recommended by the seed supplier before sowing or being mixed with other seeds for sowing. The inoculant shall be furnished by the Contractor and shall be approved by the Engineer.

All mixture classes to be interseeded shall be sown using a no-till drill such as rangeland type seed drill specifically manufactured for planting native seeds with an interseeding attachment. Interseeding by slit seeder will not be accepted. The proposed equipment shall be in an operational condition and available for inspection by the Engineer at least two (2) weeks prior to the proposed starting time. The Contractor shall demonstrate proper calibration of the equipment. If the site is too wet or muddy to use a no-till drill seeder, the Contractor must submit a written description of alternative installation method(s) and equipment for consideration by the Engineer. No alternative installation method(s) and equipment shall be used prior to receipt of written approval of them from the Engineer.

Hand broadcasting or broadcast seeders will be allowed as approved by the Engineer on steep slopes (1:3 (V:H) or steeper) or in inaccessible areas where use of the equipment specified is physically impossible. Broadcast seeding when snowfall is predicted within 24 hours shall be the preferred method.

**Method of Measurement:**

INTERSEEDING, CLASS 5 (MODIFIED) will be measured for payment in acres of surface area of seeding for the seed mix type specified.

**Basis of Payment:**

INTERSEEDING, CLASS 5 (MODIFIED) shall be paid at the Contract unit price per acre. Payment shall be in full for seed, planting, and furnishing all labor to complete the work as set forth above.

Mowing will be paid for at the contract unit price per acre for MOWING. Only the initial mowing will be paid for. Any subsequent mowing required to obtain a height of not more than 3 in. (75 mm) or to disperse mowed material will be considered as included in the cost of the initial mowing.

**REQUIRED INSPECTION OF WOODY PLANT MATERIAL**

**Delete Article 1081.01(a)(5) and substitute the following:**

The place of growth for all material, and subsequent inspection, must be located within 200 miles of the project.

**Delete Article 1081.01(c)(1) and substitute the following:**

Inspection of plant material will be made at the nursery by the Engineer, or a duly authorized representative of the Department; all plant material must be in the ground of the nursery supplying the material.

The Contractor shall provide the Engineer a minimum of 30 calendar days advance notice of the plant material to be inspected. Written certification by the Nursery will be required certifying that the plants are true to their species and/or cultivar specified in the plans.

The Department reserves the right to place identification seals on any or all plants selected. No trees shall be delivered without IDOT seal. Plant material not installed within 60 days of initial inspection will be required to be re-inspected.

## **PLANTING WOODY PLANTS**

This work shall consist of planting woody plants as specified in Section 253 of the Standard Specifications with the following revisions:

### **Delete Article 253.03 Planting Time and substitute the following:**

Spring Planting. This work shall be performed between March 15th and May 31st except that evergreen planting shall be performed between March 15th and April 30th in the northern zone.

### **Add the following to Article 253.03 (a) (2) and (b):**

All plants shall be obtained from Illinois Nurserymen's Association or appropriate state chapter nurseries. All trees and shrubs shall be dug prior to leafing out (bud break) in the spring or when plants have gone dormant in the fall, except for the following species which are only to be dug prior to leafing out in the spring:

- Maple (*Acer* spp.)
- Buckeye (*Aesculus* spp.)
- Serviceberry (*Amelanchier* spp.)
- Birch (*Betulus* spp.)
- American Hornbeam (*Carpinus caroliniana*)
- Hickory (*Carya* spp.)
- Hackberry (*Celtis occidentalis*)
- Eastern Redbud (*Cercis canadensis*)
- Hawthorn (*Crataegus* spp.)
- Walnut (*Juglans* spp.)
- Tuliptree (*Liriodendron* spp.)
- Crabapple (*Malus* spp.)
- Black Tupelo (*Nyssa sylvatica*)
- American Hophornbeam (*Ostrya virginiana*)
- Oak (*Quercus* spp.)
- Sassafras (*Sassafras albidum*)
- Baldcypress (*Taxodium distichum*)
- American Linden (*Tilia americana*)

Fall Planting. This work shall be performed between October 1 and November 30 except that evergreen planting shall be performed between August 15 and October 15.

Planting dates are dependent on species of plant material and weather. Planting might begin or end prior or after above dates as approved by the Engineer. Do not plant when soil is muddy or during frost.

**Add the following to Article 253.05 Transportation:**

Cover plants with a 70% shade mesh heavy duty tarp during transport to prevent desiccation. Plant material transported without cover shall be automatically rejected. During loading and unloading, plants shall be handled such that stems are not stressed, scraped or broken and that root balls are kept intact.

**Delete the third sentence of Article 253.07 and substitute the following:**

Trees must be installed first to establish proper layout and to avoid damage to other plantings such as shrubs and perennials.

The Contractor shall be responsible for all plant layout. The layout must be performed by qualified personnel. The planting locations must be laid out as shown in the landscape plan. This will require the use of an engineer's scale to determine some dimensions. Tree locations within each planting area shall be marked with a different color stake/flag and labeled to denote the different tree species. Shrub beds limits must be painted.

All utilities shall have been marked prior to contacting the Roadside Development Unit. The Engineer will contact the Roadside Development Unit at (847) 705-4171 to approve the layout prior to installation. Allow a minimum of seven (7) working days prior to installation for approval.

**Delete the first paragraph to Article 253.08 Excavation of Plant Holes and substitute with the following:**

Protect structures, utilities, sidewalks, bicycle paths, knee walls, fences, pavements, utility boxes, other facilities, lawns and existing plants from damage caused by planting operations. Excavation of the planting hole may be performed by hand, machine excavator, or auger.

The excavated material shall not be stockpiled on turf, in ditches, or used to create enormous water saucer berms around newly installed trees or shrubs. Remove all excess excavated subsoil from the site and dispose as specified in Article 202.03.

**Delete the second sentence of Article 253.08 Excavation of Plant Holes (a) and the third paragraph of Article 253.08(b) and substitute with the following:**

Excavation of planting hole width. Planting holes for trees, shrubs, and vines shall be three times the diameter of the root mass and with 45-degree sides sloping down to the base of the root mass to encourage rapid root growth. Roots can become deformed by the edge of the hole if the hole is too small and will hinder root growth.

Planting holes dug with an auger shall have the sides cut down with a shovel to eliminate the glazed, smooth sides and create sloping sides.

Excavation of planting hole depth. The root flare shall be visible at the top of the root mass. If the trunk flare is not visible, carefully remove soil from around the trunk until the root flare is visible without damaging the roots. Remove excess soil until the top of the root mass exposes the root collar.

The root flare shall always be slightly above the surface of the surrounding soil. The depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees.

For stability, the root mass shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

Excavation of planting hole on slopes. Excavate away the slope above the planting hole to create a flattened area uphill of the planting hole to prevent the uphill roots from being buried too deep. Place the excess soil on the downslope of the planting hole to extend the planting shelf to ensure roots on the downhill side of the tree remain buried. The planting hole shall be three times the diameter of the root mass and saucer shaped. The hole may be a bit elongated to fit the contour of the slope as opposed to the typical round hole on flat ground.

Add backfill to create a small berm on the downhill portion of the planting shelf to trap water and encourage movement into the soil to increase water filtration around the tree. Smooth out the slope above the plant where you have cut into the soil so the old slope and the new slope transition together smoothly.

**Add the following to Article 253.08 Excavation of Plant Holes (b):**

When planting shrubs in shrub beds as shown on the plans or as directed by the Engineer, spade a planting bed edge at approximately a 45-degree angle and to a depth of approximately 3-inches around the perimeter of the shrub bed prior to placement of the mulch. Remove any debris created in the spade edging process and dispose of as specified in Article 202.03.

**Delete Article 253.09 (b) Pruning and substitute with the following:**

Deciduous Shrubs. Shrubs shall be pruned to remove dead, conflicting, or broken branches and shall preserve the natural form of the shrub.

**Delete the third and fourth paragraphs of Article 253.10 Planting Procedures and Article 253.10 (a) and substitute the following:**

Approved watering equipment shall be at the site of the work and in operational condition PRIOR TO STARTING the planting operation and DURING all planting operations OR PLANTING WILL NOT BE ALLOWED.



All plants shall be placed in a plumb position and avoid the appearance of leaning. Confirm the tree is straight from two directions prior to backfilling.

Before the plant is placed in the hole, any paper or cardboard trunk wrap shall be removed. Check that the trunk is not damaged. Any soil covering the tree's root flare shall be removed to expose the crown prior to planting.

Check the depth of the root ball in the planting hole. With the root flare exposed, the depth of the hole shall be equal to the depth of the root mass minus 2" allowing the tree or shrub to sit 2" higher than the surrounding soil surface for trees. The root flare shall always be slightly above the surface of the surrounding soil. For stability, the root ball shall sit on existing undisturbed soil. If the hole was inadvertently dug too deep, backfill and recompact the soil to the correct depth.

After the plant is placed in the hole, all cords and burlap shall be removed from the trunk. Remove the wire basket from the top three quarters (3/4) of the root ball. The remaining burlap shall be loosened and scored to provide the root system quick contact with the soil. All ropes or twine shall be removed from the root ball and tree trunk. All materials shall be disposed of properly.

The plant hole shall be backfilled with the same soil that was removed from the hole. Clay soil clumps shall be broken up as much as possible. Where rocks, gravel, heavy clay or other debris are encountered, clean topsoil shall be used. Do not backfill excavation with subsoil.

The hole shall be 1/3 filled with soil and firmly packed to assure the plant remains in plumb, then saturated with water. After the water has soaked in, complete the remaining backfill in 8" lifts, tamping the topsoil to eliminate voids, and then the hole shall be saturated again. Maintain plumb during backfilling. Backfill to the edge of the root mass and do not place any soil on top of the root mass. Visible root flare shall be left exposed, uncovered by the addition of soil.

**Add the following to Article 253.10 (b):**

After removal of the container, inspect the root system for circling, matted or crowded roots at the container sides and bottom. Using a sharp knife or hand pruners, prune, cut, and loosen any parts of the root system requiring corrective action.

**Delete the first sentence of Article 253.10(e) and substitute with the following:**

Water Saucer. All plants placed individually and not specified to be bedded with other plants, shall have a water saucer constructed of soil by mounding up the soil 4-inches high x 8-inches wide outside the edge of the planting hole.

**Delete Article 253.11 and substitute the following:**

Individual trees, shrubs, shrub beds, and vines shall be mulched within 48 hours after being planted. No weed barrier fabric will be required for tree and shrub plantings.

The mulch shall consist of wood chips or shredded tree bark free not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. Mulch shall be aged in stockpiles for a minimum of four (4) months where interior temperatures reach a minimum of 140-degrees. The mulch shall be free from inorganic materials, contaminants, fuels, invasive weed seeds, disease, harmful insects such as emerald ash borer or any other type of material detrimental to plant growth. A sample must be supplied to the Roadside Development Unit for approval prior to performing any work. Allow a minimum of seven (7) working days prior to installation for approval.

Mulch shall be applied at a depth of 4-inches around all plants within the entire mulched bed area or around each individual tree forming a minimum 6-foot diameter mulch ring around each tree. An excess of 4-inches of mulch is unacceptable and excess shall be removed. Mulch shall not be tapered so that no mulch shall be placed within 6-inches of the shrub base or trunk to allow the root flare to be exposed and shall be free of mulch contact.

Care shall be taken not to bury leaves, stems, or vines under mulch material. All finished mulch areas shall be left smooth and level to maintain uniform surface and appearance. After the mulch placement, any debris or piles of material shall be immediately removed from the right of way, including raking excess mulch out of turf areas in accordance with Article 202.03.

**Delete Article 253.12 Wrapping and substitute the following:**

Within 48 hours after planting, screen mesh shall be wrapped around the trunk of all deciduous trees with a caliper of 1-inch or greater. Multi-stem or clump form trees, with individual stems having a caliper of 1-inch or greater, shall have each stem wrapped separately. The screen mesh shall be secured to itself with staples or single wire strands tied to the mesh. Trees shall be wrapped at time of planting, before the installation of mulch. The lower edge of the screen wire shall be in continuous contact with the ground and shall extend up to a minimum of 36-inches or to the lowest major branch, whichever is less. Replacement plantings shall not be wrapped.

**Delete Article 253.13 Bracing and substitute with the following:**

Unless otherwise specified by the Engineer, within 48 hours after planting all deciduous and evergreen trees, with the exception of multi-stem or clump form specimens, over 8-feet in height shall require three 6-foot long steel posts equally spaced from each other and adjacent to the outside of the ball. The posts shall be driven vertically to a depth of 18-inches below the bottom of the hole. The anchor plate shall be aligned perpendicular to a line between the tree and the post. The tree shall be firmly attached to each post with a double guy of 14-gauge steel wire. The portion of the wire in contact with the tree shall be encased in a hose of a type and length approved by the Engineer.

During the life of the contract, within 72 hours the Contractor shall straighten any tree that deviates from a plumb position. The Contractor shall adjust backfill compaction and install or adjust bracing on the tree as necessary to maintain a plumb position. Replacement trees shall not be braced.

**Delete the second sentence of the first paragraph of Article 253.14 Period of Establishment and substitute the following:**

This period shall begin in April and end in November of the same year.

**Delete the last sentence of the first paragraph of Article 253.15 Plant Care and substitute the following:**

This may require pruning, cultivating, tightening and repairing supports, repair of wrapping, and furnishing and applying sprays as necessary to keep the plants free of insects and disease. The Contractor shall provide plant care a minimum of every two weeks, or within 3 days following notification by the Engineer. All requirements for plant care shall be considered as included in the cost of the contract.

**Delete the first paragraph of Article 253.15 Plant Care (a) and substitute with the following:**

During plant care additional watering shall be performed at least every two weeks during the months of May through December. The Contractor shall apply a minimum of 35 gallons of water per tree, 25 gallons per large shrub, 15 gallons per small shrub, and 4 gallons per vine. The Engineer may direct the Contractor to adjust the watering rate and frequency depending upon weather conditions.

**Add the following to Article 253.15 Plant Care (c):**

The Contractor shall correct any vine growing across the ground plane that should be growing up desired vertical element (noise wall, retaining wall, fence, knee wall, etc.). Work may include but is not limited to carefully weaving vines through fence and/or taping vines to vertical elements.

**Add the following to Article 253.15 Plant Care (d):**

The Contractor shall inspect all trees, shrubs, and vines for pests and diseases at least every two weeks during the months of initial planting through final acceptance. Contractor must identify and monitor pest and diseases and determine action required to maintain the good appearance, health and, top performance of all plant material. Contractor shall notify the Engineer with their inspection findings and recommendations within twenty-four hours of findings. The recommendations for action by the Contractor must be reviewed and by the Engineer for approval/rejection. All approved corrective activities will be included in the cost of the contract and shall be performed within 48 hours following notification by the Engineer.

**Delete Article 253.16 Method of Measurement and substitute with the following:**

Trees, shrubs, evergreens, vines, and seedlings will be measured as each individual plant.

- (a) This work will be measured for initial payment, in place, for plant material found to be in live and healthy condition by June 1.
- (b) This work will be measured for final payment, in place, for plant material found to be in live and healthy condition upon final acceptance by the Department.

**Delete Article 253.17 Basis of Payment and substitute the following:**

This work will be paid for at the contract unit price per each for TREES, SHRUBS, EVERGREENS, or VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS.

The unit price shall include the cost of all materials, mulch, equipment, labor, plant care, watering, and disposal required to complete the work as specified herein and to the satisfaction of the Engineer. Payment will be made according to the following schedule.

- (a) Initial Payment. Upon completion of planting, mulch covering, wrapping, and bracing, 75 percent of the pay item(s) will be paid.
- (b) Final Payment. After the successful completion of all required replacement plantings, clean-up work and receipt of the "Final Acceptance of Landscape Work" memorandum from the Bureau of Maintenance, or upon execution of a third-party bond, the remaining 25 percent of the pay item(s) will be paid.

**PERENNIAL PLANTS, WOODLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG  
PERENNIAL PLANTS, PRAIRIE TYPE, 2" DIAMETER BY 4" DEEP PLUG**

Description: This work shall consist of furnishing and installing native woodland or prairie perennial plant plugs, watering of the plugs, and other materials required in the planting operation only at locations as directed by the Engineer.

All work, materials, and equipment shall conform to Sections 254 and 1081 of the Standard Specifications except as modified herein.

Materials:

Add the following to Article 254.02 Materials:

All plants shall be healthy, vigorous, and true to species and variety. All materials shall be provided by a certified nursery and shall be free of pests and disease. All plant materials shall comply with State and Federal laws with respect to inspection for plant diseases and infestations. Written approval shall be necessary for substitutions.

Original source of all plants shall be within 200 miles of the respective project site location. Species and quantities will vary based on location, performance, and permit requirements. Exact quantities of plugs and varieties will be provided on an as-needed basis. Species shall be as directed by the Engineer from the following lists:

### WOODLAND TYPE

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Aquilegia canadensis</i>	Columbine
<i>Bromus pubescens</i>	Woodland Brome
<i>Campanula rotundifolia</i>	Harebell
<i>Carex blanda</i>	Common Wood Sedge
<i>Carex cephalophora</i>	Short Headed Bracted Sedge
<i>Carex pensylvanica</i>	Common Oak Sedge
<i>Carex rosea</i>	Rosy Sedge
<i>Dicentra canadensis</i>	Squirrel Corn
<i>Dicentra cucullaria</i>	Dutchman's Breeches
<i>Geranium maculatum</i>	Wild Geranium
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf
<i>Penstemon calycosus</i>	Smooth Beard Tongue
<i>Penstemon hirsutus</i>	Hairy Beard Tongue
<i>Phlox divaricate</i>	Blue Phlox
<i>Polemonium reptans</i>	Jacob's Ladder
<i>Solidago ulmifolia</i>	Elm-leafed Goldenrod
<i>Symphyotrichum shortii</i>	Short's Aster
<i>Thalictrum dioicum</i>	Early Meadow Rue

**PRAIRIE TYPE**

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Allium cernuum</i>	Nodding Wild Onion
<i>Amorpha canescens</i>	Lead Plant
<i>Asclepias syriaca</i>	Common Milkweed
<i>Asclepias tuberosa</i>	Butterfly Milkweed
<i>Asclepias verticillata</i>	Whorled Milkweed
<i>Baptisia australis</i>	Blue False Indigo
<i>Baptisia leucophaea</i>	Cream Wild Indigo
<i>Bouteloua curtipendula</i>	Side Oats Grama
<i>Campanula americana</i>	Tall Bellflower
<i>Coreopsis palmata</i>	Prairie Coreopsis
<i>Dalea candida</i>	White Prairie Clover
<i>Dalea purpurea</i>	Purple Prairie Clover
<i>Echinacea pallida</i>	Pale Purple Coneflower
<i>Echinacea purpurea</i>	Purple Coneflower
<i>Eragrostis spectabilis</i>	Purple Lovegrass
<i>Eryngium yuccifolium</i>	Rattlesnake Master
<i>Guem triflorum</i>	Prairie Smoke
<i>Lespedeza violacea</i>	Violet Bush Clover
<i>Liatris aspera</i>	Rough Blazing Star
<i>Liatris squarrosa</i>	Scaly Blazing Star
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Penstemon digitalis</i>	Foxglove beard tongue
<i>Ruellia humilis</i>	Wild Petunia
<i>Sisyrinchium angustifolium</i>	Blue-eyed Grass
<i>Sporobolus heterolepis</i>	Prairie Dropseed
<i>Tradescantia ohimensis</i>	Spiderwort
<i>Verbena stricta</i>	Hoary Vervain
<i>Zizia aurea</i>	Golden Alexanders

**Delete Article 254.03(b) Planting Time and substitute the following:**

Woodland plugs shall be planted between April 1 and May 15. Prairie plugs shall be planted between May 1 and June 15. Written approval from the Engineer must be received prior to planting outside the specified dates.

**Add the following to Article 254.04 Transporting and Storing Plants:**

Each species shall be handled and packed in the manner approved for the plant, having regard for the soil climatic conditions at the time and place of digging and delivery, and for the time that will be consumed for transit and delivery.

Plant materials shall be packed to ensure adequate protection against damage during transit. The plants shall be protected with wet material to ensure that the plant materials are delivered in a moist and cool condition. The vehicle should be ventilated to prevent overheating.

Plant materials shall be stored in a shaded area. Watering shall occur to maintain plant vigor during on-site storage.

An on-site inspection will be made prior to the installation of plant material. Any plant material not meeting specifications (that being of good health) must be removed and replaced.

**Delete Article 254.05 Layout of Planting and substitute the following:**

When plants are specified to be planted in prepared soil planting beds, the planting bed shall be approved by the Engineer prior to planting. Bed limits shall be painted or flagged. Individual plants layout shall be marked prior to installation. The Engineer will contact the Roadside Development Unit at (847) 705-4171 for layout.

**Delete Article 254.06 (b) Planting Procedures and substitute the following:**

When planting plugs in areas as shown on the plans or as directed by the Engineer, the following work shall be performed prior to planting:

Trees and shrubs must be installed first to establish proper layout and to avoid damage to other plantings.

Weed Control and other preparatory work must be completed prior to planting plugs to avoid damage to plants. Replanting interval specified on the label of any herbicide used must be followed.

Permanent Seeding and Erosion Control Blanket must be installed prior to plug installation. Debris (rock, stones, concrete, bottles, plastic bags, etc.) shall be removed from the plug plantings area and be disposed of in accordance with Article 202.03.

Install plugs with planting bar. Planting holes shall be as deep as or slightly deeper than the plug roots to allow placing the plant without bending roots. Plant shall be placed flush with the earth surface. Hole shall be filled with soil carefully to avoid damage to roots and to leave no voids and pressed firm to earth surface to ensure soil contact.

Contractor shall provide and maintain all equipment necessary for planting, including watering equipment, water, and hoses. Immediately after planting, thoroughly water plant beds. Do not wash soil onto crowns of plants.

**Delete Article 254.08 (b) Period of Establishment and substitute the following:**

Plugs must undergo a 45-day period of establishment. Watering shall be performed not less than two times a week during the period of establishment. Water shall be applied at the rate of at least 2 gallons per square foot. Should adequate moisture prevail, the Engineer may allow the Contractor to omit any or all of the watering cycles.

A spray nozzle that does not damage small plants must be used when watering native plant plugs. Water shall be applied at the base of the plant. The plants to be watered and the method of application are subject to review and approval by the Engineer.

In dry weather, the Engineer may require additional watering. The Contractor will not be relieved in any way from the responsibility for unsatisfactory plant establishment due to the amount of watering necessary.

All requirements for proper care during the period of establishment shall be considered as included in the cost of the contract.

Method of Measurement:

**Delete Article 254.09 Method of Measurement and substitute the following:**

This work will be measured for payment in units of 100 woodland and/or prairie plant plugs regardless of the type and size specified. Measurement for payment of this work will not be performed until the end of the 45 - day establishment period. Only plants that are in place, alive, and thriving at the time of measurement will be measured for payment. Debris removal will not be measured for payment but shall be considered included.

Basis of Payment:

**Delete Article 253.17 Basis of Payment and substitute the following:**

This work will be paid for at the contract unit price per unit for PERENNIAL PLANTS, WOODLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG and PERENNIAL PLANTS, PRAIRIE TYPE, 2" DIAMETER BY 4" DEEP PLUG.

The unit price shall include the cost of all materials, equipment, labor, plant care, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.



**PLANTING PERENNIAL PLANTS**

Description: This work shall consist of furnishing and installing perennials, grasses, woodland plants, prairie plants, or bulbs, watering of the perennials, and other materials required in the planting operation only at locations as directed by the Engineer.

All work, materials, and equipment shall conform to Sections 254 and 1081 of the Standard Specifications except as modified herein.

Materials:

**Add the following to Article 254.02 Materials:**

All plants shall be healthy, vigorous, and true to species and variety. All materials shall be provided by a certified nursery and shall be free of pests and disease. All plant materials shall comply with State and Federal laws with respect to inspection for plant diseases and infestations. Written approval shall be necessary for substitutions.

Original source of all plants shall be within 200 miles of the respective project site location. Species and quantities will vary based on location, performance, and permit requirements. Exact quantities of plugs and varieties will be provided on an as-needed basis. Species shall be as directed by the Engineer from the following lists:

(a) Bulbs:

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Narcissus 'Actaea'</i>	Actaea Daffodil
<i>Narcissus 'Barette Browning'</i>	Barret Browning Daffodil
<i>Narcissus 'Delibes'</i>	Delibes Daffodil
<i>Narcissus 'Ice Follies'</i>	Ice Follies Daffodil
<i>Narcissus 'Pimpernel'</i>	Pimpernel Daffodil

(b) Ornamental Type, Gallon Pot:

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Aruncus dioicus</i>	Goat's Beard
<i>Amsonia hubrichtii</i>	Narrow Leaf Blue Star
<i>Adiantum pedatum</i>	Northern Maidenhair Fern
<i>Athyrium filix-femina</i>	Lady Fern
<i>Dryopteris marginalis</i>	Marginal Wood Fern
<i>Polystichum acrostichoide</i>	Christmas Fern
<i>Podophyllum peltatum</i>	Mayapple
<i>Polygonatum biflorum</i>	Smooth Solomon's Seal
<i>Symphotrichum oblongifolium</i> 'October Skies'	October Skies Aromatic Aster
<i>Vernonia lettermannii</i> 'Iron Butterflies'	Iron Butterfly Ironweed

(c) Prairie Type, Gallon Pot:

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Andropogon gerardii</i> 'Red October'	Red October Big Bluestem
<i>Callirhoe involucrata</i>	Purple Poppy Mallow
<i>Oenothera macrocarpa</i>	Missouri Evening Primrose
<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Red Switch Grass

(f) Woodland Type, Quart Pot:

<u>BOTANIC NAME</u>	<u>COMMON NAME</u>
<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit
<i>Asarum canadense</i>	Wild Ginger
<i>Dodecatheon meadia</i>	Shooting Star
<i>Fragaria virginiana</i>	Wild Strawberry
<i>Hepatica nobilis</i> Schreb. var. <i>acuta</i>	Sharp-lobed Hepatica
<i>Iris cristata</i>	Dwarf Crested Iris
<i>Maianthemum racemosum</i>	Feathery False Solomon's Seal
<i>Mertensia virginica</i>	Virginia Bluebells
<i>Dicentra cucullaria</i>	Dutchman's Breeches
<i>Pachysandra procumbens</i>	Allegheny Spurge
<i>Phlox bifida</i>	Cleft Phlox
<i>Sanguinaria canadensis</i>	Bloodroot
<i>Sedum ternatum</i>	Wild Stonecrop
<i>Silene regia</i>	Royal Catchfly
<i>Sisyrinchium angustifolium</i>	Blue-eyed Grass
<i>Tiarella cordifolia</i>	Foamflower
<i>Trillium grandiflorum</i>	Large-flowered Trillium
<i>Uvularia grandiflora</i>	Large-flowered Merrybells

**Delete Article 254.03(a) Planting Time and substitute the following:**

Bulbs shall be planted between October 15 and November 30. Bulbs shall not be installed prior to trees, shrubs, perennials, and ornamental grasses are planted.

**Delete Article 254.05 Layout of Planting and substitute the following:**

When plants are specified to be planted in prepared soil planting beds, the planting bed shall be approved by the Engineer prior to planting. Bed limits shall be painted or flagged. Individual plants layout shall be marked prior to installation. The Contractor will contact the Roadside Development Unit at (847) 705-4171 for plant layout prior to installation. Allow a minimum of seven (7) days prior to installation for layout.

**Add the following to Article 254.06 Planting Procedures:**

When planting perennials in bed areas shown on the plans or as directed by the Engineer, the following work shall be performed prior to planting:

- Spade a planting bed edge at approximately a 45 - degree angle and to a depth of approximately two (2) inches around the perimeter of the perennial bed. Remove any debris created in the spade edging process and dispose of as specified in Article 202.03.
- Do not plant when soil is muddy.
- Trees and shrubs must be installed first to establish proper layout and to avoid damage to other plantings.
- Perennial plants shall be planted by a hand method approved by the Engineer. Open holes sized to accommodate roots, place plants at proper elevation and backfill with planting soil, working carefully to avoid damage to roots and to leave no voids. Build up a small water basin of soil around each plant.
- Thoroughly water plant beds within 2 hours of installation. Do not wash soil onto crowns of plants.

**Delete the first sentence of Article 254.07 Mulching and substitute the following:**

Within 24 hours, the entire perennial plant bed shall be mulched with two (2) inches of fine grade Shredded Hardwood Bark Mulch. Monitor mulch depths to maintain a two (2) inch depth around perennial plants (no more, no less). Mulch shall not touch perennial crowns.

Hardwood bark mulch shall be clean, finely shredded mixed-hardwood bark not to exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones, and clods. All hardwood mulch shall be processed through a hammer mill. Hardwood bark not processed through a hammer mill shall not be accepted. A mulch sample shall be submitted to the Engineer for approval seven (7) days prior to placing. The Contractor shall place the mulch to build up a small water basin of mulch around each plant so as not to smother the plants or bury leaves, stems or vines under mulch material.

**Delete Article 254.08 (b) Period of Establishment and substitute the following:**

Perennial plants must undergo a 30-day period of establishment. Additional watering shall be performed not less than twice a week for four weeks following installation. Any signs of stress exhibited by plant material must be given special consideration in determining water needs. Water immediately if plants begin to wilt, or if top (1) inch to two (2) inches of soil is dry. Water shall be applied at the rate of a minimum of 2 gallons per square foot. Water to ensure that moisture penetrates throughout the root zone, including the surrounding soil, and only as frequently as necessary to maintain healthy growth. **Do not over water.**

Should excess moisture prevail, the Engineer may delete any or all of the additional watering cycles. In severe weather, the Engineer may require additional watering.

Water must be applied in such a manner so as not to damage plant material. Water must trickle slowly into soil and completely soak the root zone. An open-end hose is unacceptable. Water early in the day and apply water as close to the soil as possible without washing out soil or mulch. Water at the base of the plant to keep as much water as possible off plant leaves in order to minimize fungus problems. Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing water to flow beyond the periphery of the bed. Thoroughly saturate all areas of the perennial bed, not just individual plants. The plants to be watered and the method of application will be approved by the Engineer.

The Contractor will not be relieved in any way from the responsibility for unsatisfactory plants due to the amount of watering. Any loss of newly installed plant material determined by the Engineer to be due to lack of water, is the responsibility of the contractor to replace at no additional cost. Any damage to plant material due to incorrect watering must be corrected or replace at the Contractors expense, to the satisfaction of the Engineer.

At the end of the period of establishment, the Contractor will be permitted to replace any unacceptable plants and shall thoroughly weed all the beds.

**Add the following Article 254.08 Period of Establishment:**

During the period of establishment, weeds and grass growth shall be removed from within the mulched perennial beds. This weeding shall be performed a minimum of once per week or within 48 hours following notification by the Engineer during the 30-day period of establishment. The Contractor will not be relieved in any way from the responsibility for unsatisfactory plants due to the extent of weeding.

The weeding may be performed in any manner approved by the Engineer provided the weed and grass growth, including their roots and stems, are removed from the area specified. Mulch disturbed by the weeding operation shall be replaced to its original condition. All debris that results from this operation must be removed from the right-of-way and disposed of at the end of each day in accordance with Article 202.03.

**Add the following to Article 254.09 Method of Measurement:**

Disposal of weeds, sod and debris (rock, stones, concrete, bottles, plastic bags, etc.) removed from the perennial planting bed as specified in Article 202.03.

**Add the following to Article 254.10 Basis of Payment:**

- a) Payment for Shredded Mulch shall be included in contract unit price of the perennial plant pay item.
- b) The unit price shall include the cost of all materials, equipment, labor, plant care, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.

**PERENNIAL PLANT CARE**

Description: This work shall consist of weeding, replenishing mulch, trimming and other perennial plant care work items for each work cycle as described herein and as directed by the Engineer. The work required for each work cycle shall be scheduled to be complete and acceptable at the time of inspection.

Inspection Date: Perennial plant care will be inspected 5 days after the Engineer directs the Contractor to perform perennial plant care. The work required for each work cycle must be 100 percent complete on the inspection date. Partial inspections will not be made.

Work Cycle Requirements:

- Perennial plant beds must be 100 percent weed-free and clear of litter and debris to be acceptable. Control weeds in landscaped areas by pulling the entire plant and roots.
- Disturbed areas shall be raked level and mulch adjusted.
- Dead or diseased flowers, stems, and leaves must be trimmed and removed.
- Monitor mulch depths to maintain a two-inch (50 mm) depth around perennial plants (no more, no less). Rake mulch any away from perennial crowns.
- Finely shredded hardwood bark mulch must be replenished to maintain a two-inch depth around perennial plants, if necessary. Hardwood mulch shall not exceed two (2) inches in its largest dimension, free of foreign matter, sticks, stones and clods. (Mulch must be approved by the Engineer prior to placement).
- Remove litter and other debris. All drain inlets must be kept clean and draining freely. All walls, pavement, curb and gutters, and concrete pads are to be left clean and swept free of all debris.
- Plants must be free of insect infestations and sprayed if necessary. (Pesticide must be approved by the Engineer prior to use).

- Beds must have a neatly spaded edge between the mulched bed and the turf.
- Mulch must be raked out of turf surrounding the mulched bed.
- All debris that results from this operation must be removed from the right-of-way and disposed of in accordance with Article 202.03 at the end of each day.
- Trim dead tips of vines and ground covers.
- In the spring (March/April/May), cut back ornamental grasses to six (6) inches in height. Cut down any perennial left up over the winter to a height of six (6) inches or less and remove any dead leaves around the crowns of the plants. Rake beds free of accumulated debris, dead leaves, and other material, leaving mulch in place and being careful not to damage emerging bulb foliage and flowers. Rake back any mulch that covers plant crowns.
- Fall clean-up (October 15 – November 15; depending upon weather conditions and condition of plant material), cut back perennials leaving 3 to 4 inches height foliage as soon as foliage has died back or at discretion of the Engineer. Do not cut into plant crowns. Do not cut back any perennial with winter interest (ornamental grasses, Baptisia, Echinacea/Rudbeckia seed heads).

Method of Measurement: The work will be measured for payment of surface area cared for to the satisfaction of the Engineer on the inspection date specified in the plans. The area will be computed in square yards. Measurement for payment of this work will be performed on the inspection date specified in the plans.

If the inspection discloses any work as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with such instructions and correct the unsatisfactory work on the inspection date. Work that is not acceptable on the inspection date will not be measured for payment. Individual perennial plant areas within a perennial plant bed will not be measured for payment if any portion of the perennial plant bed has not been cared for to the satisfaction of the Engineer. Each perennial plant care work cycle specified in the plans will be measure separately for payment.

Basis of Payment: This work will be paid for at the contract unit price per square yards for PERENNIAL PLANT CARE, which price shall include all materials, equipment, labor, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.

## **SELECTIVE MOWING STAKES**

This work shall be done in accordance with Article 250.08 of the Standard Specifications with the following addition:

On selective mowing stakes, as directed by the Engineer, the Contractor shall furnish materials, labor and equipment to attach a 10" x 18" aluminum sign with one of the following texts:

1. Prairie Plants
2. Wildflowers

The text of the sign should be appropriate to the area being delineated with selective mowing stakes. The signs shall be permanently attached to the stakes by a method approved by the Engineer. The signs will be provided by the Department and shall be picked up by the Contractor from the District One Roadside Development Unit in Schaumburg, Illinois.

Scheduling the pickup of the signs can be arranged by contacting the District One Roadside Development Unit at (847)705-4171. The cost of picking up and attaching the signs to the selective mowing stakes will not be paid for separately but shall be included in the contract unit price for SELECTIVE MOWING STAKES.

## **MOWING (ACRES)**

Description: This work shall consist of mowing areas to be interseeded to a height of 3 inches and to mow native grass areas to a height of 8 - 10 inches.

Schedule: The Contractor shall be responsible for the regular mowing and maintenance of native grass areas when the vegetation (including weeds) has reached a height of 12 - 15 inches, or as directed by the Engineer. Mowing must be completed in a timely manner. When the Engineer directs the Contractor to mow, the Contractor must begin the mowing operation within 3 days of notice.

Equipment: The Contractor shall keep all mowing equipment sharp and properly equipped for operation along an urban arterial route. The equipment used shall be capable of completely severing all growth at the cutting height and distributing it evenly over the mowed area. Special equipment may be required on steep slopes, in narrow areas, and for trimming around posts, poles, fences, trees, shrubs, seedlings, etc.

All mowing equipment used **MUST BE WASHED** prior to entering the site. Washing is required to prevent the accidental introduction and spread of weed species into naturalized areas. If mowing equipment is not clean at time of work, the Resident Engineer will reject use of this machinery until it is proven clean.

Method: All mowing and trimming operations are to proceed in the direction of traffic flow. The cut material shall not be windrowed or left in a lumpy or bunched condition. All drain inlets must be kept clean and draining freely. Additional mowing or trimming may be required to obtain the height specified or to disperse mowed material. When amount of grass is heavy, cut grass shall be removed to prevent destruction of underlying turf. No more than 1/3 of the total growth of grass shall be cut off at one time and only when grass is dry, and soil is not wet.

Remove litter, including plastic bags, paper, bottles, etc. prior to mowing. Debris encountered during the mowing operations which hampers the operation or is visible from the roadway shall be removed and disposed of according to Article 202.03. All trimmings, windrowed material, litter and debris removal must be complete to the satisfaction of the Engineer. Damage to the turf, such as ruts or wheel tracks more than 2 inches in depth, scalping of the mowed areas, or other plantings or highway appurtenances caused by the mowing or trimming operation shall be repaired at the Contractor's expense.

Method of Measurement: Mowing and trimming will be measured in acres of surface area mowed at the completion of each mowing cycle.

Plan quantities are estimates only. Actual quantities will be measured in place. Agreement to plan quantities will not be allowed. Shrub beds or perennial beds within the mowed area that are less than 1000 square feet will not be subtracted from the area mowed.

Basis of Payment: This work will be paid for at the contract unit price per acre for MOWING. Any additional mowing or trimming required to obtain the height specified or to disperse mowed material will be considered as included in the cost of the initial mowing. Payment for mowing and trimming shall include the cost of all material, equipment, labor, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.

## **MOWING (UNIT)**

Description: This work shall consist of mowing or hand trimming small areas of various types of weeds to the height of (2 - 6") dependent on the ground cover type (native grass, forbs, etc.) and weed. These areas may not be able to be mowed with typical roadside mowing equipment. Locations for selective mowing shall be designated by the Engineer.

All selective mowed areas shall be trimmed and finished uniformly to the satisfaction of the Engineer with equipment approved by the Engineer. Disposal of material shall be done in accordance with Article 202.03.

Schedule and Height of Mowing: When vegetation reaches a height of 12 inches or as directed by the Engineer. Individual weed species such as sweet clover (*Melilotus* spp.), garlic mustard (*Alliaria petiolate*), and others may be targeted and shall be mowed to the ground level during the appropriate growth stage. When spot mowing for individual weed species, care shall be taken so the surrounding native or planted vegetation is not damaged. Mowing must be completed in a timely manner. When the Engineer directs the Contractor to mow, the Contractor must begin mowing operation within 3 days of notice.



Equipment: The Contractor shall keep all mowing equipment sharp and properly equipped for operation within an urban arterial route. The equipment used shall be capable of completely severing all growth at the cutting height and distributing it evenly over the mowed area. All mowing equipment used MUST BE WASHED prior to entering the site. Washing is required to prevent the accidental introduction and spread of weed species into naturalized areas. If mowing equipment is not clean at time of work, IDOT will reject use of this machinery until it is proven clean. Special equipment may be required to cut small, designated areas.

Method: All mowing and trimming operations are to proceed in the direction of traffic flow. The cut material shall not be windrowed or left in a lumpy or bunched condition. All drain inlets must be kept clean and draining freely. Additional mowing or trimming may be required to obtain the height specified or to disperse mowed material. When amount of cut vegetation is heavy, cut vegetation shall be removed to prevent destruction of underlying turf and/or disrupting water flow. If weeds or other undesirable vegetation threatens to introduce seed into naturalized areas, smother planted species, or in case of weeds exceeding growth of planted species, at the direction of the Engineer, the weeds shall be uprooted, raked and removed from the area.

The cut material from common reed (*Phragmites australis*), teasel species (*Dipsacus* spp.), and thistle species (*Cirsium* spp.) shall be removed and disposed of according to Article 202.03.

Remove litter, including plastic bags, paper, bottles, etc. prior to mowing. Debris encountered during the mowing operations shall be removed and disposed of according to Article 202.03. All trimmings, windrowed material, litter and debris removal must be complete to the satisfaction of the Engineer. Damage to the turf, such as ruts or wheel tracks more than 2 inches (50 MM) in depth, scalping of the mowed areas, or other plantings or highway appurtenances caused by the mowing or trimming operation shall be repaired at the Contractor's expense and to the satisfaction of the Engineer.

Method of Measurement: Mowing will be measured in units of 1,000 square feet of surface area mowed at the completion of each mowing cycle. Areas not meeting the satisfaction of the Engineer shall not be measured for payment. Plan quantities are estimates only. Actual quantities will be measured in place. Agreement to plan quantities will not be allowed.

Basis of Payment: This work will be paid for at the contract unit price per unit for MOWING. Any additional mowing or trimming required to obtain the height specified will be considered as included in the cost of the initial mowing. Payment for mowing and trimming shall include the cost of all material, equipment, labor, removal, disposal and incidentals required to complete the work as specified herein and to the satisfaction of the Engineer.

## **MAINTENANCE OF ROADWAYS**

Effective: September 30, 1985

Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

## **PUBLIC CONVENIENCE AND SAFETY (DIST 1)**

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.”

## **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: 701001, 701006, 701106, 701201, 701301, 701311, 701421, 701422, 701427, 701501, 701502, 701601, 701606, 701611, 701701, 701801, 701901

DETAILS:

(TC-10) Traffic Control and Protection for Side Roads, Intersections, and Driveways  
(TC-17) Traffic Control and Protection for Freeway Shoulder Closure and Partial Ramp Closure

SPECIAL PROVISIONS:

Public Convenience and Safety (District 1)  
Maintenance of Roadway  
Work Zone Traffic Control (D-1 Maintenance)  
Failure to Open Traffic Lanes to Traffic  
Traffic Control and Protection (Arterials)  
Traffic Control and Protection (Expressways)  
Keeping Arterial Roadways Open to Traffic (Lane Closures Only)  
Keeping Arterial Roadways Open to Traffic (With 15 MIN Full Stops)  
Keeping the Expressway Open to Traffic  
Automated Flagger Assistance Devices (BDE)  
Equipment Parking and Storage (BDE)  
Traffic Control Devices – Cones (BDE)  
Work Zone Traffic Control Devices (BDE)

**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."

### **KEEPING THE EXPRESSWAY OPEN TO TRAFFIC**

Effective: March 22, 1996

Revised: January 21, 2015

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](http://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.

Shoulder closures or partial ramp closures (per attached TC-17) will not be permitted on weekdays (Monday thru Friday) from 5:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 7:00 p.m. Lane and ramp 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. 1<sup>st</sup> and April 1<sup>st</sup>.

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.

### **FAILURE TO OPEN TRAFFIC LANES TO TRAFFIC**

Effective: March 22, 1996

Revised: February 9, 2005

Should the Contractor fail to completely open and keep open all the traffic lanes to traffic in accordance with the limitations specified under the Special Provisions for "Keeping the Expressway Open to Traffic", the Contractor shall be liable to the Department for the amount of:

One lane or ramp blocked = \$ 2,000/15 minutes

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.

### **TRAFFIC CONTROL AND PROTECTION (ARTERIALS)**

Effective: February 1, 1996

Revised: January 24, 2020

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

Method of Measurement: All traffic control indicated on the traffic control plan details and specified in the Special Provisions will be not be measured for payment.

#### Basis of Payment:

(a) Traffic Control and Protection (Arterials) 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 AND PROTECTION (EXPRESSWAYS)**

Effective: March 8, 1996

Revised: January 24, 2020

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 existing 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 (Expressways) will not be measured for payment.

Basis of Payment.

- (a) Traffic Control and Protection (Expressways) 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.



**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 = \$ 1,000

Two lanes blocked = \$ 2,500

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 ARTERIAL ROADWAYS OPEN TO TRAFFIC (WITH 15 MIN FULL STOPS)**

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**.

Full closure of all arterial lanes in one or both directions will only be permitted for a maximum of 15 minutes at a time **during the off-peak traffic volume hours**. During full roadway closures, the Contractor will be required to reduce the roadway to only one open traffic lane in the affected direction(s) of travel using the appropriate State Standard(s) and District Detail(s). Police forces shall be notified and requested to close the remaining lane to facilitate the necessary work activities, except that a flagger may be substituted for daytime closures with the approval of the Engineer. The Contractor shall notify the District One Arterial Traffic Control Supervisor at 847-705-4470 at least three (3) working days (weekends and holidays DO NOT count into this notification time) in advance of the proposed road closures.

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 = \$ 1,000

Two lanes blocked = \$ 2,500

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.

## 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: November 1, 2014

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 using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment’s respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

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* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), 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 (DBE)**

Effective: September 1, 2000

Revised: March 2, 2019

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

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

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

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



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

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

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

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

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

<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

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

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

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

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

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder’s good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

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

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

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

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

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

- (a) **NO AMENDMENT.** No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be emailed to the Department at [DOT.DBE.UP@illinois.gov](mailto:DOT.DBE.UP@illinois.gov).
- (b) **CHANGES TO WORK.** Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) **SUBCONTRACT.** The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) **ALTERNATIVE WORK METHODS.** In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

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

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;

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

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



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

#### **DISPOSAL FEES (BDE)**

Effective: November 1, 2018

Replace Articles 109.04(b)(5) – 109.04(b)(8) of the Standard Specifications with the following:

- "(5) Disposal Fees. When the extra work performed includes paying for disposal fees at a clean construction and demolition debris facility, an uncontaminated soil fill operation or a landfill, the Contractor shall receive, as administrative costs, an amount equal to five percent of the first \$10,000 and one percent of any amount over \$10,000 of the total approved costs of such fees.
- (6) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

- (7) Statements. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with itemized statements of the cost of such force account work. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Itemized statements at the cost of force account work shall be detailed as follows.

- a. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman. Payrolls shall be submitted to substantiate actual wages paid if so requested by the Engineer.
  - b. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - c. Quantities of materials, prices and extensions.
  - d. Transportation of materials.
  - e. Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.
- (8) Work Performed by an Approved Subcontractor. When extra work is performed by an approved subcontractor, the Contractor shall receive, as administrative costs, an amount equal to five percent of the total approved costs of such work with the minimum payment being \$100.
- (9) All statements of the cost of force account work shall be furnished to the Engineer not later than 60 days after receipt of the Central Bureau of Construction form "Extra Work Daily Report". If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the Department is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery."

## **EQUIPMENT PARKING AND STORAGE (BDE)**

Effective: November 1, 2017

Replace the first paragraph of Article 701.11 of the Standard Specifications with the following.

**“701.11 Equipment Parking and Storage.** During working hours, all vehicles and/or nonoperating equipment which are parked, two hours or less, shall be parked at least 8 ft (2.5 m) from the open traffic lane. For other periods of time during working and for all nonworking hours, all vehicles, materials, and equipment shall be parked or stored as follows.

- (a) When the project has adequate right-of-way, vehicles, materials, and equipment shall be located a minimum of 30 ft (9 m) from the pavement.
- (b) When adequate right-of-way does not exist, vehicles, materials, and equipment shall be located a minimum of 15 ft (4.5 m) from the edge of any pavement open to traffic.
- (c) Behind temporary concrete barrier, vehicles, materials, and equipment shall be located a minimum of 24 in. (600 mm) behind free standing barrier or a minimum of 6 in. (150 mm) behind barrier that is either pinned or restrained according to Article 704.04. The 24 in. or 6 in. measurement shall be from the base of the non-traffic side of the barrier.
- (d) Behind other man-made or natural barriers meeting the approval of the Engineer.”

## **MOBILIZATION (BDE)**

Effective: April 1, 2020

Replace Articles 671.02(a), (b), and (c) of the Standard Specifications with the following:

- “(a) Upon execution of the contract, 90 percent of the pay item will be paid.
- (b) When 90 percent of the adjusted contract value is earned, the remaining ten percent of the pay item will be paid along with any amount bid in excess of six percent of the original contract amount.”

**PAVEMENT MARKING REMOVAL (BDE)**

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

**“783.02 Equipment.** Equipment shall be according to the following.

Item	Article/Section
(a) Grinders (Note 1)	
(b) Water Blaster with Vacuum Recovery .....	1101.12

Note 1. Grinding equipment shall be approved by the Engineer.”

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

**“783.03 Removal of Conflicting Markings.** Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours.”

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

“The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.”

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

**“783.04 Cleaning.** The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast.”

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

**“783.06 Basis of Payment.** This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING.”

Delete Article 1101.13 from the Standard Specifications.

**PORTLAND CEMENT CONCRETE (BDE)**

Effective: November 1, 2017

Revise the Air Content % of Class PP Concrete in Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

"TABLE 1. CLASSES OF CONCRETE AND MIX DESIGN CRITERIA		
Class of Conc.	Use	Air Content %
PP	Pavement Patching Bridge Deck Patching (10)	4.0 - 8.0"
	PP-1	
	PP-2	
	PP-3	
	PP-4	
	PP-5	

Revise Note (4) at the end of Table 1 Classes of Concrete and Mix Design Criteria in Article 1020.04 of the Standard Specifications to read:

“(4) For all classes of concrete, the maximum slump may be increased to 7 in (175 mm) when a high range water-reducing admixture is used. For Class SC, the maximum slump may be increased to 8 in. (200 mm). For Class PS, the maximum slump may be increased to 8 1/2 in. (215 mm) if the high range water-reducing admixture is the polycarboxylate type.”

**REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)**

Effective: January 1, 2019

Revised: January 1, 2020

Revise Section 669 of the Standard Specifications to read:

**“SECTION 669. REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES**

**669.01 Description.** This work shall consist of the transportation and proper disposal of regulated substances. This work shall also consist of the removal, transportation, and proper disposal of underground storage tanks (UST), their contents and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities.

**669.02 Equipment.** The Contractor shall notify the Engineer of the delivery of all excavation, storage, and transportation equipment to a work area location. The equipment shall comply with OSHA and American Petroleum Institute (API) guidelines and shall be furnished in a clean condition. Clean condition means the equipment does not contain any residual material classified as a non-special waste, non-hazardous special waste, or hazardous waste. Residual materials include, but are not limited to, petroleum products, chemical products, sludges, or any other material present in or on equipment.

Before beginning any associated soil or groundwater management activity, the Contractor shall provide the Engineer with the opportunity to visually inspect and approve the equipment. If the equipment contains any contaminated residual material, decontamination shall be performed on the equipment as appropriate to the regulated substance and degree of contamination present according to OSHA and API guidelines. All cleaning fluids used shall be treated as the contaminant unless laboratory testing proves otherwise.

**669.03 Pre-Construction Submittals and Qualifications.** Prior to beginning this work, or working in areas with regulated substances, the Contractor shall submit a "Regulated Substances Pre-Construction Plan (RSPCP)" to the Engineer for review and approval using form BDE 2730. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

As part of the RSPCP, the Contractor(s) or firm(s) performing the work shall meet the following qualifications.

- (a) Regulated Substances Monitoring. Qualification for environmental observation and field screening of regulated substances work and environmental observation of UST removal shall require either pre-qualification in Hazardous Waste by the Department or demonstration of acceptable project experience in remediation and operations for contaminated sites in accordance with applicable Federal, State, or local regulatory requirements using BDE 2730.

Qualification for each individual performing regulated substances monitoring shall require a minimum of one-year of experience in similar activities as those required for the project.

- (b) Underground Storage Tank Removal. Qualification for underground storage tank (UST) removal work shall require licensing and certification with the Office of the State Fire Marshall (OSFM) and possession of all permits required to perform the work. A copy of the permit shall be provided to the Engineer prior to tank removal.

The qualified Contractor(s) or firm(s) shall also document it does not have any current or former ties with any of the properties contained within, adjoining, or potentially affecting the work.

The Engineer will require up to 21 calendar days for review of the RSPCP. The review may involve rejection or revision and resubmittal; in which case, an additional 21 days will be required for each subsequent review. Work shall not commence until the RSPCP has been approved by the Engineer. After approval, the RSPCP shall be revised as necessary to reflect changed conditions in the field and documented using BDE 2730A "Regulated Substances Pre-Construction Plan (RSPCP) Addendum" and submitted to the Engineer for approval.

## CONSTRUCTION REQUIREMENTS

**669.04 Regulated Substances Monitoring.** Regulated substances monitoring includes environmental observation and field screening during regulated substances management activities at the contract specific work areas. 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)".

- (a) Environmental Observation. Prior to beginning excavation, the Contractor shall mark the limits of the contract specific work areas. Once work begins, the monitoring personnel shall be present on-site continuously during the excavation and loading of material.
- (b) Field Screening. Field screening shall be performed during the excavation and loading of material from the contract specific work areas, except for material classified according to Article 669.05(b)(1) or 669.05(c) where field screening is not required.

Field screening shall be performed with either a photoionization detector (PID) (minimum 10.6eV lamp) or a flame ionization detector (FID), and other equipment as appropriate, to monitor for potential contaminants associated with regulated substances. The PID or FID shall be calibrated on-site, and background level readings taken and recorded daily, and as field and weather conditions change. Field screen readings on the PID or FID in excess of background levels indicates the potential presence of regulated substances requiring handling as a non-special waste, special waste, or hazardous waste. PID or FID readings may be used as the basis of increasing the limits of removal with the approval of the Engineer but shall in no case be used to decrease the limits.

**669.05 Regulated Substances Management and Disposal.** The management and disposal of soil and/or groundwater containing regulated substances shall be according to the following:

- (a) Soil Analytical Results Exceed Most Stringent MAC. When the soil analytical results indicate detected levels exceed the most stringent maximum allowable concentration (MAC) for chemical constituents in soil established pursuant to Subpart F of 35 Ill. Adm. Code 1100.605, the soil shall be managed as follows:
  - (1) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC, but still considered within area background levels by the Engineer, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable. If the soils cannot be utilized within the right-of-way, they shall be managed and disposed of at a landfill as a non-special waste.

- (2) When analytical results indicate inorganic chemical constituents exceed the most stringent MAC but do not exceed the MAC for a Metropolitan Statistical Area (MSA) County identified in 35 Ill. Admin. Code 742 Appendix A. Table G, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of at a clean construction and demolition debris (CCDD) facility or an uncontaminated soil fill operation (USFO) within an MSA County provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (3) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, or the MAC within the Chicago corporate limits, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago or within the Chicago corporate limits provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (4) When analytical results indicate chemical constituents exceed the most stringent MAC but do not exceed the MAC for an MSA County excluding Chicago, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site at a CCDD facility or an USFO within an MSA County excluding Chicago provided the pH of the soil is within the range of 6.25 - 9.0, inclusive.
  - (5) When the Engineer determines soil cannot be managed according to Articles 669.05(a)(1) through (a)(4) above and the materials do not contain special waste or hazardous waste, as determined by the Engineer, the soil shall be managed and disposed of at a landfill as a non-special waste.
  - (6) When analytical results indicate soil is hazardous by characteristic or listing pursuant to 35 Ill. Admin. Code 721, contains radiological constituents, or the Engineer otherwise determines the soil cannot be managed according to Articles 669.05(a)(1) through (a)(5) above, the soil shall be managed and disposed of off-site as a special waste or hazardous waste as applicable.
- (b) Soil Analytical Results Do Not Exceed Most Stringent MAC. When the soil analytical results indicate that detected levels do not exceed the most stringent MAC, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO for any of the following reasons.
- (1) The pH of the soil is less than 6.25 or greater than 9.0.
  - (2) The soil exhibited PID or FID readings in excess of background levels.



- (c) Soil Analytical Results Exceed Most Stringent MAC but Do Not Exceed Tiered Approach to Corrective Action Objectives (TACO) Residential. When the soil analytical results indicate that detected levels exceed the most stringent MAC but do not exceed TACO Tier 1 Soil Remediation Objectives for Residential Properties pursuant to 35 Ill. Admin. Code 742 Appendix B Table A, the excavated soil can be utilized within the right-of-way as embankment or fill, when suitable, or managed and disposed of off-site according to Article 202.03. However, the excavated soil cannot be taken to a CCDD facility or an USFO.
- (d) Groundwater. When groundwater analytical results indicate the detected levels are above Appendix B, Table E of 35 Ill. Admin. Code 742, the most stringent Tier 1 Groundwater Remediation Objectives for Groundwater Component of the Groundwater Ingestion Route for Class 1 groundwater, the groundwater shall be managed off-site as a special waste or hazardous waste as applicable. Special waste groundwater shall be containerized and trucked to an off-site treatment facility, or may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority. Groundwater discharged to a sanitary sewer or combined sewer shall be pre-treated to remove particulates and measured with a calibrated flow meter to comply with applicable discharge limits. A copy of the permit shall be provided to the Engineer prior to discharging groundwater to the sanitary sewer or combined sewer.

Groundwater encountered within trenches may be managed within the trench and allowed to infiltrate back into the ground. If the groundwater cannot be managed within the trench, it may be discharged to a sanitary sewer or combined sewer when permitted by the local sewer authority, or it shall be containerized and trucked to an off-site treatment facility as a special waste or hazardous waste. The Contractor is prohibited from discharging groundwater within the trench through a storm sewer. The Contractor shall install backfill plugs within the area of groundwater contamination.

One backfill plug shall be placed down gradient to the area of groundwater contamination. Backfill plugs shall be installed at intervals not to exceed 50 ft (15 m). Backfill plugs are to be 4 ft (1.2 m) long, measured parallel to the trench, full trench width and depth. Backfill plugs shall not have any fine aggregate bedding or backfill, but shall be entirely cohesive soil or any class of concrete. The Contractor shall provide test data that the material has a permeability of less than  $10^{-7}$  cm/sec according to ASTM D 5084, Method A or per another test method approved by the Engineer.

The Contractor shall use due care when transferring contaminated material from the area of origin to the transporter. Should releases of contaminated material to the environment occur (i.e., spillage onto the ground, etc.), the Contractor shall clean-up spilled material and place in the appropriate storage containers as previously specified. Clean-up shall include, but not be limited to, sampling beneath the material staging area to determine complete removal of the spilled material.

The Contractor shall provide engineered barriers, when required, and shall include materials sufficient to completely line excavation surfaces, including sloped surfaces, bottoms, and sidewall faces, within the areas designated for protection.

The Contractor shall obtain all documentation including any permits and/or licenses required to transport the material containing regulated substances to the disposal facility. The Contractor shall coordinate with the Engineer on the completion of all documentation. The Contractor shall make all arrangements for collection and analysis of landfill acceptance testing. The Contractor shall coordinate waste disposal approvals with the disposal facility.

The Contractor shall provide the Engineer with all transport-related documentation within two days of transport or receipt of said document(s). For management of special or hazardous waste, the Contractor shall provide the Engineer with documentation that the Contractor is operating with a valid Illinois special waste transporter permit at least two weeks before transporting the first load of contaminated material.

Transportation and disposal of material classified according to Article 669.05(a)(5) or 669.05(a)(6) shall be completed each day so that none of the material remains on-site by the close of business, except when temporary staging has been approved.

Any waste generated as a special or hazardous waste from a non-fixed facility shall be manifested off-site using the Department's county generator number provided by the Bureau of Design and Environment. An authorized representative of the Department shall sign all manifests for the disposal of the contaminated material and confirm the Contractor's transported volume. Any waste generated as a non-special waste may be managed off-site without a manifest, a special waste transporter, or a generator number.

The Contractor shall select a landfill permitted for disposal of the contaminant within the State of Illinois. The Department will review and approve or reject the facility proposed by the Contractor to use as a landfill. The Contractor shall verify whether the selected disposal facility is compliant with those applicable standards as mandated by their permit and whether the disposal 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 landfill shall in no manner delay the construction schedule or alter the Contractor's responsibilities as set forth.

**669.06 Non-Special Waste Certification.** An authorized representative of the Department shall sign and date all non-special waste certifications. The Contractor shall be responsible for providing the Engineer with the required information that will allow the Engineer to certify the waste is not a special waste.

(a) Definition. A waste is considered a non-special waste as long as it is not:

- (1) a potentially infectious medical waste;
- (2) a hazardous waste as defined in 35 Ill. Admin. Code 721;

- (3) an industrial process waste or pollution control waste that contains liquids, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107;
  - (4) a regulated asbestos-containing waste material, as defined under the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61.141;
  - (5) a material containing polychlorinated biphenyls (PCB's) regulated pursuant to 40 CFR Part 761;
  - (6) a material subject to the waste analysis and recordkeeping requirements of 35 Ill. Admin. Code 728.107 under land disposal restrictions of 35 Ill. Admin. Code 728;
  - (7) a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Environmental Protection Act; or
  - (8) an empty portable device or container in which a special or hazardous waste has been stored, transported, treated, disposed of, or otherwise handled.
- (b) Certification Information. All information used to determine the waste is not a special waste shall be attached to the certification. The information shall include but not be limited to:
- (1) the means by which the generator has determined the waste is not a hazardous waste;
  - (2) the means by which the generator has determined the waste is not a liquid;
  - (3) if the waste undergoes testing, the analytic results obtained from testing, signed and dated by the person responsible for completing the analysis;
  - (4) if the waste does not undergo testing, an explanation as to why no testing is needed;
  - (5) a description of the process generating the waste; and
  - (6) relevant material safety data sheets.

**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. 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.

Temporary staging shall be accomplished within the right-of-way and the Contractor's means and methods shall be described in the approved or amended RSPCP. Staging areas shall not be located within 200 feet (61 m) of a public or private water supply well; nor within 100 feet (30 m) of sensitive environmental receptor areas, including wetlands, rivers, streams, lakes, or designated habitat zones.

The method of staging shall consist of containerization or stockpiling as applicable for the type, classification, and physical state (i.e., liquid, solid, semisolid) of the material. Materials of different classifications shall be staged separately with no mixing or co-mingling.

When containers are used, the containers and their contents shall remain intact and inaccessible to unauthorized persons until the manner of disposal is determined. The Contractor shall be responsible for all activities associated with the storage containers including, but not limited to, the procurement, transport, and labeling of the containers. The Contractor shall not use a storage container if visual inspection of the container reveals the presence of free liquids or other substances that could cause the waste to be reclassified as a hazardous or special waste.

When stockpiles are used, they shall be covered with a minimum 20-mil plastic sheeting or tarps secured using weights or tie-downs. Perimeter berms or diversionary trenches shall be provided to contain and collect for disposal any water that drains from the soil. Stockpiles shall be managed to prevent or reduce potential dust generation.

When staging non-special waste, special waste, or hazardous waste, the following additional requirements shall apply:

- (a) Non-Special Waste. When stockpiling soil classified according to Article 669.05(a)(1) or 669.05(a)(5), an impermeable surface barrier between the materials and the ground surface shall be installed. The impermeable barrier shall consist of a minimum 20-mil plastic liner material and the surface of the stockpile area shall be clean and free of debris prior to placement of the liner. Measures shall also be taken to limit or discourage access to the staging area.
- (b) Special Waste and Hazardous Waste. Soil classified according to Article 669.05(a)(6) shall not be stockpiled but shall be containerized immediately upon generation in containers, tanks or containment buildings as defined by RCRA, Toxic Substances Control Act (TSCA), and other applicable State or local regulations and requirements, including 35 Ill. Admin. Code Part 722, Standards Applicable to Generators of Hazardous Waste.

The staging area(s) shall be enclosed (by a fence or other structure) to restrict direct access to the area, and all required regulatory identification signs applicable to a staging area containing special waste or hazardous waste shall be deployed.

Storage containers shall be placed on an all-weather gravel-packed, asphalt, or concrete surface. Containers shall be in good condition and free of leaks, large dents, or severe rusting, which may compromise containment integrity. Containers must be constructed of, or lined with, materials that will not react or be otherwise incompatible with the hazardous or special waste contents. Containers used to store liquids shall not be filled more than 80 percent of the rated capacity. Incompatible wastes shall not be placed in the same container or comingled.

All containers shall be legibly labeled and marked using pre-printed labels and permanent marker in accordance with applicable regulations, clearly showing the date of waste generation, location and/or area of waste generation, and type of waste. The Contractor shall place these identifying markings on an exterior side surface of the container.

Storage containers shall be kept closed, and storage pads covered, except when access is needed by authorized personnel.

Special waste and hazardous waste shall be transported and disposed within 90 days from the date of generation.

**669.08 Underground Storage Tank Removal.** For the purposes of this section, an underground storage tank (UST) includes the underground storage tank, piping, electrical controls, pump island, vent pipes and appurtenances.

Prior to removing an UST, the Engineer shall determine whether the Department is considered an "owner" or "operator" of the UST as defined by the UST regulations (41 Ill. Adm. Code Part 176). Ownership of the UST refers to the Department's owning title to the UST during storage, use or dispensing of regulated substances. The Department may be considered an "operator" of the UST if it has control of, or has responsibility for, the daily operation of the UST. The Department may however voluntarily undertake actions to remove an UST from the ground without being deemed an "operator" of the UST.

In the event the Department is deemed not to be the "owner" or "operator" of the UST, the OSFM removal permit shall reflect who was the past "owner" or "operator" of the UST. If the "owner" or "operator" cannot be determined from past UST registration documents from OSFM, then the OSFM removal permit will state the "owner" or "operator" of the UST is the Department. The Department's Office of Chief Counsel (OCC) will review all UST removal permits prior to submitting any removal permit to the OSFM. If the Department is not the "owner" or "operator" of the UST then it will not register the UST or pay any registration fee.

The Contractor shall be responsible for obtaining permits required for removing the UST, notification to the OSFM, using an OSFM certified tank contractor, removal and disposal of the UST and its contents, and preparation and submittal of the OSFM Site Assessment Report in accordance with 41 Ill. Admin. Code Part 176.330.

The Contractor shall contact the Engineer and the OSFM's office at least 72 hours prior to removal to confirm the OSFM inspector's presence during the UST removal. Removal, transport, and disposal of the UST shall be according to the applicable portions of the latest revision of the "American Petroleum Institute (API) Recommended Practice 1604".

The Contractor shall collect and analyze tank content (sludge) for disposal purposes. The Contractor shall remove as much of the regulated substance from the UST system as necessary to prevent further release into the environment. All contents within the tank shall be removed, transported and disposed of, or recycled. The tank shall be removed and rendered empty according to IEPA definition.

The Contractor shall collect soil samples from the bottom and sidewalls of the excavated area in accordance with 35 Ill. Admin. Code Part 734.210(h) after the required backfill has been removed during the initial response action, to determine the level of contamination remaining in the ground, regardless if a release is confirmed or not by the OSFM on-site inspector.

In the event the UST is designated a leaking underground storage tank (LUST) by the OSFM's inspector, or confirmation by analytical results, the Contractor shall notify the Engineer and the District Environmental Studies Unit (DESU). Upon confirmation of a release of contaminants and notifications to the Engineer and DESU, the Contractor shall report the release to the Illinois Emergency Management Agency (IEMA) (e.g., by telephone or electronic mail) and provide them with whatever information is available ("owner" or "operator" shall be stated as the past registered "owner" or "operator", or the IDOT District in which the tank is located and the DESU Manager).

The Contractor shall perform the following initial response actions if a release is indicated by the OSFM inspector:

- (a) Take immediate action to prevent any further release of the regulated substance to the environment, which may include removing, at the Engineer's discretion, and disposing of up to 4 ft (1.2 m) of the contaminated material, as measured from the outside dimension of the tank;
- (b) Identify and mitigate fire, explosion and vapor hazards;
- (c) Visually inspect any above ground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater; and
- (d) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors and free product that have migrated from the tank excavation zone and entered into subsurface structures (such as sewers or basements).

The tank excavation shall be backfilled according to applicable portions of Sections 205, 208, and 550 with a material that will compact and develop stability. All uncontaminated concrete and soil removed during tank extraction may be used to backfill the excavation, at the discretion of the Engineer.

After backfilling the excavation, the site shall be graded and cleaned.

**669.09 Regulated Substances Final Construction Report.** Not later than 90 days after completing this work, the Contractor shall submit a "Regulated Substances Final Construction Report (RSFCR)" to the Engineer using form BDE 2733 and required attachments. The form shall be signed by an Illinois licensed Professional Engineer or Professional Geologist.

**669.10 Method of Measurement.** Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench.

Groundwater containerized and transported off-site for management, storage, and disposal will be measured for payment in gallons (liters).

Backfill plugs will be measured in cubic yards (cubic meters) in place, except the quantity for which payment will be made shall not exceed the volume of the trench, as computed by using the maximum width of trench permitted by the Specifications and the actual depth of the trench, with a deduction for the volume of the pipe.

Engineered Barriers will be measured for payment in square yards (square meters).

**669.11 Basis of Payment.** The work of preparing, submitting and administering a Regulated Substances Pre-Construction Plan will be paid for at the contract lump sum price for REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN.

Regulated substances monitoring, including completion of form BDE 2732 for each day of work, will be paid for at the contract unit price per calendar day, or fraction thereof to the nearest 0.5 calendar day, for REGULATED SUBSTANCES MONITORING.

The installation of engineered barriers will be paid for at the contract unit price per square yard (square meter) for ENGINEERED BARRIER.

The work of UST removal, soil excavation, soil and content sampling, the management of excavated soil and UST content, and UST disposal, will be paid for at the contract unit price per each for UNDERGROUND STORAGE TANK REMOVAL.

The transportation and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL.

The transportation and disposal of groundwater from an excavation determined to be contaminated will be paid for at the contract unit price per gallon (liter) for SPECIAL WASTE GROUNDWATER DISPOSAL or HAZARDOUS WASTE GROUNDWATER DISPOSAL. When groundwater is discharged to a sanitary or combined sewer by permit, the cost will be paid for according to Article 109.05.

Backfill plugs will be paid for at the contract unit price per cubic yard (cubic meter) for BACKFILL PLUGS.

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) will be paid for according to Article 109.04. The Department will not be responsible for any additional costs incurred, if mismanagement of the staging area, storage containers, or their contents by the Contractor results in excess cost expenditure for disposal or other material management requirements.

Payment for accumulated stormwater removal and disposal will be according to Article 109.04. Payment will only be allowed if appropriate stormwater and erosion control methods were used.

Payment for decontamination, labor, material, and equipment for monitoring areas beyond the specified areas, with the Engineer's prior written approval, will be according to Article 109.04.

When the waste material for disposal requires sampling for landfill disposal acceptance, the samples shall be analyzed for TCLP VOCs, SVOCs, RCRA metals, pH, ignitability, and paint filter test. The analysis will be paid for at the contract unit price per each for SOIL DISPOSAL ANALYSIS using EPA Methods 1311 (extraction), 8260B for VOCs, 8270C for SVOCs, 6010B and 7470A for RCRA metals, 9045C for pH, 1030 for ignitability, and 9095A for paint filter.

The work of preparing, submitting and administering a Regulated Substances Final Construction Report will be paid for at the contract lump sum price REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT.”



**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%”

**TRAFFIC CONTROL DEVICES - CONES (BDE)**

Effective: January 1, 2019

Revise Article 701.15(a) of the Standard Specifications to read:

“(a) Cones. Cones are used to channelize traffic. Cones used to channelize traffic at night shall be reflectorized; however, cones shall not be used in nighttime lane closure tapers or nighttime lane shifts.”

Revise Article 1106.02(b) of the Standard Specifications to read:

“(b) Cones. Cones shall be predominantly orange. Cones used at night that are 28 to 36 in. (700 to 900 mm) in height shall have two white circumferential stripes. If non-reflective spaces are left between the stripes, the spaces shall be no more than 2 in. (50mm) in width. Cones used at night that are taller than 36 in. (900 mm) shall have a minimum of two white and two fluorescent orange alternating, circumferential stripes with the top stripe being fluorescent orange. If non-reflective spaces are left between the stripes, the spaces shall be no more than 3 in. (75 mm) in width.

The minimum weights for the various cone heights shall be 4 lb for 18 in. (2 kg for 450 mm), 7 lb for 28 in. (3 kg for 700 mm), and 10 lb for 36 in. (5 kg for 900 mm) with a minimum of 60 percent of the total weight in the base. Cones taller than 36 in. shall be weighted per the manufacturer’s specifications such that they are not moved by wind or passing traffic.”

**WEEKLY DBE TRUCKING REPORTS (BDE)**

Effective: June 2, 2012

Revised: April 2, 2015

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

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

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

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

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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