# 69

### Letting August 4, 2017

## Notice to Bidders, Specifications and Proposal



Springfield, Illinois 62764

Contract No. 61D93 DUPAGE County Section 11-00033-00-LS (Warrenville) Route FAP 365 (II 56) Project TE-00D1(959) District 1 Construction Funds

Prepared by

Checked by

F

## Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 10:00 a.m. August 4, 2017 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. 61D93 DUPAGE County Section 11-00033-00-LS (Warrenville) Project TE-00D1(959) Route FAP 365 (II 56) District 1 Construction Funds

Landscaping, lighting and signage from Winfield Road to the Canadian National Railroad located west of Briggs Avenue in the City of Warrenville.

- 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

Randall S. Blankenhorn, Secretary

#### CONTRACT 61D93

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2017

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-17)

#### **SUPPLEMENTAL SPECIFICATIONS**

<u>Std. Sp</u>	ec. Sec.	<u>'age No</u>
106	Control of Materials	1
403	Bituminous Surface Treatment (Class A-1, A-2, A-3)	2
420	Portland Cement Concrete Pavement	
502	Excavation for Structures	5
503	Concrete Structures	7
504	Precast Concrete Structures	10
542	Pipe Culverts	11
586	Sand Backfill for Vaulted Abutments	12
670	Engineer's Field Office and Laboratory	14
704	Temporary Concrete Barrier	15
888	Pedestrian Push-Button	17
1003	Fine Aggregates	18
1004	Coarse Aggregates	19
1006	Metals	
1020	Portland Cement Concrete	22
1103	Portland Cement Concrete Equipment	24

### CHECK SHEET FOR RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2017

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

#### RECURRING SPECIAL PROVISIONS

<u>UII</u>	<u>-Un</u>	SHEEL #	PAGE NO.
1	Χ	Additional State Requirements for Federal-Aid Construction Contracts	26
2	Х	Subletting of Contracts (Federal-Aid Contracts)	29
3	Х	EEO	30
4		Specific EEO Responsibilities Non Federal-Aid Contracts	40
5		Required Provisions - State Contracts	45
6		Asbestos Bearing Pad Removal	51
7		Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	52
8		Temporary Stream Crossings and In-Stream Work Pads	53
9		Construction Layout Stakes Except for Bridges	54
10	X	Construction Layout Stakes	57
11		Use of Geotextile Fabric for Railroad Crossing	60
12		Subsealing of Concrete Pavements	62
13		Hot-Mix Asphalt Surface Correction	66
14		Pavement and Shoulder Resurfacing	68
15		Patching with Hot-Mix Asphalt Overlay Removal	69
16		Polymer Concrete	70
17		PVC Pipeliner	72
18	Х	Bicycle Racks	73
19		Temporary Portable Bridge Traffic Signals	75
20		Work Zone Public Information Signs	77
21	Χ	Nighttime Inspection of Roadway Lighting	78
22		English Substitution of Metric Bolts	79
23		Calcium Chloride Accelerator for Portland Cement Concrete	80
24		Quality Control of Concrete Mixtures at the Plant	81
25	Х	Quality Control/Quality Assurance of Concrete Mixtures	89
26		Digital Terrain Modeling for Earthwork Calculations	105
27		Reserved	107
28		Preventive Maintenance – Bituminous Surface Treatment (A-1)	108
29		Preventive Maintenance – Cape Seal	114
30		Preventive Maintenance – Micro-Surfacing	129
31		Preventive Maintenance – Slurry Seal	140
32		Temporary Raised Pavement Markers	149
33		Restoring Bridge Approach Pavements Using High-Density Foam	150
34		Portland Cement Concrete Inlay or Overlay	153

### CHECK SHEET FOR LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

CHECK	SHEET#	PAGE NO.
LRS 1	Reserved	158
LRS 2	☐ Furnished Excavation	159
LRS 3	✓ Work Zone Traffic Control Surveillance	160
LRS 4	☐ Flaggers in Work Zones	161
LRS 5	Contract Claims	162
LRS 6	☐ Bidding Requirements and Conditions for Contract Proposals	163
LRS 7	☐ Bidding Requirements and Conditions for Material Proposals	169
LRS 8	Reserved	175
LRS 9	Bituminous Surface Treatments	176
LRS 10	Reserved	177
LRS 11	Employment Practices	178
LRS 12	Wages of Employees on Public Works	180
LRS 13	Selection of Labor	182
LRS 14	Paving Brick and Concrete Paver Pavements and Sidewalks	183
LRS 15	Partial Payments	186
LRS 16	Protests on Local Lettings	187
LRS 17	☐ Substance Abuse Prevention Program	188
LRS 18	Multigrade Cold Mix Asphalt	189

#### **INDEX OF SPECIAL PROVISIONS**

<u>Item</u>	Page
Opening Paragraph of Special Provisions	1
Location and Description of Project	1
Traffic Control Plan	1
Maintenance of Roadways	2
Public Convenience and Safety (D-1)	
Keeping Arterial Roadways Open to Traffic (Lane Closures Only)	2 3
Critical Natural Resources	3
Status of Utilities To Be Adjusted	4
General Electric Requirements	6
Luminaire	21
Light Pole Foundation, Offset	25
Light Pole Special	26
Luminaire Safety Cable Assembly (D-1)	26
Luminaire, LED, Type 3, Special	27
Dynamic Message Sign	28
Topsoil Furnish and Place	31
Planting Woody Plants	31
Planting Perennial Plants	32
Seeding, Class 4A (Modified)	33
Seeding, Class 5A (Modified)	34
Trash Receptacles	36
Gateway Monument Sign, Minor Sign, Masonry Column	38
Trail Head Sign, Trail Head Map, Wayfinding Sign	45
Stamped Colored PCC Concrete Sidewalk, 5"	47
Bicycle Racks	49
Selective Clearing	50
Use of Water from City Fire Hydrants	51
Removal and Disposal of Regulated Substances	51
Light Pole Foundation, Special	56
Temporary Information Signing	57
Available Reports	58
Electric Utility Service Connection	60
Maintenance of Existing Traffic Signal Installation	60

#### INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

LR # LR SD12 LR SD13 LR 107-2 LR 107-4 LR 108 LR 109 LR 212 LR 355-1 LR 355-2 LR 400-1 LR 400-2 LR 400-3 LR 400-4 LR 400-5 LR 400-6 LR 400-7 LR 400-8	<u>Pg#</u>	Special Provision Title Slab Movement Detection Device Required Cold Milled Surface Texture Railroad Protective Liability Insurance for Local Lettings Insurance Combination Bids Equipment Rental Rates Shaping Roadway Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix Bituminous Stabilized Base Course, Plant Mix Bituminous Treated Earth Surface Bituminous Surface Plant Mix (Class B) Hot In-Place Recycling (HIR) – Surface Recycling Full-Depth Reclamation (FDR) with Emulsified Asphalt Cold In-Place Recycling (CIR) With Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt	Effective Nov. 11, 1984 Nov. 1, 1987 Mar. 1, 2005 Feb. 1, 2007 Jan. 1, 1994 Jan. 1, 2012 Aug. 1, 1969 Oct. 1, 1973 Feb. 20, 1963 Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2012 Apr. 1, 2012 Apr. 1, 2012 June 1, 2012 June 1, 2012 June 1, 2012 Jan. 24, 2017	Revised Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2006 Aug. 1, 2007 Mar. 1, 2005  Jan. 1, 2002 Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2012  Jun. 1, 2012  Jun. 1, 2012
LR 402 LR 403-1		Salt Stabilized Surface Course Surface Profile Milling of Existing, Recycled or Reclaimed Flexible	Feb. 20, 1963	Jan. 1, 2007
LR 403-2		Pavement Bituminous Hot Mix Sand Seal Coat	Apr. 1, 2012 Aug. 1, 1969	Jun. 1, 2012 Jan. 1, 2007
LR 403-3		Preventive Maintenance - Bituminous Surface Treatment (A-1)	July 1, 2016	Jan. 1, 2007
LR 406 LR 420 LR 442 LR 451 LR 503-1 LR 503-2 LR 542 LR 542-1 LR 663 LR 702 LR 1000-1		Filling HMA Core Holes with Non-Shrink Grout PCC Pavement (Special) Bituminous Patching Mixtures for Maintenance Use Crack Filling Bituminous Pavement with Fiber-Asphalt Furnishing Class SI Concrete Furnishing Class SI Concrete (Short Load) Pipe Culverts, Type (Furnished) Pipe Culverts, Special Calcium Chloride Applied Construction and Maintenance Signs Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR)	Jan. 1, 2008 May 12, 1964 Jan. 1, 2004 Oct. 1, 1991 Oct. 1, 1973 Jan. 1, 1989 Sep. 1, 1964 Apr. 1, 2016 Jun. 1, 1958 Jan. 1, 2004	Jan. 2, 2007 Jun. 1, 2007 Jan. 1, 2007 Jan. 1, 2002 Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2007
LR 1000-2		with Emulsified Asphalt Mix Design Procedures Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR)	Apr. 1, 2012	Jun. 1, 2012
LR 1004 LR 1030 LR 1032-1 LR 1102 LR 80029-1		with Foamed Asphalt Mix Design Procedures Coarse Aggregate for Bituminous Surface Treatment Growth Curve Emulsified Asphalts Road Mix or Traveling Plan Mix Equipment Disadvantaged Business Enterprise Participation for Local Lettings	June 1, 2012 Jan. 1, 2002 Mar. 1, 2008 Jan. 1, 2007 Jan. 1, 2007 Aug. 26, 2016	Jan. 1, 2007 Jan. 1, 2010 Feb. 7, 2008

#### **BDE SPECIAL PROVISIONS**

The following special provisions indicated by an "x" are applicable to this contract. An \* indicates a new or revised special provision for the letting.

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<b>Effective</b>	Revised
80099 80382		Accessible Pedestrian Signals (APS) Adjusting Frames and Grates	April 1, 2003 April 1, 2017	Jan. 1, 2014
80274		Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192		Automated Flagger Assistance Device	Jan. 1, 2008	, ,
* 80173		Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
80241		Bridge Demolition Debris	July 1, 2009	e vermente en
50261		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481		Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80366	SANTA	Butt Joints	July 1, 2016	
* 80384	69	X Compensable Delay Costs	June 2, 2017	
80198	-	Completion Date (via calendar days)	April 1, 2008	
80199	-	Completion Date (via calendar days) Plus Working Days	April 1, 2008	1.1.4.0040
80293		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	_	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277	-a	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	73	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80029	76	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	July 2, 2016
80378 * <b>80229</b>		Dowel Bar Inserter	Jan. 1, 2017	
80304	Chefoles	Fuel Cost Adjustment Grooving for Recessed Pavement Markings	April 1, 2009	Aug. 1, 2017
80246	-	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Nov. 1, 2012	Aug. 1, 2014
80347	-	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits -	Jan. 1, 2010 Nov. 1, 2014	April 1, 2016 April 1, 2017
000-7		Jobsite Sampling	1907. 1, 2014	April 1, 2017
* 80383	59/19525500	Hot-Mix Asphalt – Quality Control for Performance	April 1, 2017	April 2, 2017
80376		Hot-Mix Asphalt – Tack Coat	Nov. 1, 2016	
80367	ľ	Light Poles	July 1, 2016	
80368		Light Tower	July 1, 2016	
80336	İ	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80369	87	X Mast Arm Assembly and Pole	July 1, 2016	, ,
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
80165		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80349		Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
80371	[	Pavement Marking Removal	July 1, 2016	
80298	Į	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
80377		Portable Changeable Message Signs	Nov. 1, 2016	April 1, 2017
80359	1	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	Jan. 1, 2017
80338	nalisma ling paga ging nga ginan ginan s	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
* 80385	88	X Portland Cement Concrete Sidewalk	Aug. 1, 2017	
80300	ļ	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	89	X Progress Payments	Nov. 2, 2013	
34261		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
80340	min with colored war an every con-	Speed Display Trailer	April 2, 2014	Jan. 1, 2017
* 80127		Steel Cost Adjustment	April 2, 2004	Aug. 1, 2017
80379		Steel Plate Beam Guardrail	Jan. 1, 2017	

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	<b>Effective</b>	Revised
80317		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80298		Temporary Pavement Marking (NOTE: This special provision was previously named "Pavement Marking Tape Type IV".)	April 1, 2012	April 1, 2017
20338		Training Special Provision	Oct. 15, 1975	
80318		Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80381		Traffic Barrier Terminal, Type 1 Special	Jan. 1, 2017	
80380		Tubular Markers	Jan. 1, 2017	
80288		Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	90	X Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80071	91	X Working Days	Jan. 1, 2002	

The following special provisions have been deleted from use:

#### 80289 Wet Reflective Thermoplastic Pavement Marking

The following special provisions are in the 2017 Supplemental Specifications and Recurring Special Provisions.

<u>File</u> Name	<b>Special Provision Title</b>	New Location	<b>Effective</b>	Revised
80360	Coarse Aggregate Quality	Article 1004.01	July 1, 2015	
80363	Engineer's Field Office	Article 670.07	April 1, 2016	
80358	Equal Employment Opportunity	Recurring CS #1 and #5	April 1, 2015	
80364	Errata for the 2016 Standard Specifications	Supplemental	April 1, 2016	
80342	Mechanical Side Tie Bar Inserter	Articles 420.03, 420.05, and 1103.19	Aug. 1, 2014	April 1, 2016
80370	Mechanical Splicers	Article 1006.10	July 1, 2016	
80361	Overhead Sign Structures Certification of Metal Fabricator	Article 106.08	Nov. 1, 2015	April 1, 2016
80365	Pedestrian Push-Button	Article 888.03	April 1, 2016	
80353	Portland Cement Concrete Inlay or Overlay	Recurring CS #34	Jan. 1, 2015	April 1, 2016
80372	Preventive Maintenance – Bituminous Surface Treatment (A-1)	Recurring CS #28	Jan. 1, 2009	July 1, 2016
80373	Preventive Maintenance - Cape Seal	Recurring CS #29	Jan. 1, 2009	July 1, 2016
80374	Preventive Maintenance - Micro Surfacing	Recurring CS #30	Jan. 1, 2009	July 1, 2016
80375	Preventive Maintenance - Slurry Seal	Recurring CS #31	Jan. 1, 2009	July 1, 2016
80362	Steel Slag in Trench Backfill	Articles 1003.01 and 1003.04	Jan. 1, 2016	
80355	Temporary Concrete Barrier	Articles 704.02, 704.04, 704.05, and 704.06	Jan. 1, 2015	July 1, 2015

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

#### 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 proposed improvement designated as

Butterfield Road (IL Route 56) Beautification & Streetscape Enhancements

Section No.:

11-00033-00-LS

Project No.:

TE-00D1 (959) C-91-253-14

Job No.: Contract No.:

61D93

In case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### **LOCATION OF PROJECT**

The project is located in the City of Warrenville, DuPage County, Illinois. The proposed worked is located within the right-of-way along FAP 365 (IL Route 56 Butterfield Road) from the Canadian National Railroad to Winfield Road. Improvements will occur within IDOT, DuPage County and ComEd right-of-way per previously established easement agreements. The gross and net length of the project is 13,730 feet (2.6 miles).

#### **DESCRIPTION OF PROJECT**

The work consists of earth excavation, landscaping, lighting, signage, electrical service connection, and the construction of an irrigation system providing the necessary connections to the existing stubbed-out water services. This work shall include all the incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

#### 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.

<u>STANDARDS:</u> 000001-06, 701006-05, 701101-05, 701106-02, 701301-04,

701311-03, 701426-09, 701427-05, 701501-06, 701502-07, 701601-09, 701606-10, 701701-10, 701801-06, 701901-06,

<u>DETAILS:</u> Sheet 2, Highway Standards

SPECIAL PROVISIONS: Public Convenience and Safety (District 1), Temporary Information

Signing, Maintenance of Roadways, TC-10 (District 1), Keeping Arterial Roadways Open to Traffic (Lane Closures only), TC-22 Arterial Road Information Sign, TC-14 Traffic Control and

Protection at Turn Bays (To Remain Open During Traffic)

#### 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 (D-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 the 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 PM Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical"

#### KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC (LANE CLOSURES ONLY)

Effective: January 22, 2003 Revised: February 20, 2015

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 Illinois Department of Transportation's Arterial Traffic Control Supervisor at 847-705-4470 seventy—two (72) hours in advance of all long-term (24 hrs. or longer) lane closures. This advance notification is calculated based on a Monday through Friday workweek and shall not include weekends or state holidays.

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 9:00 AM and 3:00 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.

#### CRITICAL NATURAL RESOURCES

The Contractor should note that there is a 1995 record of the Kirtland's snake and a 2002 record of the black-crowned night heron, both located at the east end of the proposed improvement. As such, no snakes or birds shall be killed while implementing the proposed improvements. If a snake or bird is found within the project limits, the Contractor shall stop work immediately and contact the Owner for relocation.

Contractors may elect at their own discretion to collect, hold, report, and turn over to the Owner any animals encountered in "harms way" during the Work.

#### STATUS OF UTILITIES TO BE ADJUSTED (D-1)

Effective: June 1, 2016

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information in regard to their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

#### **UTILTIES TO BE ADJUSTED**

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances resolution will be a function of the construction staging. The responsible agency must relocate or complete new installations as noted in the action column; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

No conflicts to be resolved.

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
Wide Open West	Paul Finkow		630-536-3139	
Nicor Gas			630-388-2362	
ComEd			630-576-7094	
AT&T	Carl Donahue/Bobby Akhter		847-420-9115/	
			630-390-0089	
G4S Technology				
	Doug Gones/Cecil Kuhse	1	630-343-2826/	
			815-782-7465	
Enbridge Energy Partners				
Windstream KDL	Mike Price		218-864-5463	
City of Warrenville	Thomas Decker		319-790-7228	
DuPage Water Commission	John Satter	West, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14	630-335-6731	
Comcast	Michael Schweizer		630-834-0100	
MCI	Martha Gieras		630-229-5862	
Zayo Fiber Solutions	Dean Boyers		972-729-6322	
Natural Gas Pipeline Co.	Tim Payment		630-203-8003	
DuPage County DOT	Greg Smith		303-914-7848	
OneOK North System	Robert Greene		630-407-6890	

		580-395-2377	
City of Aurora	Joe Delgado	630-688-8411	
Lightower	Elizabeth Stockwell	212-324-5074	
Vinakom Communications	Dicky Patel	847-592-5785	
WOW Access Inc.	Brian Armstrong	630-729-9613	
Winfield Township	John Dusza	630-231-8850	

#### <u>UTILITIES TO BE WATCHED AND PROTECTED</u>

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owners part can be secured.

No facilities requiring additional consideration.

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

Agency/Company Responsible to Resolve Conflict	Name of contact	Address	Phone	e-mail address
Wide Open West	Paul Finkow		630-536-3139	
Nicor Gas			630-388-2362	
ComEd			630-576-7094	
AT&T	Carl Donahue/Bobby Akhter		847-420-9115/	
			630-390-0089	***************************************
G4S Technology	Doug Gones/Cecil Kuhse		630-343-2826/	
			815-782-7465	
Enbridge Energy Partners	Mike Price		218-864-5463	
Windstream KDL	Thomas Decker		319-790-7228	
City of Warrenville	John Satter		630-335-6731	
DuPage Water Commission	Michael Schweizer		630-834-0100	
Comcast	Martha Gieras		630-229-5862	
MCI	Dean Boyers		972-729-6322	
Zayo Fiber Solutions	Tim Payment		630-203-8003	
Natural Gas Pipeline Co.	Greg Smith		303-914-7848	
DuPage County DOT	Robert Greene		630-407-6890	
OneOK North System			580-395-2377	
City of Aurora	Joe Delgado		630-688-8411	
Lightower	Elizabeth Stockwell		212-324-5074	
Vinakom Communications	Dicky Patel		847-592-5785	

WOW Access Inc.	Brian Armstrong	630-729-9613
Winfield Township	John Dusza	630-231-8850

The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be taken into account in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided in the action column for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation dates must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies. The Department's contractor is responsible for contacting J.U.L.I.E. prior to any and all excavation work.

#### **GENERAL ELECTRIC REQUIREMENTS**

Effective: June 1, 2016

This special provision replaces Articles 801.01 – 801.07, 801.09 – 801-16 of the Standard Specifications.

**Definition.** Codes, standards, and industry specifications cited for electrical work shall be by definition the latest adopted version thereof, unless indicated otherwise.

Materials by definition shall include electrical equipment, fittings, devices, motors, appliances, fixtures, apparatus, all hardware and appurtenances, and the like, used as part of, or in connection with, electrical installation.

**Standards of Installation.** Materials shall be installed according to the manufacturer's recommendations, the NEC, OSHA, the NESC, and AASHTO's Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.

All like materials shall be from the same manufacturer. Listed and labeled materials shall be used whenever possible. The listing shall be according to UL or an approved equivalent.

Safety and Protection. Safety and protection requirements shall be as follows.

Safety. Electrical systems shall not be left in an exposed or otherwise hazardous condition. All electrical boxes, cabinets, pole handholes, etc. which contain wiring, either energized or non-energized, shall be closed or shall have covers in place and be locked when possible, during nonworking hours.

Protection. Electrical raceway or duct openings shall be capped or otherwise sealed from the entrance of water and dirt. Wiring shall be protected from mechanical injury.

**Equipment Grounding Conductor.** All electrical systems, materials, and appurtenances shall be grounded. Good ground continuity throughout the electrical system shall be assured, even though every detail of the requirements is not specified or shown. Electrical circuits shall have a continuous insulated equipment grounding conductor. When metallic conduit is used, it shall be bonded to the equipment grounding conductor, but shall not be used as the equipment grounding conductor.

Detector loop lead-in circuits, circuits under 50 volts, and runs of fiber optic cable will not require an equipment grounding conductor.

Where connections are made to painted surfaces, the paint shall be scraped to fully expose metal at the connection point. After the connection is completed, the paint system shall be repaired to the satisfaction of the Engineer.

Bonding of all boxes and other metallic enclosures throughout the wiring system to the equipment grounding conductor shall be made using a splice and pigtail connection. Mechanical connectors shall have a serrated washer at the contact surface.

All connections to structural steel or fencing shall be made with exothermic welds. Care shall be taken not to weaken load carrying members. Where connections are made to epoxy coated reinforcing steel, the epoxy coating shall be sufficiently removed to facilitate a mechanical connection. The epoxy coating shall be repaired to the satisfaction of the Engineer. Where connections are made to insulated conductors, the connection shall be wrapped with at least four layers of electrical tape extended 6 in. (150 mm) onto the conductor insulation.

**Submittals.** At the preconstruction meeting, the Contractor shall submit a written listing of manufacturers for all major electrical and mechanical items. The list of manufacturers shall be binding, except by written request from the Contractor and approval by the Engineer. The request shall include acceptable reasons and documentation for the change.

Major items shall include, but not limited to the following:

Type of Work (discipline)	ltem
All Electrical Work	Electric Service Metering Emergency Standby System Transformers Cable Unit Duct Splices Conduit Surge Suppression System
Lighting	Tower Pole

	Luminaire Foundation Breakaway Device Controllers Control Cabinet and Peripherals
ITS	Controller Cabinet and Peripherals CCTV Cameras Camera Structures Ethernet Switches Detectors Detector Loop Fiber Optic Cable

Within 30 calendar days after contract execution, the Contractor shall submit, for approval, one copy each of the manufacturer's product data (for standard products and components) and detailed shop drawings (for fabricated items). Submittals for the materials for each individual pay item shall be complete in every respect. Submittals which include multiple pay items shall have all submittal material for each item or group of items covered by a particular specification, grouped together and the applicable pay item identified. Various submittals shall, when taken together, form a complete coordinated package. A partial submittal will be returned without review unless prior written permission is obtained from the Engineer.

The submittal shall be properly identified by route, section, county, and contract number.

The Contractor shall have reviewed the submittal material and affixed his/her stamp of approval, with date and signature, for each individual item. In case of subcontractor submittal, both the subcontractor and the Contractor shall review, sign, and stamp their approval on the submittal.

Illegible print, incompleteness, inaccuracy, or lack of coordination will be grounds for rejection.

Items from multiple disciplines shall not be combined on a single submittal and transmittal. Items for lighting, signals, surveillance and CCTV must be in separate submittals since they may be reviewed by various personnel in various locations.

The Engineer will review the submittals for conformance with the design concept of the project according to Article 105.04 and the following. The Engineer will stamp the drawings indicating their status as "Approved", "Approved as Noted", "Disapproved", or "Information Only". Since the Engineer's review is for conformance with the design concept only, it shall be the Contractor's responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, or layout drawings by the Engineer's approval thereof. The Contractor shall still be in full compliance with contract and specification requirements.

All submitted items reviewed and marked "Disapproved" or "Approved as Noted" shall be resubmitted by the Contractor in their entirety, unless otherwise indicated within the submittal comments.

Work shall not begin until the Engineer has approved the submittal. Material installed prior to approval by the Engineer, will be subject to removal and replacement at no additional cost to the Department.

Unless otherwise approved by the Engineer, all of the above items shall be submitted to the Engineer at the same time. Each item shall be properly identified by route, section, and contract number.

**Certifications.** When certifications are specified and are available prior to material manufacture, the certification shall be included in the submittal information. When specified and only available after manufacture, the submittal shall include a statement of intent to furnish certification. All certificates shall be complete with all appropriate test dates and data.

Authorized Project Delay. See Article 801.08

#### Maintenance transfer and Preconstruction Inspection:

<u>General.</u> Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall request a maintenance transfer and preconstruction site inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting and/or traffic control systems which may be affected by the work. The request for the maintenance transfer and preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction inspection shall:

Establish the procedures for formal transfer of maintenance responsibility required for the construction period.

Establish the approximate location and operating condition of lighting and/or traffic control systems which may be affected by the work

Marking of Existing Cable Systems. The party responsible for maintenance of any existing lighting and/or traffic control systems at the project site will, at the Contractor's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the State. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). The markings shall be taken to have a horizontal tolerance of at least 304.8 mm (one (1) foot) to either side.. The request for the cable locations and marking shall be made at the same time the request for the maintenance transfer and preconstruction inspection is made. The Contractor shall exercise extreme caution where existing buried cable runs are involved. The markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work, as specified elsewhere herein. Note that the contractor shall be entitled to only one request for location marking of existing systems and that multiple requests may only be honored at the contractor's expense. No locates will be made after maintenance is transferred, unless it is at the contractor's expense.

Condition of Existing Systems. The Contractor shall conduct an inventory of all existing electrical system equipment within the project limits, which may be affected by the work, making note of any parts which are found broken or missing, defective or malfunctioning. Megger and load readings shall be taken for all existing circuits which will remain in place or be modified. If a circuit is to be taken out in its entirety, then readings do not have to be taken. The inventory and test data shall be reviewed with and approved by the Engineer and a record of the inventory shall be submitted to the Engineer for the record. Without such a record, all systems transferred to the Contractor for maintenance during construction shall be returned at the end of construction in complete, fully operating condition."

Contract: 61D93

Marking Proposed Locations for Highway Lighting System. The Contractor shall mark or stake the proposed locations of all poles, cabinets, junction boxes, pull boxes, handholes, cable routes, pavement crossings, and other items pertinent to the work. A proposed location inspection by the Engineer shall be requested prior to any excavation, construction, or installation work after all proposed installation locations are marked. Any work installed without location approval is subject to corrective action at no additional cost to the Department.

**Inspection of electrical work**. Inspection of electrical work shall be according to Article 105.12 and the following.

Before any splice, tap, or electrical connection is covered in handholes, junction boxes, light poles, or other enclosures, the Contractor shall notify and make available such wiring for the Engineer's inspection.

#### Maintenance and Responsibility During Construction.

<u>Lighting Operation and Maintenance Responsibility</u>. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance of the existing, proposed, temporary, sign and navigation lighting, or other lighting systems and all appurtenances affected by the work as specified elsewhere herein. Maintenance of lighting systems is specified elsewhere and will be paid for separately

The proposed lighting system must be operational prior to opening the roadway to traffic unless temporary lighting exists which is designed and installed to properly illuminate the roadway.

Energy and Demand Charges. The payment of basic energy and demand charges by the electric utility for existing lighting which remains in service will continue as a responsibility of the Owner, unless otherwise indicated. Unless otherwise indicated or required by the Engineer duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously at the Owner's expense and lighting systems shall not be kept in operation during long daytime periods at the Owner's expense. Upon written authorization from the Engineer to place a proposed new lighting system in service, whether the system has passed final acceptance or not, (such as to allow temporary lighting to be removed), the Owner will accept responsibility for energy and demand charges for such lighting, effective the date of authorization. All other energy and demand payments to the utility shall be the responsibility of the Contractor until final acceptance.

**Damage to Electrical Systems.** Should damage occur to any existing electrical systems through the Contractor's operations, the Engineer will designate the repairs as emergency or non-emergency in nature.

Emergency repairs shall be made by the Contractor, or as determined by the Engineer, the Department, or its agent. Non-emergency repairs shall be performed by the Contractor within six working days following discovery or notification. All repairs shall be performed in an expeditious manner to assure all electrical systems are operational as soon as possible. The repairs shall be performed at no additional cost to the Department.

Lighting. An outage will be considered an emergency when three or more lights on a circuit or three successive lights are not operational. Knocked down materials, which result in a danger to the motoring public, will be considered an emergency repair.

Contract: 61D93

Temporary aerial multi-conductor cable, with grounded messenger cable, will be permitted if it does not interfere with traffic or other operations, and if the Engineer determines it does not require unacceptable modification to existing installations.

**Testing.** Before final inspection, the electrical work shall be tested. Tests may be made progressively as parts of the work are completed, or may be made when the work is complete. Tests shall be made in the presence of the Engineer. Items which fail to test satisfactorily shall be repaired or replaced. Tests shall include checks of control operation, system voltages, cable insulation, and ground resistance and continuity.

The forms for recording test readings will be available from the Engineer in electronic format. The Contractor shall provide the Engineer with a written report of all test data including the following:

- Voltage Tests
- Amperage Tests
- Insulation Resistance Tests
- Continuity tests
- Detector Loop Tests

Lighting systems. The following tests shall be made.

- (1) Voltage Measurements. Voltages in the cabinet from phase to phase and phase to neutral, at no load and at full load, shall be measured and recorded. Voltage readings at the last termination of each circuit shall be measured and recorded.
- (2) Insulation Resistance. Insulation resistance to ground of each circuit at the cabinet, with all loads connected, shall be measured and recorded.

On tests of new cable runs, the readings shall exceed 50 megohms for phase and neutral conductors with a connected load over 20 A, and shall exceed 100 megohms for conductors with a connected load of 20 A or less.

On tests of cable runs which include cables which were existing in service prior to this contract, the resistance readings shall be the same or better than the readings recorded at the maintenance transfer at the beginning of the contract. Measurements shall be taken with a megohm meter approved by the Engineer.

- (3) Loads. The current of each circuit, phase main, and neutral shall be measured and recorded. The Engineer may direct reasonable circuit rearrangement. The current readings shall be within ten percent of the connected load based on material ratings.
- (4) Ground Continuity. Resistance of the system ground as taken from the farthest extension of each circuit run from the controller (i.e. check of equipment ground continuity for each circuit) shall be measured and recorded. Readings shall not exceed 2.0 ohms, regardless of the length of the circuit.

Contract: 61D93

(5) Resistance of Grounding Electrodes. Resistance to ground of all grounding electrodes shall be measured and recorded. Measurements shall be made with a ground tester during dry soil conditions as approved by the Engineer. Resistance to ground shall not exceed 10 ohms.

ITS. The following test shall be made in addition to the lighting system test above.

Detector Loops. Before and after permanently securing the loop in the pavement, the resistance, inductance, resistance to ground, and quality factor for each loop and lead-in circuit shall be tested. The loop and lead-in circuit shall have an inductance between 20 and 2500 microhenries. The resistance to ground shall be a minimum of 50 megohms under any conditions of weather or moisture. The quality factor (Q) shall be 5 or greater.

Fiber Optic Systems. Fiber optic testing shall be performed as required in the fiber optic cable special provision and the fiber optic splice special provision.

All test results shall be furnished to the Engineer seven working days before the date the inspection is scheduled.

**Contract Guarantee.** The Contractor shall provide a written guarantee for all electrical work provided under the contract for a period of six months after the date of acceptance with the following warranties and guarantees.

- (a) The manufacturer's standard written warranty for each piece of electrical material or apparatus furnished under the contract. The warranty for light emitting diode (LED) modules, including the maintained minimum luminance, shall cover a minimum of 60 months from the date of delivery.
- (b) The Contractor's written guarantee that, for a period of six months after the date of final acceptance of the work, all necessary repairs to or replacement of said warranted material or apparatus for reasons not proven to have been caused by negligence on the part of the user or acts of a third party shall be made by the Contractor at no additional cost to the Department.
- (c) The Contractor's written guarantee for satisfactory operation of all electrical systems furnished and constructed under the contract for a period of six months after final acceptance of the work.

The warranty for an uninterruptable power supply (UPS) shall cover a minimum of two years from date the equipment is placed in operation; however, the batteries of the UPS shall be warranted for full replacement for a minimum of five years.

**Record Drawings.** Alterations and additions to the electrical installation made during the execution of the work shall be neatly and plainly marked in red by the Contractor on the full-size set of record drawings kept at the Engineer's field office for the project. These drawings shall be updated on a daily basis and shall be available for inspection by the Engineer during the course of the work. The record drawings shall include the following:

- Cover Sheet
- Summary of Quantities, electrical items only
- Legends, Schedules and Notes
- Plan Sheet

Contract: 61D93

- Pertinent Details
- Single Line Diagram
- Other useful information useful to locate and maintain the systems.

Any modifications to the details shall be indicated. Final quantities used shall be indicated on the Summary of Quantities. Foundation depths used shall also be listed.

As part of the record drawings, the Contractor shall inventory all materials, new or existing, on the project and record information on inventory sheets provided by the Engineer.

The inventory shall include:

- Location of Equipment, including rack, chassis, slot as applicable.
- Designation of Equipment
- Equipment manufacturer
- Equipment model number
- Equipment Version Number
- Equipment Configuration
  - o Addressing, IP or other
  - o Settings, hardware or programmed
- Equipment Serial Number

The following electronic inventory forms are available from the Engineer:

- Lighting Controller Inventory
- Lighting Inventory
- Light Tower Inspection Checklist
- ITS Location Inventory

The information shall be entered in the forms; handwritten entries will not be acceptable; except for signatures. Electronic file shall also be included in the documentation.

When the work is complete, and seven days before the request for a final inspection, the set of contract drawings, stamped "RECORD DRAWINGS", shall be submitted to the Engineer for review and approval and shall be stamped with the date and the signature of the Contractor's supervising Engineer or electrician. The record drawings shall be submitted in PDF format on CDROM as well as hardcopy's for review and approval.

In addition to the record drawings, PDF copies of the final catalog cuts which have been Approved and Approved as Noted with applicable follow-up shall be submitted along with the record drawings. The PDF files shall clearly indicate either by filename or PDF table of contents the respective pay item number. Specific part or model numbers of items which have been selected shall be clearly visible. Hard copies of the catalog are not required with this submittal.

The Contractor shall provide two sets of electronically produced drawings in a moisture proof pouch to be kept on the inside door of the controller cabinet or other location approved by the Engineer. These drawings shall show the final as-built circuit orientation(s) of the project in the form of a single line diagram with all luminaires numbered and clearly identified for each circuit.

Contract: 61D93

Final documentation shall be submitted as a complete submittal package, i.e. record drawings, test results, inventory, etc. shall be submitted at the same time. Partial piecemeal submittals will be rejected without review. A total of five hardcopies and CDROMs of the final documentation shall be submitted.

GPS Documentation. In addition to the specified record drawings, the Contactor shall record GPS coordinates of the following electrical components being installed, modified or being affected in other ways by this contract:

- All light poles and light towers.
- Handholes and vaults.
- Junction Boxes
- Conduit roadway crossings.
- Controllers.
- Control Buildings.
- Structures with electrical connections, i.e. DMS, lighted signs.
- Electric Service locations.
- CCTV Camera installations.
- Roadway Surveillance installations.
- Fiber Optic Splice Locations.
- Fiber Optic Cables. Coordinates shall be recorded along each fiber optic cable route every 200 feet.
- All fiber optic slack locations shall be identified with quantity of slack cable
  included. When sequential cable markings are available, those markings shall be
  documented as cable marking into enclosure and marking out of enclosure.

Datum to be used shall be North American 1983.

Data shall be provided electronically and in print form. The electronic format shall be compatible with MS Excel. Latitude and Longitude shall be in decimal degrees with a minimum of 6 decimal places. Each coordinate shall have the following information:

- 1. District
- 2. Description of item
- 3. Designation
- 4. Use
- 5. Approximate station
- 6. Contract Number
- 7. Date
- 8. Owner
- 9. Latitude
- 10. Longitude
- 11. Comments

A spreadsheet template will be available from the Engineer for use by the Contractor.

Prior to the collection of data, the contractor shall provide a sample data collection of at least six data points of known locations to be reviewed and verified by the Engineer to be accurate within

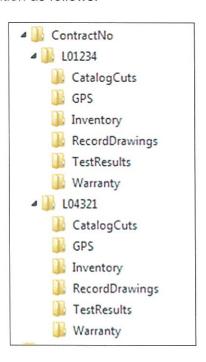
**20 feet.** Upon verification, data collection can begin. Data collection can be made as construction progresses, or can be collected after all items are installed. If the data is unacceptable the contractor shall make corrections to the data collection equipment and or process and submit the data for review and approval as specified. **Data collection prior to the submittal and review of the sample data of existing data points will be unacceptable and rejected.** 

Accuracy. Data collected is to be mapping grade. A handheld mapping grade GPS device shall be used for the data collection. The receiver shall support differential correction and data shall have minimum 5 meter accuracy after post processing.

GPS receivers integrated into cellular communication devices, recreational and automotive GPS devices are not acceptable.

The GPS shall be the product of an established major GPS manufacturer having been in the business for a minimum of 6 years."

The documents on the CD shall be organized by the Electrical Maintenance Contract Management System (EMCMS) location designation. If multiple EMCMS locations are within the contract, separate folders shall be utilized for each location as follows:



Extraneous information not pertaining to the specific EMCMS location shall not be included in that particular folder and sub-folder.

The inspection will not be made until after the delivery of acceptable record drawings, specified certifications, and the required guarantees.

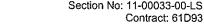
The Final Acceptance Documentation Checklist shall be completed and is contained elsewhere herein.

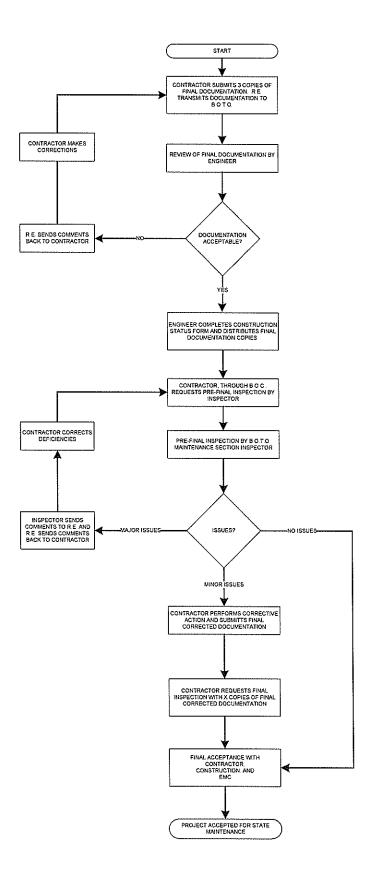
All CD's shall be labeled as illustrated in the CD Label Template contained herein.

**Acceptance.** Acceptance of electrical work will be given at the time when the Department assumes the responsibility to protect and maintain the work according to Article 107.30 or at the time of final inspection.

When the electrical work is complete, tested, and fully operational, the Contractor shall schedule an inspection for acceptance with the Engineer no less than seven working days prior to the desired inspection date. The Contractor shall furnish the necessary labor and equipment to make the inspection.

A written record of the test readings taken by the Contractor according to Article 801.13 shall be furnished to the Engineer seven working days before the date the inspection is scheduled. Inspection will not be made until after the delivery of acceptable record drawings, specified certifications, and the required guarantees.





**Final Acceptance Documentation Checklist** 

LOCATION			
Route	Common Name		
Limits	Section		
Contract #	County		
Controller Designation(s)	EMC Database Location Number(s)		

ITEM	Contractor (Verify)	Resident Engineer (Verify)
Record Drawings -Four hardcopies (11" x 17") -Scanned to two CD-ROMs		
Field Inspection Tests  -Voltage  -Amperage  -Cable Insulation Resistance  -Continuity  -Controller Ground Rod Resistance  (Four Hardcopies & scanned to two CD's)		
GPS Coordinates -Excel file (Check Special Provisions, Excel file scanned to two CD's)		
Job Warranty Letter (Four Hardcopies & scanned to two CD's)		
Catalog Cut Submittals -Approved & Approved as Noted (Scanned to two CD's)		
Lighting Inventory Form (Four Hardcopies & scanned to two CD's)		
Lighting Controller Inventory Form (Four Hardcopies & scanned to two CD's)		
Light Tower Inspection Form (If applicable, Four Hardcopies & scanned to two CD's)		

Contract: 61D93

Four Hardcopies & scanned to two CD's shall be submitted for all items above. The CD ROM shall be labeled as shown in the example contained herein.

#### **General Notes:**

Record Drawings – The record drawings should contain contract cover sheet, summary of quantities showing all lighting pay item sheets, proposed lighting plans and lighting detail sheets. Submit hardcopies 11 x 17 size. Include the original "red-ink" copy. The red-ink markup should be neatly drawn. Record drawings copies should be legible. Blurred copies will not be acceptable. Temporary lighting plans and removal lighting plans should not be part of the set.

<u>Field Inspection Tests</u> – Testing should be done for proposed cables. Testing shall be per standard specifications. Forms shall be neatly filled out.

<u>GPS Coordinates</u> – Check special provisions "General Electrical Requirements". Submit electronic "EXCEL" file.

Job Warranty Letter - See standard specifications.

<u>Cutsheet Submittal</u> – See special provisions "General Electrical Requirements". Scan Approved and Approved as Noted cutsheets.

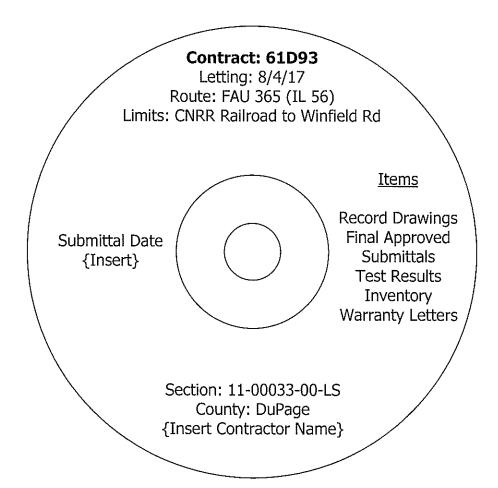
<u>Lighting Inventory Form</u> – Inventory form should include only proposed light poles, proposed light towers, proposed combination (traffic/light pole) lighting and proposed underpass luminaires.

<u>Lighting Controller Inventory Form</u> – Form should be filled out for only proposed lighting controllers.

<u>Light Tower Safety Inspection Form</u> – Form should be filled out for each proposed light tower.

CD LABEL FORMAT TEMPLATE.

Label must be printed; hand written labels are unacceptable and will be rejected.



#### LUMINAIRE

**Description.** This work shall consist of the material, labor, and equipment necessary to furnish and install roadway and beacon luminaires as indicated on the plans, according to the type specified. The luminaires shall be installed on proposed light poles complete with wire, fuses, fuseholders, ground connection and splice connections to make ready for use and in accordance with the plan details and the following requirements. This work shall be performed according to applicable sections of Division 800 of the State Specifications.

Materials: The luminaires shall be as specified herein, as detailed in the Plans and specifications.

The following products/suppliers may be considered for roadway luminaires:

#### High Wattage:

Manufacturer:

GE Electronics

General Electric Company 3135 Easton Turnpike Fairfield, CT 06828 www.gelighting.com

Series:

Evolve LED Roadway Lighting

Model Type:

ERS2 / C1-X-40-A

Distribution Type:

III 193W

Wattage: Lumens:

Color:

21,000 Black

Manufacturer:

Phillips Electronics - North America

3000 Minuteman Rd Andover, MA 01810

www.usa.lighting.philips.com

Series:

Lumec RoadView LED Series

Model Type:

RVM / 215W128LED4K

Distribution Type:

Ш

Wattage:

209W

Lumens:

20,448

Color:

Black

Manufacturer:

American Electric Lighting 3825 Columbus Rd # F

Granville, OH 43023

www.americanelectriclighting.com

Contract: 61D93

Series: Autobahn LED Roadway Model Type: ATB2 / 60BLEDE10

Distribution Type: III
Wattage: 208W
Lumens: 23,249
Color: Black

The following products/suppliers may be considered for beacon luminaires:

#### Medium Wattage:

Manufacturer: Phillips Electronics – North America

3000 Minuteman Rd Andover, MA 01810

www.usa.lighting.philips.com

Series: Lumec RoadView LED Series

Model Type: RVS / 80W48LED4K

Distribution Type: III
Wattage: 81W
Lumens: 7,799
Color: Black

Manufacturer: American Electric Lighting

3825 Columbus Rd # F Granville, OH 43023

www.americanelectriclighting.com

Series: Autobahn LED Roadway
Model Type: ATB0 / 20BE10LEDE10

Distribution Type: III
Wattage: 72W
Lumens: 7,829
Color: Black

**Construction Requirements.** The contractor will be required to furnish and install luminaires, pole wiring, and any other appurtenances required per the Plans. Upon completion of the initial installation an evaluation of the light distribution shall be performed to determine proper light distribution. The contractor shall make the appropriate adjustments, as needed to obtain necessary light levels.

Add the following table(s) to Article 1067 of the Standard Specifications for the high wattage luminaires:

#### **IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE**

GIVEN CONDITIONS		
ROADWAY DATA	Pavement Width	90 (ft)
	Number of Lanes	6
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	45 (ft)
	Mast Arm Length	12 (ft)
	Pole Set-Back From Edge of Pavement	15 (ft)
LUMINAIRE DATA	Lamp Type	LED
	Lamp Lumens	20,448 minimum
	I.E.S. Vertical Distribution	Medium
	I.E.S. Control Of Distribution	Cutoff
	I.E.S. Lateral Distribution	Type III
	Total Light Loss Factor	0.7
LAYOUT DATA	Spacing	150 (ft)
	Configuration	Opposite
	Luminaire Overhang over edge of pavement	2 (ft)

**NOTE**: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

#### PERFORMANCE REQUIREMENTS

**NOTE**: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

LUMINANCE	Average Luminance, LAVE	0.90 Cd/m <sup>2</sup>
	Uniformity Ratio, LAVE/LMIN	3.0 (Max)
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	5.0 (Max)
	Veiling Luminance Ratio, L <sub>V</sub> /L <sub>AVE</sub>	0.30 (Max)

Add the following table(s) to Article 1067 of the Standard Specifications for the medium wattage luminaires:

#### **IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE**

GIVEN CONDITIONS		
ROADWAY DATA	Pavement Width	35 (ft)
	Number of Lanes	2
	I.E.S. Surface Classification	R3
	Q-Zero Value	0.7
LIGHT POLE DATA	Mounting Height	30 (ft)
	Mast Arm Length	6 (ft)
	Pole Set-Back From Edge of Pavement	15 (ft) minimum
LUMINAIRE DATA	Lamp Type	LED
	Lamp Lumens	7,799 minimum
	I.E.S. Vertical Distribution	Medium
	I.E.S. Control Of Distribution	Cutoff
	I.E.S. Lateral Distribution	Type III
	Total Light Loss Factor	0.7
LAYOUT DATA	Spacing	100 (ft)
	Configuration	Single-Sided
	Luminaire Overhang over edge of pavement	2 (ft)

**NOTE**: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

#### PERFORMANCE REQUIREMENTS

**NOTE**: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

LUMINANCE	Average Luminance, LAVE	1.0 Cd/m <sup>2</sup>
	Uniformity Ratio, LAVE/LMIN	2.0 (Max)
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	4.0 (Max)
	Veiling Luminance Ratio, L <sub>V</sub> /L <sub>AVE</sub>	0.20 (Max)

Basis of Payment. This work shall be paid for at the contract unit price per each for LUMINAIRE, LED, HORIZONTAL MOUNT, HIGH WATTAGE and LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE, which price will be payment in full for furnishing luminaires, lamps, electrical connections and splices, stainless steel mounting hardware and all other materials and incidentals required, specified, or shown on the plans.

#### LIGHT POLE FOUNDATION, OFFSET

Add the following to the Article 838 of the Standard Specifications:

**Description.** This work shall consist of the material, equipment and labor required to furnish and install a steel reinforced concrete offset foundation, 30 inches in diameter, with offset construction as indicated and complete with raceways, all as indicated on the Contract drawings. The Engineer shall identify the soil as belonging to one of the types of soil listed in the Foundation Depth Table, either by visual inspection, or by the use of a pocket penetrometer, where this is feasible. The foundation shall include an excavation, reinforcement, concrete, anchor bolts, nuts, washers, and raceways. This work shall be performed according to applicable sections of Division 800 of the State Specifications.

Materials. Concrete shall be Class "SI" complying with Section 1020 of the Standard Specifications. Reinforcement bars shall comply with Section 1006.10 of the Standard Specifications. Unless otherwise indicated, anchor bolts shall comply with the requirements of ASTM DesignationF15554, Grade 725. Unless otherwise indicated, nuts shall be hexagon nuts in conformance with ASTM A563, Grade A, and washers shall be in conformance with ASTM F436. The entire length of anchor bolts as well as the nuts and washers shall be hot dip galvanize in accordance with the requirements of Article 1006.09. Unless otherwise indicated, conduit raceways shall be heavy wall rigid polyvinyl chloride (PVC) conduit, (Schedule 40) UL listed and in conformance with NEMA TC2 and Federal – Specification WC-1094A. Two (2) Raceways minim or as required in field shall be provided in each foundation.

**Construction Requirements.** The foundation depths shall be as directed by the Engineer based upon evaluation of the soil conditions encountered. The Engineer may determine soil condition by visual inspection or, where practical, by the use of a pocket penetrometer and will establish foundation depth based up on the Foundation Depth Table shown on the plans, where applicable.

The hold for the foundation shall be made by drilling with an auger, of the same diameter as the foundation. The foundation shall be cast-in-place and allowed to cure for 10 day minimum before the light pole is erected. If soil conditions require the use of a liner to form the hole, the liner shall be withdrawn as the concrete is deposited. The top of the foundation shall be constructed level so that no shims or other leveling device will be needed to set the light standard plumb on the foundation. A liner or form shall be used to produce a uniform smooth side to the top of the foundation. Foundation top shall be chamfered 3/4 -inch unless otherwise indicated. Extreme care shall be used in establishing the top elevation of concrete foundations, especially when foundations are installed before final grading is complete. Foundations shall not protrude above grade more than the limits indicated on the plans, except for specifically indicated locations, and where not otherwise indicated, foundation shall not protrude above grade more than 4 inches above a 60-inch chord centered at the foundation, at any point around the circumference. Where foundation heights extend beyond specified limits, the Engineer may direct replacement of the foundation and the incorrect foundation will not be measured for payment. The steel reinforcement, the raceway conduits, and the anchor bolts shall be secured in place to each other and properly positioned in the augured hole so that at time of pouring of concrete mixture in place the abovesaid components retain their proper positions. Special attention shall be paid to the positioning of the

anchor bolts. It is of utmost importance that the anchor bolt projections on top of the foundation, after placement of the concrete, remain in a perfectly vertical position.

**Method of Measurement.** The foundation shall be measured for payment in linear feet of foundation in place, with the measurement to be taken along the vertical and horizontal centerlines of the foundation except that the total depth shall be no greater than indicated on the Plans and directed by the Engineer, i.e., extra foundation depth, set.

**Basis of Payment.** This work shall be paid for at the contract unit price per each for LIGHT POLE FOUNDATION, 30" DIAMETER, OFFSET, which price will be payment in full for the work shown on the Plans and as described herein.

#### LIGHT POLE, SPECIAL

**Description.** This work shall consist of the material, equipment and labor required to furnish and install the City of Warrenville Standard Ornamental light poles without banner arms, of the size and type specified. This work shall be performed according to applicable sections of Division 800 of the State Specifications.

**Materials:** The light pole shall be listed or classified such as UL or ETL for the specified use. The pole shall be rated for a minimum wind loading of 90 mph fully assembled complete with specified accessories. The pole shall also comply with current AASHTO requirements. This is a proprietary item which will be sole sourced for this project.

City of Warrenville Standard Ornamental Street Pole

Model Type: Sternberg 3600 Williamsburg Series / 3612T4 / BKT

Height: 12'

Shaft Thickness: 4'-3" Finish: Tapered, smooth

Color: Black

**Construction Requirements.** The contractor will be required to furnish and install pole, fuses, fuseholder, pole wiring, and any other appurtenances required per the Plans and the Standard City of Warrenville Ornamental Street Light Detail. The pole shall be vertically plumb.

**Basis of Payment.** This work shall be paid for at the contract unit price per each for LIGHT POLE, SPECIAL, which price will be payment in full for furnish the pole, decorative base, anchor bolts, covers, wiring, fuses, fuseholders, grounding and all other materials and incidentals required, specified, or shown on the plans, and furnishing all labor, tools, and equipment necessary for the assembly of all equipment, wired, erected, and otherwise complete and in operation.

#### **LUMINAIRE SAFETY CABLE ASSEMBLY**

Effective: January 1, 2012

**Description:** This item shall consist of providing a luminaire safety cable assembly as specified herein and as indicated in the plans.

**Materials.** Materials shall be according to the following:

**Wire Rope.** Cables (wire rope) shall be manufactured from Type 304 or Type 316 stainless steel having a maximum carbon content of 0.08 % and shall be a stranded assembly. Cables shall be 3.18 mm (0.125") diameter, 7x19 Class strand core and shall have no strand joints or strand splices.

Cables shall be manufactured and listed for compliance with Federal Specification RR-W-410 and Mil-DTL-83420.

Cable terminals shall be stainless steel compatible with the cable and as recommended by the cable manufacturer. Terminations and clips shall be the same stainless steel grade as the wire rope they are connected to.

**U-Bolts.** U-Bolts and associated nuts, lock washers, and mounting plates shall be manufactured from Type 304 or Type 316 stainless steel.

Construction Requirements. The safety cable assembly shall be installed as indicated in the plan details. One end of the cable assembly shall have a loop fabricated from a stainless steel compression sleeve. The other end of the cable assembly shall be connected with stainless steel wire rope clips as indicated. Slack shall be kept to a minimum to prevent the luminaire from creeping off the end of the mast arm. Unless otherwise indicated in the plans, the luminaire safety cable shall only be used in conjunction with luminaires which are directly above the traveled pavement.

**Basis of Payment.** This work shall be paid for at the contract price each for LUMINAIRE SAFETY CABLE ASSEMBLY, which shall be payment for the work as described herein and as indicated in the plans.

#### **LUMINAIRE, LED, TYPE 3, SPECIAL**

**Description.** This work shall consist of the material, labor, and equipment necessary to furnish and install the City of Warrenville Standard Ornamental luminaire as indicated on the plans, according to the type specified for pedestrian lighting. The decorative luminaires shall be installed on proposed decorative light poles complete with wire, fuses, fuseholders, ground connection and splice connections to make ready for use and in accordance with the plan details and the following requirements. This work shall be performed according to applicable sections of Division 800 of the State Specifications. This is a proprietary item which will be sole sourced for this project.

**Materials:** The luminaires shall be as specified herein, as detailed in the Plans and the Standard City of Warrenville Ornamental Street Light Detail.

City of Warrenville Standard Ornamental Street Luminaire Model Type: Sternberg 1430 LED / 5P / 4ARC45T-MDL03

Distribution Type: III Wattage: LED, 64 Watt Ballast: 240V/120V Multi-tap

Color: Black

The manufacturer shall supply a luminaire safety cable assembly with the fixture.

**Construction Requirements.** The contractor will be required to furnish and install luminaires, pole wiring, and any other appurtenances required per the Plans. Upon completion of the initial installation an evaluation of the light distribution shall be performed to determine proper light distribution. The contractor shall make the appropriate adjustments, as needed to obtain necessary light levels.

**Basis of Payment.** This work shall be paid for at the contract unit price per each for LUMINAIRE, LED, TYPE 3, SPECIAL, which price will be payment in full for furnishing luminaires, lamps and electrical connections and splices, stainless steel mounting hardware and all other materials and incidentals required, specified, or shown on the plans.

#### DYNAMIC MESSAGE SIGN

**Description.** This work shall consist of providing all labor, materials, and equipment necessary to fabricate, furnish and install a single face LED video display sign, including cabinet, frame, internal sign electrical components, fasteners, and controlling system, as part of the Gateway Monument Sign Complete. All work shall be per Section 891 of the Standard Specifications except as indicated herein, as shown on the plans, and as directed by the Engineer.

**Submittals.** Submit product samples representing the size, shape, and color of each component and controlling, along with Manufacturer's product data to the Engineer for approval prior to ordering and fabrication.

Prior to fabrication, prepare and submit shop drawings including all electrical, dimensions, materials, connection and controlling methods for the complete erection of the dynamic message sign based on field measurements. Submit samples of each material representing the finish texture and color to the Engineer for review and approval prior to ordering and fabrication.

#### Quality Assurance.

<u>Manufacturer</u>: Sign Manufacturer shall be licensed per applicable State and municipal requirements and must have a minimum of 7 years' continuous experience manufacturing LED display modules and display cabinets under the same business name. The LED display modules and cabinet must be manufactured by the same company. If the LED display broker or distributor is providing the LED display, the original location of manufacture and manufacturer name must be provided. The manufacturer must have a US based manufacturing facility.

<u>Installation:</u> Performed by a local sign company that must provide certified factory trained personnel with at least 4 years training experience plus back-up from local dealer.

<u>Fabrication:</u> Sign cabinet to be UL listed and fabricated to meet all applicable BOCA and municipal codes. Fabricate sign as indicated or as accepted and detailed on final shop drawings.

<u>Warranty:</u> Display shall carry a minimum of 5-year parts warranty. Display manufacturer will send replacement or exchange parts via a maximum 2 business day delivery. Manufacturer will not charge customer up-front for exchange parts and will credit the returned faulty parts prior to invoicing. The above-mentioned service will be provided for the entirety of the 5-year parts warranty. Phone technical support, troubleshooting and basic display operation support must be provided for the entirely of the display life (10 Years minimum).

<u>Future Serviceability</u>: Sign company or manufacturer to provide future service must be no more than 50 miles from the sign location.

Delivery, Storage, and Handling. Deliver, store, and handle sign materials to prevent damage.

<u>Lead time</u>: Lead time for display to be on-site once contract is signed and down payment made should be no more than 8 weeks.

Shipping: Total cost shall include shipping to final destination.

**Materials.** Provide materials per Section 1084 of the Standard Specifications except as indicated herein, as shown on the plans, and as directed by the Engineer.

Fabricator/supplier: Watchfire Signs

1015 Maple Street Danville, IL 61832 800-219-0496

www.watchfiresigns.com

Provide a fully-functional LED electronic message board sign, including controlling and software, to meet the following specifications:

Size: Approximately 41" x 111" for a 36" x 108" viewing area.

Pixel Spacing: Center to center pixel spacing must not exceed 16mm (0.667").

<u>Pixel Design</u>: Each pixel must be separate one from another. No virtual or hybrid pixel technologies will be accepted. Each pixel must be comprised of no more, or less than 1 red, 1 green and 1 blue LED.

Half-Brightness Viewing Angles: 140 degrees horizontal/70 degrees vertical.

<u>Video & Graphics Capability</u>: The display must be able to show pre-recorded video clips at up to 30 frames per second. Software driving display must have the ability to import BMP, GIF, and JPG for still images; WMV and AVI for animation.

<u>Brightness/Dimming</u>: Maximum brightness must be up to 10,000 units. Dimming must be automated using a minimum 100-step photo cell, OR dimming must be automated using software dimming based on global position of LED display.

<u>Temperature Display</u>: Include temperature sensor for real time display of temperature, OR temperature must be able to be displayed on LED display using real date from an RSS internet feed.

<u>Data Integration</u>: Display must have the ability to display RSS feeds for real time data such as news, sports, weather, etc.

<u>LED rating:</u> LEDs must be lifetime rated at 100,000 hours. Lifetime is defined as the point at which the LED degradation reaches 50% of original brightness.

Color Capability: Display must be capable of displaying 1.15 quintillion possible colors.

Contract: 61D93

Matrix: LED display will be no less than 54 pixels high x 198 pixels wide.

<u>Communication</u>: Broadband cellular communications with affordable data plan. The first five years of service must be included.

<u>Software</u>: Must be capable of running on Windows 8 or better and have the capability of creating, editing, and scheduling content. Must include a font editor, as well as the capability to import true type fonts from customer's font library. Overview of features of the display software as well as hardware requirements must be included in the cost.

<u>Content:</u> A content CD must be included with the manufacturer's control software and be preloaded with a minimum of 1,000 pre-produced content files formatted to the display size being specified; the content must include animations and backgrounds that can be utilized on the display without size modification. The pre-produced content files need not be specific to any industry type.

Security: Password protection must be built into the display software.

<u>Ventilation</u>: Sign should not require air conditioning. Front ventilation is required without the need for filters.

<u>LED display cabinet</u>: Must be extruded aluminum cabinetry featuring precision mitered corners; solid welds and 30% gloss black polyurethane finish.

<u>Windowless Design</u>: LED modules must be mounted to the front of the cabinet without being covered by a Lexan or other transparent face.

Display Access: LED display must have front access for maintenance and repair.

<u>LED modules must be encapsulated</u>: For protection from the environment, must be fully submersible under water. Provide a demonstration of the LED module running under water to prove weather-proofing capability. LED modules provided in the specified display must have the same weather-proofing capability as the demo unit.

**Construction Requirements.** Coordinate work with Gateway Monument Sign prior to beginning fabrication. Do not start fabrication until all work is coordinated and unsatisfactory conditions are corrected.

Set LED sign in accordance with drawing details and final shop drawings. Provide anchors, supports, and other attachments shown, or necessary to secure the work in place.

Erect work plumb and true with joints uniform in width and accurately aligned.

Signage fabricator to coordinate with electrical contractor for specific requirements of LED sign, conduit, junction box and transformer placement.

Install sign panels, frame and post materials, internal sign electrical components and fasteners per fabricator's recommendations.

**Method of Measurement.** The contract unit price shall include submittals, preparation of shop drawings, and all work necessary for fabrication, delivery, installation and controlling, including all materials, labor, and equipment required to complete this work.

Contract: 61D93

**Basis of Payment.** This item shall be paid for at the contract unit price per each for DYNAMIC MESSAGE SIGN and no additional compensation will be allowed.

# TOPSOIL FURNISH AND PLACE

**Description.** This work shall consist of furnishing, transporting, preparing, and placing topsoil from within the site or imported from offsite sources. The work shall be completed in accordance with Section 211 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Engineer.

**Materials.** Topsoil shall be provided in accordance with Article 1081.05 of the Standard Specifications with the exception that the minimum organic content shall be 4 percent.

Import topsoil from offsite sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

**Construction.** This work shall be performed in accordance with Articles 211.04 and 211.05 of the Standard Specifications except as modified herein.

Place topsoil and complete finish grading to meet grades as shown on the plans. Place topsoil to a depth of 4 inches in all Class 2A seed areas. Place topsoil to a depth of 12 inches in all planting bed areas. Place topsoil in Selective Clearing area as needed to create a smooth and uniform ground plane as directed in the field by the Engineer, to be paid for as Topsoil Furnish and Place, Special.

**Method of Measurement.** The contract unit price shall include importing and placing topsoil to a depth of 4 inches in all seed areas and to a depth of 12 inches in all planting bed areas, including all materials, labor, or equipment required to complete this work.

**Basis of Payment.** This work shall be paid for at the contract unit price per square yard for TOPSOIL FURNISH AND PLACE, 4" and TOPSOIL FURNISH AND PLACE, 12", and per cubic yard for TOPSOIL FURNISH AND PLACE, SPECIAL and no additional compensation will be allowed.

### PLANTING WOODY PLANTS

**Description.** This work shall consist of furnishing, transporting, and planting trees and shrubs in accordance with Section 253 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Engineer. The work shall include all bracing, wrapping, watering, weeding, replacement of plants when required, including all materials, labor, and equipment required to complete this work.

**Materials.** Provide trees, shrubs, and accessories in accordance with Section 253 and Article1081.01 of the Standard Specifications except as modified herein.

Provide quality, size, genus, species, and variety of trees and shrubs as shown on the plans in compliance with the "American Standard for Nursery Stock" latest edition.

Contract: 61D93

All trees to be provided balled and burlapped. All shrubs to be provided either balled and burlapped or container grown.

Mulch shall be six-month old, well-rotted, shredded, native hardwood bark mulch, not larger than 4 inches in length and ½ inches in width, free of wood chips and sawdust.

**Construction.** This work shall be performed in accordance with Article 253 of the Standard Specifications.

**Method of Measurement.** The contract unit price for trees and shrubs shall include furnishing, transporting, and planting trees and shrubs including bracing, wrapping, watering, mulching, weeding, replacement of plants when required and all materials, labor, or equipment required to complete this work.

Basis of Payment. This work shall be paid for at the contract unit price per each for TREES (PER INDIVIDUAL PLANT CODE PAY ITEM), SHRUBS (PER INDIVIDUAL PLANT CODE PAY ITEM) and EVERGREEN (PER INDIVIDUAL PLANT CODE PAY ITEM) and no additional compensation will be allowed. Refer to material list on planting plans for individual tree and shrub species.

## PLANTING PERENNIAL PLANTS

**Description.** This work shall consist of furnishing, transporting, and planting perennial plants in accordance with Section 254 of the Standard Specifications except as specified herein, as shown on the plans, and as directed by the Engineer. The work shall include preparing the planting area, planting, watering, weeding, replacement of plants when required, and maintaining perennial areas until the project completion date, including all materials, labor, and equipment required to complete this work.

**Materials.** Provide perennial plants and accessories in accordance with Article 1081.02 of the Standard Specifications except as modified herein.

Provide container grown perennial plants for ornamental planting areas as indicated on the plans of the quality, size, genus, species, and variety as shown on the plans in compliance with the "American Standard for Nursery Stock" latest edition.

**Construction.** This work shall be performed in accordance with Section 254 of the Standard Specifications except as modified herein.

Trees and shrubs must be installed prior to installation of perennials to establish proper layout and to avoid damage to perennial plantings.

Plant perennial plants equally spaced throughout ornamental planting areas as shown on the plans.

**Method of Measurement.** The contract unit price for perennial plants shall include furnishing, transporting, preparing the planting area, planting, watering, mulching, weeding, replacement of plants when required, and maintaining perennial areas until the project completion date, including all materials, labor, and equipment required to complete this work.

**Basis of Payment.** This work shall be paid for at the contract unit price per unit (one unit equals 100 plants) for PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT, and no additional compensation will be allowed. Refer to material list on planting plans for individual perennial plant species.

# SEEDING, CLASS 4A (MODIFIED)

**Description.** This work shall consist of preparing the seed bed, placing the seed, initial watering of the seed bed and other materials required in the seeding operation including horticultural grade vermiculite 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.

**Materials.** The Class 4A (Modified) seed mixture shall be supplied in pounds of Pure Live Seed. All native seed species will be local genotype and will be from a radius of 150 miles from the project site. The Class 4A (Modified) seed mix shall be supplied with the appropriate inoculants. 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	13.5
Andropogon scoparius	
(Little Bluestem)	5.0
Bouteloua curtipendula	
(Side-Oats Grama)	5.0
Elymus canadensis	
(Canada Wild Rye)	3.0
Sporobolus heterolepsis	
(Prairie Dropseed)	0.5
• • •	
	BULK LB/ACRE
Temporary Cover	32.0
	32.3
Avena sativa	
(Annual Oats)	32.0
( • a.t.)	02.0

### Notes:

- 1. 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.
- 2. The seedbed shall be prepared and approved by the Engineer prior to seeding. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place.
- 3. No seed shall be sown during high winds or when the ground is not in proper condition for seeding.
- 4. The Engineer must witness the delivery of seed with original labels attached in the field. Provide to the Engineer the seed labels from the bags in which the seed is delivered in.

5. Temporary cover seed shall be kept separate from the Class 4A (Modified) type mixture. It shall be mixed on site under the direction of the Engineer.

- 6. In order to eliminate potential introduction of invasive or exotic species, all equipment used on the planting site shall be free of mud and/or plant material. This includes tires, mower decks, undercarriage, etc.
- 7. The Cover Crop shall be thoroughly mixed with the Class 4A (Modified) seed mix and seeded using a mechanical seeder that applies the seed uniformly at a depth of 1/4 inch. The seedbed shall be immediately mulched as specified.

If specified seed material is unavailable, the Engineer shall approve the substitutes in writing. Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract.

Provide Mulch Method 2 for all Seeding, Class 4A (modified) areas.

**Method of Measurement.** The contract unit price shall include all preparation, finish grading, materials, labor, or equipment required to complete this work.

Horticultural grade vermiculite will not be measured for payment and shall be considered incidental to the cost of Seeding, Class 4A (Modified).

**Basis of Payment.** This item shall be paid for at the contract unit price per acre for SEEDING, CLASS 4A (MODIFIED), and MULCH, METHOD 2, which price shall be payment in full for performing the work as specified herein and as determined by the Engineer.

#### SEEDING, CLASS 5 (MODIFIED)

**Description.** This work shall consist of Seeding Class 5 (Modified) in areas as shown on the plans and as directed on-site by the Engineer.

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

**Materials.** The Class 5 (Modified) seed mixture shall be supplied in a separate bag from the three mixture components: Temporary Cover, Permanent Grasses, and Forbs. All native species will be local genotype and will be from a radius of 100 miles from DuPage County. The Class 5 (Modified) seed mix shall be supplied with the appropriate inoculants. Fertilizer is not required.

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

CLASS - TYI	PE SEEDS	PURE LIVE SEED LB/ACRE
5 (Modified) Forbs:		5.50
	Aster novae	
	(Sky Blue Aster)	0.20
	Baptisia australis	
	(False Indigo)	0.75
	Baptisia leucophaea	0.45
	(Cream Wild Indigo)	0.45
	Coreopsis lanceolata	0.45
	(Lanceleaf Coreopsis)	0.45
	Dalea purpurea	0.05
	(Purple Prairie Clover) Desmodium canadense	0.35
	(Showy Tick Trefoil)	0.20
	Echinacea purpurea	0.30
	(Purple Coneflower)	0.75
	Eryngium yuccifolium	0.75
	(Rattlesnake Master)	0.30
	Liatris aspera	0.30
	(Rough Blazing Star)	0.65
	Monarda fistulosa	0.00
	(Wild Bergamot)	0.55
	Rudbeckia hirta	0.00
	(Black-eyed Susan)	0.75
	(	55
		BULK LB/ACRE
Temporary Cover		32.0
	Avena sativa	
	(Annual Oats)	32.0

#### Notes:

- 1. The Engineer must witness the delivery of seed with original labels attached in the field. Provide to the Engineer the seed labels from the bags in which the seed is delivered in.
- 2. Each bag shall be labeled. The label shall bear the dealer's guarantee of mixture and year grown, purity and germination, and date of test. Germination tests no older than twelve months of the date of sowing must be submitted to verify all bulk seed required to achieve LB PLS specified.
- 3. No seed shall be sown until the purity testing has been completed for seeds to be used and shows the seed meets the noxious weed requirements.
- 4. Seed, which has become wet, moldy, or otherwise damaged will not be acceptable. Prior to application, the Engineer must approve seed mix in the bags.
- 5. No seed shall be sown during high winds or when the ground is not in proper condition for seeding.
- 6. The seedbed shall be prepared and approved by the Engineer prior to seeding. The Contractor shall delineate the perimeter of the seedbed with wooden lathe. The wooden lathe shall remain in place.
- 7. Temporary cover seed shall be kept separate from the Native Grass seed mixture. It shall be mixed on site under the direction of the Engineer.

8. The Spring Oats shall be thoroughly mixed with the Native Grass seed and seeded first using a mechanical seeder that applies the seed uniformly at a depth of ¼ inch. Second, the Forb seed shall be thoroughly mixed with 2 bushels of moistened horticultural grade vermiculite per acre and uniformly seeded at a depth of 1/8 inch. The seedbed shall be immediately mulched as specified.

If specified Plateau herbicide tolerant designed seed material is unavailable, the Engineer shall approve the substitutes. All substitutions shall also be tolerant to (Ammonium salt of imazapic (+/-)-2-[4,5-dyhydro-4-menthyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyrudubecarboxylic acid (Plateau Herbicide). Adjustments will be made at no cost to the contract. Approval of substitutes shall in no way waive any requirements of the contract.

Provide Mulch Method 2 for all Seeding, Class 5 (modified) areas.

**Method of Measurement.** The contract unit price shall include all preparation, finish grading, materials, labor, or equipment required to complete this work.

Horticultural grade vermiculite will not be measured for payment and shall be considered incidental to the cost of Seeding, Class 5 (Modified).

**Basis of Payment.** This item shall be paid for at the contract unit price per acre for SEEDING, CLASS 5 (MODIFIED) and MULCH, METHOD 2, which price shall be payment in full for performing the work as specified herein and as determined by the Engineer.

# TRASH RECEPTACLES

**Description.** This work shall consist of furnishing, transporting, assembling, and placing trash and recycling receptacles as specified herein, as shown on the plans, and as directed by the Engineer.

**Submittals.** Submit Manufacturer's product data for each product specified to the Engineer for approval prior to construction.

Materials. The following products/suppliers are preapproved:

<u>Description</u>: Steel Trash and Recycling Receptacles

Manufacturer: DuMor Site Furnishings

P.O. Box 142

Mifflintown, PA 17059 1-800-598-4018 www.dumor.com

<u>Item No:</u> 287-32SH-SO Trash receptacle with liner-concealing shield option SO 5" x 16" lid hole shape option, labeling on band: TRASH ONLY

Capacity: 32 Gallons

Material: Steel with zinc rich epoxy and finished with polyester powder coating

Color: Black

<u>Item No</u>: 287-32SH-RC0002 Mixed Recycling receptacle with liner-concealing shield option

Lid Option: RC2 4" x 12" lid hole shape option, labeling on band: MIXED RECYCLING

CITY OF WARRENVILLE FAP 365 (IL ROUTE 56 BUTTERFIELD ROAD)

Section No: 11-00033-00-LS Contract: 61D93

Capacity: 32 Gallons

Material: Steel with zinc rich epoxy and finished with polyester powder coating

Color: Black

Description: Steel Trash and Recycling Receptacles

Manufacturer: Victor Stanley, Inc.

P.O. Drawer 330 Dunkirk, MD 20754 1-800-368-2573

www.victorstanley.com

Item No: SDC-36 Trash receptacle

<u>Lid Option</u>: Solid convex lid <u>Capacity</u>: 36 Gallons

Material: Steel with TGIC polyester powder coating

Color: Black

Options: Side-access plate with custom decal; TRASH ONLY

Item No: SDC-36 Mixed recycling receptacle

<u>Lid Option</u>: Solid convex lid Capacity: 36 Gallons

Material: Steel with TGIC polyester powder coating

Color: Black

Options: Side-access plate with custom decal; MIXED RECYCLING

<u>Description</u>: Steel Trash and Recycling Receptacles

Manufacturer: Landscape Forms, Inc.

7800 East Michigan Avenue Kalamazoo, MI 49048 1-800-430-6209

www.landscapeforms.com

Item: Chase Park trash receptacle, side opening

<u>Lid Option</u>: Standard lid Size: 24" x 39"

Material: Steel with Pangard II polyester powder coating

Color: Black

Options: Logo Band, labeling on band: TRASH ONLY

Item: Chase Park mixed recycling receptacle, side opening

Lid Option: Standard lid Size: 24" x 39"

Material: Steel with Pangard II polyester powder coating

Color: Black

Options: Logo Band, labeling on band: MIXED RECYCLING

Contract: 61D93

Provide all fasteners and hardware necessary per manufacturer's recommendations for surface mounting.

**Construction.** Assemble and install trash and recycling receptacles at locations as shown on the plans. Anchor with appropriately sized fasteners as recommended by the manufacturer, and as shown on the plans.

**Method of Measurement.** The contract unit price shall include assembly and all hardware necessary to attach the trash and recycling receptacles as recommended by the manufacturer and as shown on the plans, including all materials, labor, and equipment required to complete this work.

Basis of Payment. This work shall be paid for at the contract unit price per each for TRASH RECEPTACLES, and no additional compensation will be allowed.

# GATEWAY MONUMENT SIGN, MINOR SIGN, MASONRY COLUMN

**Description.** This work shall consist of providing all labor, materials, and equipment necessary to fabricate, furnish and install the masonry signs and their associated lighting units, and masonry columns including the concrete foundation. All work shall be per the details shown on the plans and as directed by the Engineer.

All components as shown on the plans, including but not limited to precast coping, anchors, stone veneer, block, mortar, flashing and weep holes shall be included in the cost of the masonry signs and columns.

All concrete foundations as shown on the plans, including but not limited to structural excavation, concrete structures, reinforcement bars, reinforcement bars epoxy coated, drilled shaft concrete foundations with bells shall be included in the cost of the masonry signs and columns.

This work shall consist of the material, labor, and equipment necessary to furnish and install the LED sign lighting units and solar panels as indicated on the plans, according to the type specified. The sign lighting unit and solar panels shall be installed on the secondary signs complete with prewired cable, weatherproof bar fittings, adjustable mounting brackets and frames, batteries, battery box, sockets, solar panel, charge controllers, pre-programmed software and on/off switches to make ready for use and in accordance with the plan details and the following requirements. This work shall be performed according to applicable sections of Division 800 of the State Specifications. This is a proprietary item which will be sole sourced for this project.

**Submittals.** Submit product samples representing the size, shape, and color of each unit type along with Manufacturer's product data to the Engineer for approval prior to construction. Contractor shall also submit Manufacturer's product data for each lighting unit and solar panel, specified to the Engineer for approval prior to construction.

Prior to fabrication, prepare and submit shop drawings for complete erection of each type of sign or column based on field measurements. Submit Manufacturer's product data for each type of material specified before ordering. Submit samples of each material representing the finish texture and color for review and approval by the Engineer prior to ordering and fabrication.

# Quality Assurance.

<u>Masonry:</u> Variation from the plumb in the lines and surfaces of columns shall not exceed 1/4-inch in 10 feet. Variation from plumb for external corners, expansion joints, and other conspicuous lines shall not exceed 1/4-inch. Variation in cross-sectional dimensions of and thickness of walls shall not exceed minus 1/4-inch nor plus 1/2-inch from the dimensions indicated on the drawings.

<u>Architectural Precast Concrete:</u> Manufacturer shall have minimum 5 years of continuous successful experience in fabricating precast concrete materials in compliance with the Architectural Precast Association standards. Installer shall have minimum 5 years' successful experience in handling and installing precast units on projects of comparable size and scope.

# Delivery Storage and Handling.

<u>Masonry:</u> Masonry units, when delivered to the site, shall be thoroughly cured and shall be dry. When stored on the site, they shall not be in contact with the ground, shall be kept clean, and <u>shall be covered</u> <u>with waterproof cover</u>.

<u>Architectural Precast Concrete:</u> Provide protective coverings and temporary lateral support to prevent damage during shipping. Blocking and supports shall be clean, non-staining, and shall not cause harm to exposed surfaces.

Store precast units under cover, off the ground, away from areas subject to high humidity conditions.

Where extended on-site storage is necessary, provide non-staining wood cribbing between stacked units to promote air circulation and prevent condensation.

#### Cold Weather Requirements.

All masonry units delivered to use in freezing weather shall be fully protected by a weather-tight covering to prevent accumulation of ice on the units. Loose board covering will not be permitted.

Cold Weather Protection: Remove any ice or snow formed on masonry bed by carefully applying heat until top surface is dry to the touch. Remove all masonry determined to be frozen or damaged by freezing conditions. Perform the following construction procedure while the work is progressing. When air temperature is from 40°F (4°C) to 32°F (0°C), heat sand or mixing water to produce mortar temperature between 40°F (4°C) and 120°F (49°C): When air temperature is from 32°F (0°C) to 25°F (-4°C) heat sand or water to produce mortar temperature between 40°F (4°C) and 120°F (49°C); maintain temperature of mortar on boards above freezing. When air temperature is from 25°F (-4°C) to 20°F (-7°C) heat sand and mixing water to produce mortar temperatures between 40°F (4°C) and 120°F (49°C); maintain temperature of mortar on boards above freezing; use salamanders or other heat sources on both sides of walls under construction; use wind breaks when wind is more than 15 mph. When air temperature is from 20°F (-7°C) and below, heat sand and mixing water to produce mortar temperatures between 40°F (4°C) and 120°F (49°C); provide enclosures and auxiliary heat to maintain air temperature above 32°F (0°C); do not lay units which have a surface temperature of 20°F (-7°C). Perform the following protections for completed masonry and masonry not being worked on: When the mean daily air temperature is from 40°F (4°C) to 32°F (0°C), protect masonry from rain or snow for at least 24 hours by covering with weather-restrictive membrane. When the mean daily air temperature is from 32°F (0°C) to 25°F (-4°C), completely cover masonry with weather-restrictive membrane for at least 24 hours. When the mean daily air temperature is from 25°F (-4°C) to 20°F (-7°C), completely cover masonry with

Contract: 61D93

insulating blankets or similar protection for at least 24 hours. When mean, daily temperature is 20°F (-7°C) and below, maintain masonry temperature above 32°F (0°C) for 24 hours using enclosures, blankets, and supplementary heat.

#### Materials.

<u>Concrete masonry units (CMU):</u> Shall be in accordance with Article 1042.15 of the Standard Specifications. Provide hollow, load bearing, normal weight concrete block units per dimensions as shown on the plans. Concrete Masonry Units shall conform to the requirements of ASTM designation C90.

Masonry Cavity wall reinforcement: Shall be truss type with adjustable eye wire joint reinforcement. Wire shall be 9 ga. and hot dipped galvanized having a minimum 1.50 once/square foot zinc coating in accordance with ASTM A 153 Class B. Maximum spacing of tabs shall be 24 inches. Prefabricated corners shall be used to form continuous reinforcement around corners.

Weep holes: Cellular or honeycomb cell vents, 2 1/2 inches high shall be provided at weep holes. Cell vents shall be U.V.-resistant polypropylene.

4" perforated drainage pipe: Per section 601 of the standard specifications.

Architectural Precast Concrete: Precast fabrication shall comply with Architectural Precast Association recommended fabricating practices and the recommended tolerances. Precast concrete shall be a buff color, as selected by the Engineer from the manufactures full range. Ensure exposed-to-view finish surfaces are uniform in color and appearance. Color pigments shall meet the requirements of ASTM C979, inorganic iron oxide pigments, lime-proof. Cement grade carbon black pigment is not acceptable.

Precast concrete manufacturer is responsible for preparing design mix to attain compressive strength of 6,500 psi at 28 days. Water absorption shall be maximum 6% by dry weight. Reinforcing shall be placed per Architectural Precast Association recommendations for safe handling, settling, and structural requirements. After manufacturing, cure all dry-tamped cast stone minimum of 8 hours in totally enclosed curing room at 85°F and 100% relative humidity; then steam cure for a minimum 10 hours. For new design mixes, take daily test cylinders and test in-house using a certified technician, at 20 hours and 28 days after manufacture to ensure compliance with minimum compressive strength requirements. Precast manufacturer will not be required to retest previous tested and used standard design mixes. Mix design shall be approved by the Engineer.

Units shall be designed to withstand dead and live loads, applicable snow load, erection forces, and other loads in accordance with the International Building Code, current edition.

Connection and supporting devices shall be stainless steel. Provide cramp anchors for anchoring stones together at corners. Setting buttons, shims, and sheet shall be lead or resilient plastic, non-staining, thickness to suit joint thickness. For pointed joints, sixed to avoid interference with pointing operation.

Fabricator to be a qualified company that assumes responsibility for engineering cast stone units to comply with the required performance requirements.

Contract: 61D93

Fabricate precast units straight and true to size and shape as shown on the plans. Place concrete in a continuous operation to prevent seams or planes of weakness from forming in precast units. Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air on surfaces.

Cure concrete by moisture retention without heat, or by accelerated heat curing using low-pressure live steam, or radiant heat and moisture. Cure units until compressive strength is high enough to ensure that stripping does not influence performance or appearance of final product.

Provide reinforcement to resist handling, transportation, and erection stresses and cast-in anchorage hardware as required for applications as shown on the plans.

<u>Stone Masonry Veneer:</u> Shall be limestone, sound, natural face ledgestone, natural color blend, 3-inch depth as shown on plans. Stone shall be standard grade, free of cracks, seams, or starts, which may impair structural integrity.

The following products/suppliers are preapproved:

Product/Supplier:

Brookfield Blend

Halquist Stone Company N51 W23563 Lisbon Road

Sussex, WI 53089 800-255-8811

www.halquiststone.com

Product/Supplier:

Autumn Sky Fischer Stone 1567 Heine Road Freeport, IL 61032 815-233-3232

www.fischerstone.com

Product/Supplier:

Artesian Blend

Eden Stone Company W4520 Lime Road Eden, WI 53019 800-472-2521 www.edenstone.net

Metal Flashing: Shall be constructed of stainless steel as shown on the plans.

<u>Veneer Anchors:</u> Provide corrugated-metal veneer anchors, not less than 0.030-inch- thick by 7/8-inch-wide hot-dip galvanized steel sheet with corrugations having a wavelength of 0.3 to 0.5 inch and an amplitude of 0.06 to 0.10 inch of equal as recommended by stone fabricator and approved by the Engineer.

Mortar for Masonry: Mortar shall be Type S Portland cement-lime mortar with proportion restrictions as stated in the International Building Code, current edition. Mortar and masonry cements will not be

permitted. Provide integral waterproofing compound in mortar. Portland Cement shall conform to ASTM C 150, Type I or II. Hydrated lime shall conform to ASTM C207, Type S.

Grout for Masonry: Grout shall conform to ASTM C476–Mortar and Grout for Reinforced Masonry. Aggregates shall conform to ASTM C404–Aggregates for Masonry Grout. Grout shall have a minimum 28-day compressive strength of 2,500 psi with the following proportions: Fine Grout: 1 Portland Cement: 0 to 1/10 lime: 2 1/2 to 3 fine aggregate. Coarse Grout: 1 Portland Cement: 0 to 1/10 lime: 2 1/2 to 3 fine aggregate: 1 to 2 coarse aggregate. Fine grout shall be used in spaces with least horizontal dimension greater than 3/4 inches and less than 2 1/2 inches. Coarse grout shall be used in all spaces with least dimensions 2 1/2 inches or greater.

<u>Sealant:</u> Provide water resistance, flexible sealant along perimeter of stone veneer where metal flashing occurs.

Portland Cement: Shall conform to Section 1001.

Water: Shall conform to Section 1002.

Fine Aggregate: Shall conform to Section 1003.

Coarse Aggregate: Shall conform to Section 1004.

Concrete admixtures: Shall conform to Section 1021.

Reinforcing: Shall conform to Section 508.

Resin Anchors: Shall conform to Section 584.

<u>Concrete Foundations.</u> Concrete foundations of the type and size specified in the plans, shall be constructed per the applicable requirements of Sections 503, 508, 516 and 734 of the standard specifications and GBSP 86.

### Sign Lighting.

The sign lighting unit will be sole sourced, and shall be as specified herein and as detailed in the Plans:

Manufacturer:

Solar Illuminations 5611 Halifax Avenue Fort Myers, FL 33912 (239) 461-5522

http://www.solarilluminations.com/

Primary Sign

Model Type: FL15 Solar 144 LED, Sign Light Bar System

No. LED Light Bars: 3

Light Output Lumens: 864/lamp

5 year - Light and equipment warranty

Contract: 61D93

Secondary Signs

Model Type: FL15 Solar 144 LED, Sign Light Bar System

No. LED Light Bars: 2 Lumens: 864/lamp

5 year - Light and equipment warranty

No. Solar Panels: 1 Solar Panel Wattage: 90W Panel Frame Material: Aluminum 20 year – Solar Panel Warranty

### Construction.

<u>Stone Masonry Veneer:</u> Sort stone before it is placed to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication or that is otherwise unsuitable for intended use. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance. Perform necessary field cutting and trimming as stone is set.

Arrange stones in pattern as shown on the plans with random course heights, random lengths, and uniform joint widths. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment if any. Maintain joints at not less than 3/8 inch at narrowest points or more than 5/8 inch at widest points.

Place weep holes where moisture may accumulate, including at base of cavity walls and above shelf angles. Use wicking material to form weep holes. Turn wicking down at lip of foundation to be as inconspicuous as possible. Space weep holes 24 inches on center.

<u>Variation from Plumb</u>: For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch in 40 feet or more. For external corners, expansion joints, control joints, and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more. Variation from Level: For bed joints, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

Support stone veneer where concrete veneer ledge is not provided with a steel lintel attached to the concrete structure with ½ inch expansion bolts 12 inches on center minimum. Steel lintel is to be attached 6 inches below finish grade.

Anchor stone masonry veneer to unit masonry with corrugated metal veneer anchors. Embed anchors in unit masonry mortar joints or grouted cells for distance at least one-half of unit masonry thickness.

Provide 1 inch minimum cavity between stone masonry and concrete masonry units. Keep cavity free of mortar droppings and debris. Place mortar spots in cavity at veneer anchors to maintain spacing. Slope beds toward cavity to minimize mortar protrusions into cavity.

Rake joints to depth of approximately 3/8-inch-deep to uniform depths with square bottoms and clean sides unless otherwise shown on the plans.

Clean stone masonry veneer as work progresses. Remove mortar fins and smears before tooling joints.

After mortar is thoroughly set and cured, clean stone masonry by removing large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels. Further clean by bucket and brush hand-cleaning method using job-mixed detergent solution unless otherwise approved by the Engineer.

<u>Architectural Precast Concrete:</u> Install/set all units and accessories accurately, using skilled experienced personnel, according to approved shop and setting drawings.

Clean precast surfaces before setting using only water or mild cleaning compounds containing no caustic or abrasives. Drench all precast units thoroughly with water just before setting. Provide chases, reveals, openings, and other spaces required to accommodate other work. Close after other work is complete with precast which matches precast already set. Where an open cavity is indicated between precast and backup material, keep cavity free of mortar and grout.

Install anchors, supports, fasteners, and other attachments indicated or necessary to secure precast in place. Attach anchors securely to precast and to supporting surfaces. Place anchors and dowels firmly, and fill holes with mortar or nonshrink grout. Set precast accurately, in patterns and locations indicated, with uniform joints of dimensions indicated and with edges and faces aligned per established relationships and indicated tolerances. Set precast supported on solid structural members on setting buttons, shims, or sheets, or a combination of setting buttons and mortar. After setting each precast unit, sponge off mortar smears and splashes. Embed only ends of lugged sills and similar precast units; leave remainder of joint open and tuckpoint on faces only. Set all partially or fully horizontal precast units with unfilled vertical joints. After setting, install backer rod, prime ends, and caulk.

<u>Setting Tolerances</u>: Set precast units to the following tolerances unless detailed otherwise: Variation from plumb of lines and surfaces of columns, walls, and arises: Maximum 1/4-inch in 10 feet. Variation in cross-sectional dimensions of column and wall thicknesses: maximum ±1/4-inch. Variation between faces of adjacent pieces and panels is not permitted.

Cleaning New Work: Masonry faces to remain exposed shall be wiped with a damp cloth as the work progresses and thoroughly cleaned and pointed upon completion. If stiff brushes and water will not suffice, the surface shall be thoroughly wetted with plain water and then scrubbed with a 5 or 10% solution of hydrochloric acid. Alternatively, a commercial cleaner made for masonry applications, may be used. Immediately after, the surface shall be washed to remove all traces of acid. All surfaces not being cleaned shall be protected from the acid. All mortar shall be removed from surfaces other than masonry. For precast concrete, remove and replace work that is broken, chipped, stained, or otherwise damaged; work that does not match approved samples or approved mock-up; and work containing defective joints. Replace unacceptable materials in accordance with the precast manufacturer, leaving no visible evidence of replacement.

Sign Lighting: The contractor will be required to furnish and install the sign lighting unit, and any other appurtenances required per the Plans. Upon completion of the initial installation an evaluation of the light distribution shall be performed to determine proper light distribution. The contractor shall make the appropriate adjustments, as needed to obtain necessary light levels.

**Method of Measurement.** The contract unit price shall include all concrete foundations, all concrete masonry unit work, all masonry veneer work, and all architectural precast concrete work including mortar, reinforcement, finishing, cleanup, materials, labor, and equipment required to complete this

work. The contract unit price shall also include all sign lighting work, including specified number of LED lighting units and solar panels, as well as all mounting hardware, cable, and equipment outlined in the pay item description.

**Basis of Payment.** This work will be paid for at the contract unit price per each for GATEWAY MONUMENT SIGN COMPLETE, MINOR SIGN COMPLETE and MASONRY COLUMN, LARGE and no additional compensation will be allowed.

All concrete foundation work to be included in the price of GATEWAY MONUMENT SIGN COMPLETE, MINOR SIGN COMPLETE and MASONRY COLUMN, LARGE respectively.

All sign lighting work to be included in the price of GATEWAY MONUMENT SIGN COMPLETE, and MINOR SIGN COMPLETE.

# TRAIL HEAD SIGN, TRAIL HEAD MAP, WAYFINDING SIGN

**Description.** This work shall consist of providing all labor, materials, and equipment necessary to fabricate, furnish and install the decorative sign posts and signage including the concrete footing. All work shall be per the details shown on the plans and as directed by the Engineer.

**Submittals.** Submit Manufacturer's product data for each product specified to the Engineer for approval prior to construction.

Prior to fabrication, prepare and submit shop drawings for each type of sign. Submit Manufacturer's product data for each type of material specified for review and approval by the Engineer prior to fabrication.

**Materials.** Materials provided for signage shall be in accordance with Section 720, 1091, and 1093 of the Standard Specifications except as indicated herein.

<u>Sign Panels:</u> All sign panels to be cut from 0.080 aluminum blank sheeting to dimensions as indicated in plans. Background, borders, and letters to be reflective film per the standard specifications, colors as indicated in plans. Back of sign shall be painted black.

Trail Head Sign Posts: 2" OD galvanized steel tube post, powder coat, color; black.

<u>Trail Head Map and Wayfinding Sign Posts:</u> 3" OD Fluted Aluminum Sign Post. The following manufacturers and products are pre-approved.

Manufacturer: Capital Streetscapes

9402 Business Drive Austin, TX 78758 1-855-339-7800

www.capitalstreetscapes.com

Sign Pole:

3" x 14' fluted sign pole with two-piece Base 32 24"x9" for 3" pole

Color:

Black

Accessories: Top Ball 3 decorative finial for 3" pole

Manufacturer: Signature Streetscapes

2350 South Getty Street Muskegon, MI 49444 1-800-705-1446

www.signaturestreetscapes.com

Sign Pole: 3" x 14' fluted sign pole FL-0314 with Classic Base BS-03D 25" x 8" for 3" pole

Color: Black

Accessories: 3" Diameter Globe FN-0203 Final for 3" pole

Manufacturer: Tapco

5100 W Brown Deer Road Brown Deer, WI 53223 1-800-236-0112 www.tapconet.com

Sign Pole: 3" x 15' fluted sign pole 203-11115 with Middletown Base 203-00131 for 3" pole

Color: Black

Accessories: Ball Finial for Pole Top 203-00031 for 3" pole

<u>Mounting Hardware:</u> Provide mounting hardware appropriate for application per manufacturer's recommendations and as indicated on the plans. Mount to concrete footing using IDOT approved breakaway method. Provide 12" diameter concrete footing per IDOT standard specifications.

Prior to fabrication submit complete shop drawings and samples for all signage components to the Engineer. Shop drawings shall show all sign elevations, including text, details of sections and connections. Show anchorage and accessory items. Provide a sample of typical sign and finish color for approval by the Engineer. All samples, product data, and shop drawings shall be submitted for approval prior to commencement of construction operations.

**Construction.** Layout all sign locations and review with the Engineer prior to installation. Set posts as indicated on plans and erect signs. Upon completion of the work, remove from site all excess materials, debris, tools, and equipment. Repair damage resulting from operations.

**Method of Measurement.** The contract unit price shall include preparation of shop drawings, fabricating, furnishing, transporting, layout, and installation of signage including all materials, labor, and equipment required to complete this work.

The accessories and methods of attachment, including excavation and cast in place concrete footing foundation for setting posts, will not be measured for payment and shall be included in the contract unit cost for TRAIL HEAD SIGN COMPLETE, TRAIL HEAD MAP and WAYFINDING SIGN respectively, and no additional compensation will be allowed.

**Basis of Payment.** This work shall be paid for at the contract unit price per each for TRAIL HEAD SIGN COMPLETE, TRAIL HEAD MAP and WAYFINDING SIGN, and no additional compensation will be allowed.

The accessories and methods of attachment, including excavation and cast in place concrete footing foundation for setting posts, will not be measured for payment and shall be included in the contract unit cost for TRAIL HEAD SIGN COMPLETE, TRAIL HEAD MAP and WAYFINDING SIGN respectively, and no additional compensation will be allowed.

# STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH

**Description.** This work shall consist of providing integrally colored and stamped concrete at sidewalk and island locations as shown on the plans. This work shall consist of subgrade preparation, aggregate base course, formwork, reinforcement, finishing, and cleanup necessary for construction of Portland Cement Concrete sidewalk in accordance with Section 424 of the Standard Specifications, as described herein, and as depicted on the plan and detail sheets. All saw cuts required for removal and proposed improvements shall be included in the cost of this pay item.

**Qualifications:** The installer performing this work must be trained or approved by the manufacturer of the decorative concrete systems specified and must have a minimum of five years' experience with projects of similar scope and quantity. Submit qualifications to the Engineer for review and approval prior to construction.

**Submittals.** Submit Manufacturer's product data, pattern, and color samples for each product specified to the Engineer for review and approval prior to mock-up, ordering, and construction.

**Mock-up.** The contractor shall provide an on-site mock-up, minimum size of 4 feet by 4 feet by full thickness. Demonstrate range of finishes and workmanship, including curing procedures. Approved field samples set quality standards for comparison with remaining work. Approved field samples may become part of the completed work if approved by the engineer.

#### Materials.

<u>Description</u>: Integrally Colored and Stamped Concrete Paving. The following manufacturers are preapproved.

Manufacturer: Butterfield Color

625 West Illinois Avenue

Aurora, IL 60506 1-800-282-3388

www.butterfieldcolor.com

Manufacturer: Scofield Color

L.M. Scofield Company 1652 E. Main Street Suite 200

St. Charles, IL 60174 (630) 377-5959 www.scofield.com

Manufacturer: Solomon Colors, Inc.

4050 Color Plant Road Springfield, II 62702 (217) 522-3112

www.solomoncolors.com

Integral Concrete Colorant: ASTM C 979, factory-measured powdered mix in self-dissolving packaging, consisting of non-fading finely-ground synthetic mineral-oxide coloring pigments and water reducing wetting agent.

<u>Color</u>: To match existing stamped, colored sidewalk to remain; Red-Brown from manufacturer's standard colors. Color to be approved by engineer prior to construction.

Release Agent: Provide release agent that facilitates release of stamps and texture rollers from colored concrete. Color of release agent to match existing stamped, colored sidewalk to remain.

<u>Stamp Mats</u>: Semi-rigid polyurethane mats with projected texture and ridged underside capable of imprinting texture and joint patterns to plastic concrete.

<u>Pattern</u>: Brick basket weave pattern to match existing stamped, colored sidewalk to remain, pattern to be chosen from manufacturer's standard patterns. Pattern to be approved by engineer prior to construction.

<u>Accessory Stamp Tools</u>: Aluminum detailing tools capable of imprinting joints and dressing stamped joints of plastic concrete.

<u>Concrete Admixtures</u>: Comply with requirements of the Standard Specifications. Do not use calcium chloride or admixtures containing calcium chloride.

<u>Curing and Sealing Materials</u>: Clear, Solvent-Borne, Membrane-Forming Curing and Sealing Compound: ASTM C 309, non-yellowing, VOC-compliant, high-gloss, clear liquid.

Flatten Paste: Manufacturer's standard product designed to reduce sealer gloss finish to matte finish.

<u>Slip-Resistive Additive</u>: Finely graded aggregate or polymer additive designed to add to sealer for slip-resistant surface.

\*Final color and stamp pattern selections to be approved by engineer prior to mockup, ordering, and construction.

Deliver materials in original packaging with labels intact. Store in clean, dry and protected location according to manufacturer's requirements.

Existing granular base material shall remain in-place and be compacted as shown on the plans or as directed by the Engineer in accordance with the requirements of Section 311 of the Standard Specifications.

**Construction.** Placement of concrete shall be performed in accordance with Section 424 of the Standard Specifications except as modified herein. Refer to layout plans and details for specific construction

configurations and accessories. Work shall include subgrade preparation and all reinforcement, accessories, and finishing as shown on the plans and details.

Stamping: Stamp concrete surfaces per manufacturer's instructions.

Mat Stamping: While concrete is plastic, accurately align stamp mats in sequence and uniformly press into concrete to produce imprint pattern, texture, and depth of imprint, per manufacturer's instructions. Remove stamps from concrete immediately. Stamp edges and surfaces unable to be imprinted with stamp mat with flexible stamping mats. Remove unembedded pigmented powder release agent after interval recommended by manufacturer and per manufacturer's instructions. Pressure wash surfaces per manufacturer's instructions without damaging decorative concrete.

<u>Joints:</u> Provide sawcut control joints approximately 10 feet on center and expansion joints approximately 40 feet on center. Review joint placement with engineer to minimize impact to stamp pattern for approval prior to placement.

<u>Curing and Sealing:</u> Protect decorative concrete pavement from prematurely drying and excessive cold or hot temperatures. Cure decorative concrete pavement per manufacturer's instructions.

<u>Curing and Sealing Compound:</u> Apply uniformly in continuous operation by sprayer or short nap roller per manufacturer's instructions. After initial application is dry and tack free, apply a second coat. Do not over apply or apply in a single heavy coat. Thoroughly mix flatten paste in curing and sealing compound per manufacturer's instructions. Stir occasionally to maintain uniform distribution of paste. Thoroughly mix slip-resistant additive in sealer per manufacturer's instructions. Stir occasionally to maintain uniform distribution of additive. Verify adequacy of slip resistance before opening surfaces to traffic. Do not cover concrete with plastic sheeting.

Repairs and Protection: Repair damaged decorative concrete pavement if required per manufacturer's instructions. Clean spillage and soiling from adjacent construction per manufacturer's instructions. Protect decorative cement concrete pavement from damage or deterioration until date of Final Acceptance.

**Method of Measurement.** The contract unit price for stamped colored Portland cement concrete sidewalk, 5 inch shall include all subgrade preparation, aggregate base course, formwork, reinforcement, accessories, concrete, stamping and integral coloring materials, finishing, cleanup, and all other, labor, and equipment required to complete this work.

**Basis of Payment.** This work shall be paid for at the contract unit price per square feet for STAMPED, COLORED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, and no additional compensation will be allowed.

#### **BICYCLE RACKS**

**Description.** This work shall consist of furnishing, transporting, assembling, and placing bicycle racks as specified herein, as shown on the plans, and as directed by the Engineer.

**Submittals.** Submit Manufacturer's product data for each product specified to the Engineer for approval prior to construction.

Materials.

<u>Description</u>: "Bike" style Bike Rack Manufacturer: Dero Bike Rack Co.

504 Malcolm Avenue SE

Suite 100

Minneapolis, MN 55414

(888) 337-6729 <u>www.dero.com</u> Surface mount

Options: Surface mount Finish: Powder Coat

Color: Black

Provide all fasteners and hardware necessary per manufacturer's recommendations for surface mounting.

**Construction.** Assemble and install bicycle racks at locations as shown on the plans. Anchor bicycle racks with appropriately sized fasteners as recommended by the manufacturer, and as shown on the plans.

**Method of Measurement.** The contract unit price for bike racks shall include assembly and all hardware necessary to attach the bicycle racks as recommended by the manufacturer and as shown on the plans, including all materials, labor, and equipment required to complete this work.

Basis of Payment. This work shall be paid for at the contract unit price per each for BICYCLE RACKS, and no additional compensation will be allowed.

### SELECTIVE CLEARING

**Description.** This work shall consist of extensive removal and disposal of shrubs, brush, debris (including rocks, bottles, etc.) and selected trees up to six (6) inches (150 mm) in diameter. All trees and shrubs to be saved shall be carefully protected as provided by Article 201.05 of the Standard Specifications. Locations for Selective Clearing and vegetation to be cleared or saved shall be designated by the Engineer.

The undesirable trees and brush (Siberian Elm, European Buckhorn, Mulberry, etc.) shall be cut flush with the ground and all stubs or stumps shall be treated with a resprout herbicide approved by the Engineer to prevent regrowth from the stumps. Trees of Tree of Heaven shall not be cut off as specified above, but shall be pulled or grubbed in such a manner as to insure complete removal. Branches on remaining trees shall be pruned off up to 6 feet (2 meters) from the ground, and as directed by the Engineer.

All selective cleared areas shall be graded, trimmed, smoothed, 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.

**Method of Measurement.** Selective Clearing will be measured in units of 1,000 square feet. 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 SELECTIVE CLEARING. Payment for Selective Clearing shall include the cost of all minor grading, debris removal and disposal, trimming, pruning, smoothing, finishing, labor, materials, tools and equipment required to complete the work as specified herein and to the satisfaction of the Engineer.

# **USE OF WATER FROM CITY FIRE HYDRANTS**

Water for supply on-site in this contract shall be in accordance with Article 107.18 of the Standard Specifications, and will be furnished by the City of Warrenville at standard water rates with the following conditions:

The Contractor shall procure such water in the location and in the manner designated by the Engineer. The Contractor shall use only Engineer-approved devices for opening and closing the hydrant.

The Contractor at his own expense shall make authorized connections and provide means for delivering the water to the work site. The source for water to be used for this project is the fill valve/hydrant at the Department of Public Works, 3S346 Mignin Dr, Warrenville, IL 60555

The Contractor shall provide adequately against waste and needless use of water.

Large quantities of water needed for flushing trenches, testing, or other operations shall be drawn only at times specifically authorized by the Engineer.

This cost will not be paid for, but shall be included in the contract unit prices for items requiring water to be provided at the location of work.

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

This work shall be according to Article 669 of the Standard Specifications and the following:

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

<u>General.</u> This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either "uncontaminated soil" or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. Phase I Preliminary Engineering information

<u>is available through the District's Environmental Studies Unit.</u> Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following areas: Site 2936-3 (Residence)

 Station 98+05 to Station 99+05 (CL IL 56), 0 to 100 feet RT (Residence, PESA Site 2936-3, 30W351 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

# Site 2936-5 (Sunrise Landscaping)

• Station 105+55 to Station 106+60 (CL IL 56), 0 to 100 feet RT (Sunrise Landscaping, PESA Site 2936-5, 30W221 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

# Site 2936-12 (Mobil Container Services)

• Station 105+30 to Station 106+25 (CL IL 56), 0 to 115 feet LT (Mobil Container Services, PESA Site 2936-12, 30W180 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, and Manganese.

### Site 2936-19 (Vacant Lot)

Station 121+55 to Station 123+10 (CL IL 56), 0 to 125 feet LT (Vacant Lot, PESA Site 2936-19, 29W700 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

#### Site 2936-20 (Speedway Gasoline Station)

• Station 121+35 to Station 122+85 (CL IL 56), 0 to 115 feet RT (Speedway Gasoline Station, PESA Site 2936-20, 3S405 IL 59, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

### Site 2936-25 (Townhomes)

- Station 136+70 to Station 138+40 (CL IL 56), 0 to 120 feet LT (Townhomes, PESA Site 2936-25, 29W463-483 Big Woods Drive, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 138+40 to Station 140+30 (CL IL 56), 0 to 120 feet LT (Townhomes, PESA Site 2936-25, 29W463-483 Big Woods Drive, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 140+30 to Station 142+35 (CL IL 56), 0 to 120 feet LT (Townhomes, PESA Site 2936-25, 29W463-483 Big Woods Drive, Warrenville). This material meets the criteria of Article 669.09(a)(3)

and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.

### Site 2936-26 (Residences)

- Station 142+35 to Station 144+15 (CL IL 56), 0 to 120 feet LT (Residences, PESA Site 2936-26, 29W401-445 White Oak Drive, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 144+15 to Station 145+55 (CL IL 56), 0 to 120 feet LT (Residences, PESA Site 2936-26, 29W401-445 White Oak Drive, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

### Site 2936-28 (West Alliance Church)

- Station 145+55 to Station 148+35 (CL IL 56), 0 to 120 feet LT (West Alliance Church, PESA Site 2936-28, 29W376 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 148+35 to Station 150+00 (CL IL 56), 0 to 110 feet LT (West Alliance Church, PESA Site 2936-28, 29W376 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 150+00 to Station 151+35 (CL IL 56), 0 to 110 feet LT (West Alliance Church, PESA Site 2936-28, 29W376 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

#### Site 2936-32 (Residences)

- Station 151+35 to Station 153+50 (CL IL 56), 0 to 110 feet LT (Residences, PESA Site 2936-32, 3S335-354 Williams Road, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.
- Station 153+50 to Station 155+75 (CL IL 56), 0 to 110 feet LT (Residences, PESA Site 2936-32, 3S335-354 Williams Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 155+75 to Station 160+10 (CL IL 56), 0 to 110 feet LT (Residences, PESA Site 2936-32, 3S335-354 Williams Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 160+10 to Station 162+10 (CL IL 56), 0 to 110 feet LT (Residences, PESA Site 2936-32, 3S335-354 Williams Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.

#### Site 2936-34 (Warrenville Woods)

 Station 162+10 to Station 164+25 (CL IL 56), 0 to 110 feet LT (Warrenville Woods, PESA Site 2936-34, 29W100-170 Butterfield Road, Warrenville). This material meets the criteria of Article

669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Station 164+25 to Station 166+25 (CL IL 56), 0 to 110 feet LT (Warrenville Woods, PESA Site 2936-34, 29W100-170 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

### Site 2936-35 (Commercial Buildings)

- Station 166+25 to Station 168+25 (CL IL 56), 0 to 110 feet LT (Commercial Buildings, PESA Site 2936-35, 29W036 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 168+25 to Station 172+25 (CL IL 56), 0 to 110 feet LT (Commercial Buildings, PESA Site 2936-35, 29W036 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Arsenic, and Manganese.

### Site 2936-36 (Commercial Building)

• Station 172+25 to Station 174+20 (CL IL 56), 0 to 110 feet LT (Commercial Building, PESA Site 2936-36, 29W012 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

# Site 2936-37 (Vacant Lot)

- Station 174+20 to Station 176+20 (CL IL 56), 0 to 110 feet LT (Vacant Lot, PESA Site 2936-37, 29W000 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 176+20 to Station 176+50 (CL IL 56), 0 to 110 feet LT (Vacant Lot, PESA Site 2936-37, 29W000 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.

#### Site 2936-38 (Vacant Lot)

- Station 176+50 to Station 177+00 (CL IL 56), 0 to 110 feet LT (Vacant Lot, PESA Site 2936-38, 28W800 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 177+00 to Station 178+20 (CL IL 56), 0 to 100 feet LT (Vacant Lot, PESA Site 2936-38, 28W800 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 178+20 to Station 180+30 (CL IL 56), 0 to 100 feet LT (Vacant Lot, PESA Site 2936-38, 28W800 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

•

### Site 2936-39 (U.S. Postal Service)

- Station 182+15 to Station 184+10 (CL IL 56), 0 to 110 feet LT (U.S. Postal Service, PESA Site 2936-39, 3S101 Rockwell Street, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 619+00 to Station 620+90 (CL IL 56), 0 to 110 feet LT (U.S. Postal Service, PESA Site 2936-39, 3S101 Rockwell Street, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

### Site 2936-40 (Vacant Lot)

- Station 184+10 to Station 185+70 (CL IL 56), 0 to 125 feet LT (Vacant Lot, PESA Site 2936-40, 28W846 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 185+70 to Station 186+25 (CL IL 56), 0 to 115 feet LT (Vacant Lot, PESA Site 2936-40, 28W846 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.
- Station 615+25 to Station 615+90 (CL Batavia Road), 0 to 55 feet LT (Vacant Lot, PESA Site 2936-40, 28W846 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 615+90 to Station 619+00 (CL Batavia Road), 0 to 55 feet LT (Vacant Lot, PESA Site 2936-40, 28W846 Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

### Site 2936-41 (Vacant Lot)

- Station 186+25 to Station 186+80 (CL IL 56), 0 to 115 feet LT (Vacant Lot, PESA Site 2936-41, 28W620 Batavia Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 186+80 to Station 187+45 (CL IL 56), 0 to 120 feet LT (Vacant Lot, PESA Site 2936-41, 28W620 Batavia Road, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.
- Station 187+45 to Station 192+10 (CL IL 56), 0 to 200 feet LT (Vacant Lot, PESA Site 2936-41, 28W620 Batavia Road, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.
- Station 615+25 to Station 619+00 (CL Batavia Road), 0 to 55 feet RT (Vacant Lot, PESA Site 2936-41, 28W620 Batavia Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, and Manganese.

### Site 2936-43 (Blackwell Forest Preserve)

Section No: 11-00033-00-LS Contract: 61D93

### Site 2936-43 (Blackwell Forest Preserve)

Station 192+10 to Station 194+00 (CL IL 56), 0 to 220 feet LT (Blackwell Forest Preserve, PESA Site 2936-43, 28W600 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, and Manganese.

### Site 2936-E (Amoco Oil)

Station 609+00 to Station 610+00 (CL Batavia Road), 0 to 40 feet RT (Amoco Oil, PESA Site 2936-E, 28W550 Batavia Road, Warrenville). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, and Manganese.

### Site 2936-44 (Warrenville Grove Forest Preserve)

• Station 714+60 to Station 715+60 (CL Winfield Road), 0 to 75 feet LT (Warrenville Grove Forest Preserve, PESA Site 2936-44, 28W600 block of Butterfield Road, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

### Site ROW (IL Route 59 Right-of-Way)

- Station 510+15 to Station 511+20 (CL IL 59 NB), 0 to 65 feet RT (IL Route 59 Right-of-Way, Warrenville). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 525+25 to Station 526+30 (CL IL 59 SB), 0 to 65 feet LT (IL Route 59 Right-of-Way, Warrenville). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard for NON-SPECIAL WASTE DISPOSAL, per lump sum price for SPECIAL WASTE PLANS AND REPORTS, and per each for SOIL DISPOSAL ANALYSIS, which will be payment in full for the sampling, transportation, and disposal of contaminated soil as well as the preparation, administration and execution of all environmental site plans and reports in accordance with Section 669 of the Standard Specifications.

#### LIGHT POLE FOUNDATION, SPECIAL

**Description.** This work shall consist of the material, equipment and labor required to furnish and install a reinforced concrete foundation, 18 inches in diameter, as indicated on the Contract drawings. The foundation shall include an excavation, reinforcement, concrete, anchor bolts, nuts, washers, ground rods and raceways. This work shall be performed according to applicable sections of Division 800 of the State Specifications.

Materials. Concrete shall be Class "SI" complying with Section 1020 of the Standard Specifications. Reinforcement bars shall comply with Section 1006.10 of the Standard Specifications. Unless otherwise indicated, anchor bolts shall comply with the requirements of ASTM Designation F15554, Grade 725. Unless otherwise indicated, nuts shall be hexagon nuts in conformance with ASTM A563, Grade A, and washers shall be in conformance with ASTM F436. The entire length of anchor bolts as well as the nuts and washers shall be hot dip galvanize in accordance with the requirements of Article 1006.09. Unless

otherwise indicated, conduit raceways shall be heavy wall rigid polyvinyl chloride (PVC) conduit, (Schedule 40) UL listed and in conformance with NEMA TC2 and Federal – Specification WC-1094A. Two (2) Raceways minim or as required in field shall be provided in each foundation.

Construction Requirements. The foundation depths shall be according to the Plans. The hold for the foundation shall be made by drilling with an auger, of the same diameter as the foundation. The foundation shall be cast-in-place and allowed to cure for 10 day minimum before the light pole is erected. If soil conditions require the use of a liner to form the hole, the liner shall be withdrawn as the concrete is deposited. The top of the foundation shall be constructed level so that no shims or other leveling device will be needed to set the light standard plumb on the foundation. A liner or form shall be used to produce a uniform smooth side to the top of the foundation. Foundation top shall be chamfered 3/4 -inch unless otherwise indicated. Extreme care shall be used in establishing the top elevation of concrete foundations. especially when foundations are installed before final grading is complete. Foundations shall not protrude above grade more than the limits indicated on the plans, except for specifically indicated locations, and where not otherwise indicated, foundation shall not protrude above grade more than 4 inches above a 60-inch chord centered at the foundation, at any point around the circumference. Where foundation heights extend beyond specified limits, the Engineer may direct replacement of the foundation and the incorrect foundation will not be measured for payment. The steel reinforcement, the raceway conduits, and the anchor bolts shall be secured in place to each other and properly positioned in the augured hole so that at time of pouring of concrete mixture in place the above-said components retain their proper positions. Special attention shall be paid to the positioning of the anchor bolts. It is of utmost importance that the anchor bolt projections on top of the foundation, after placement of the concrete, remain in a perfectly vertical position.

**Basis of Payment.** This work shall be paid for at the contract unit price per each for LIGHT POLE FOUNDATION, SPECIAL, which price will be payment in full for the work shown on the Plans and as described herein.

### **TEMPORARY INFORMATION SIGNING**

Effective: November 13, 1996 Revised: January 2, 2007

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

Materials. Materials shall be according to the following Articles of Section 1000 - Materials:

	<u>ltem</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face ( Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

#### GENERAL CONSTRUCTION REQUIRMENTS

### Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

<u>Method of Measurement</u>. This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

<u>Basis Of Payment</u>. This work shall be paid for at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING.

### **AVAILABLE REPORTS**

☐ No project specific reports were prepared.	
When applicable, the following checked reports and record information is available fo reference upon request:	r Bidders'
☐ Record structural plans	
☑ Preliminary Site Investigation (PSI)	
☑ Preliminary Environmental Site Assessment (PESA)	
Soils/Geotechnical Report     ■ Content	

⊠ Bo	oring Logs	
□ Pa	avement Cores	
	ocation Drainage Study (LDS)	
□ <b>H</b> ;	ydraulic Report	
□ No	oise Analysis	
⊠ O	ther: _Wetland Report	
Those seeking these reports should request access from:		
John Mayer Engineering Resource Associates, Inc. (630) 393-3060; jmayer@eraconsultants.com		
{or}		
Kristine Hocking City of Warrenville (630) 393-1531; khocking@warrenville.il.us		

### **ELECTRIC UTILITY SERVICE CONNECTION**

Effective: January 1, 2012

**Description.** This item shall consist of payment for work performed by ComEd in providing or modifying electric service as indicated. THIS MAY INVOLVE WORK AT MORE THAN ONE ELECTRIC SERVICE. For summary of the Electrical Service Drop Locations see the schedule contained elsewhere herein.

#### **CONSTRUCTION REQUIREMENTS**

General. It shall be the contractor's responsibility to contact ComEd. The Contractor shall coordinate his work fully with the ComEd both as to the work required and the timing of the installation. No additional compensation will be granted under this or any other item for extra work caused by the failure to meet this requirement. Please contact ComEd, New Business Center Call Center, at 866 NEW ELECTRIC (1-866-639-3532) to begin the service connection process. The Call Center Representatives will create a work order for the service connection. The representative will ask the requestor for information specific to the request. The representative will assign the request based upon the location of the project.

The Contractor should make particular note of the need for the earliest attention to arrangements with ComEd for service. In the event of delay by ComEd, no extension of time will be considered applicable for the delay unless the Contractor can produce written evidence of a request for electric service within 30 days of execution.

**Method of Payment.** The Contractor will be reimbursed to the exact amount of money as billed by ComEd for its services. Work provided by the Contractor for electric service will be paid separately as described under ELECTRIC SERVICE INSTALLATION. For bidding purposes, this item shall be estimated as \$2,500.00. No extra compensation shall be paid to the Contractor for any incidental materials and labor required to fulfill the requirements as shown pm the plans and specified herein.

**Basis of Payment.**\_This work will be paid for at the contract lump sum price for ELECTRIC UTILITY SERVICE CONNECTION which shall be reimbursed in full for electric utility service charges.

### MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**General.** Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the Contract or any portion thereof. If Contract work is started prior to a traffic signal inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection.

The Contractor shall have electricians with IMSA Level II certification on staff to provide signal maintenance. A copy of the certification shall be immediately available upon request of the Engineer.

This item shall include maintenance of all traffic signal equipment and other connected and related equipment such as flashing beacons, emergency vehicle pre-emption equipment, master controllers, uninterruptable power supply (UPS and batteries), PTZ cameras, vehicle detection, handholes, lighted signs, telephone service installations, communication cables, conduits to adjacent intersections, and other traffic signal equipment.

Regional transit, County and other agencies may also have equipment connected to existing traffic signal or peripheral equipment such as PTZ cameras, switches, transit signal priority (TSP and BRT) servers, radios and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.

Maintenance shall not include Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, or peripheral equipment. This equipment is operated and maintained by the local municipality and should be de-activated while on contractor maintenance.

The energy charges for the operation of the traffic signal installation shall be paid for by the Contractor.

Maintenance. The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. The Contractor shall check signal system communications and phone lines to assure proper operation. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs. Prior to the traffic signal maintenance transfer, the contractor shall supply a detailed maintenance schedule that includes dates, locations, names of electricians providing the required checks and inspections along with any other information requested by the Engineer.

The Contractor is advised that the existing and/or span wire traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shut down the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.

The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.

The Contractor shall provide the Engineer with 2 (two) 24 hour telephone numbers for the maintenance of the traffic signal installation and for emergency calls by the Engineer.

Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.

The Contractor shall respond to all emergency calls from the Department or others within one (1) hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have the State's Electrical Maintenance Contractor beform the maintenance work. The Contractor shall be responsible for all of the State's Electrical Maintenance Contractor's costs and liquidated damages of \$1000 per day per occurrence. The State's Electrical Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the Electrical Maintenance Contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.

Equipment included in this item that is damaged or not operating properly from any cause shall be replaced with new equipment meeting current District One traffic signal specifications and provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system, all as approved by the Engineer. Final replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed.

Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause, shall be the responsibility of the municipality or the Automatic Traffic Enforcement Company per Permit agreement.

The Contractor shall be responsible to clear snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment.

The Contractor shall maintain the traffic signal in normal operation during short or long term loss of utility or battery back-up power at critical locations designated by the Engineer. Critical locations may include traffic signals interconnected to railroad warning devices, expressway ramps, intersection with an SRA route, critical corridors or other locations identified by the Engineer. Temporary power to the traffic signal must meet applicable NEC and OSHA guidelines and may include portable generators and/or replacement batteries. Temporary power to critical locations shall not be paid for separately but shall be included in the contract.

Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Engineer to

Contract: 61D93

assure signal heads are located overhead and over traveled pavement. Temporary replacement of mast arm mount signals with post mount signals will not be permitted.

**Basis of Payment**. This work will be paid for at the contract unit price per each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately.

Page 1 of 2



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

#### **Uncontaminated Soil Certification**

by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

# Revised in accordance with 35 III. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 III. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information	
(Describe the location of the source of the unconta	aminated soil)
Project Name: FAP 365: Illinois Route 56 (Butterfie	field Road) Office Phone Number, if available:
Physical Site Location (address, inclduding numbe 30W351 Butterfield Road (ISGS Site No. 2936-3)	er and street):
City: Warrenville State: IL	Zip Code:
County: DuPage	Township:
Lat/Long of approximate center of site in decimal d	degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):
Latitude: 41.82050471 Longitude: -88.2	21228858
(Decimal Degrees) (-De	ecimal Degrees)
Identify how the lat/long data were determined:	
☐ GPS ☐ Map Interpolation ☐ Photo	Interpolation Survey Other
Kai C. C. Lai Map (Maip alate)	- management - Common
IEPA Site Number(s), if assigned: BOL:	BOW: BOA:
II. Owner/Operator Information for Sou Site Owner	urce Site Site Operator
Name: Illinois Department of Transportat	ation Name: Illinois Department of Transportation
Street Address: 201 West Center Court	Street Address: 201 West Center Court
PO Box:	PO Box:
City: Schaumburg State	e: IL City: Schaumburg State: IL
Zip Code: 60196-1096 Phone: 847-70	05-4101 Zip Code: 60196-1096 Phone: 847-705-410
Contact: Sam Mead	Contact: Sam Mead
Email, if available: Sam.Mead@illinois.gov	Email, if available: Sam.Mead@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

IL 532-2922 not to exceed \$10,000 LPC 663 Rev. 8/2012 Management Center.

P.E. or L.P.G. Seal:

Project Name: FAP 365: Illinois Route 56 (Butterfield Road)

Latitude: 41.82050471 Longitude: -88.21228858

#### Uncontaminated Site Certification

#### III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 III. Adm. Code 1100.610(a)]:

LOCATION R3-1 WAS SAMPLED ADJACENT TO ISGS SITE No. 2936-3. SEE FIGURE 3-1 AND TABLE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT FOR SAMPLING DETAILS.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

TESTAMERICA ANALYTICAL REPORTS - JOB ID: 500-121937-1.
ALSO SEE FIGURE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

# IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

In Michael A. Castillo, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415] ILCS 5/22.51 or 22.51a] and 35 III. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Weston Solutions, Inc.	
Street Address:	300 Circle Plaza; Suite 20:	2
City:	Mundelein	State: IL Zip Code: 60060
Phone:	(224) 864-7200	OROFESS/O
Michael A. Castillo, P.G	la.	SECONA
Licensed Profession	acistello	7 April 2017 MICHAEL A. CASTILLO GO GO Date:

Page 1 of 2



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

#### **Uncontaminated Soil Certification**

by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

# Revised in accordance with 35 III. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information	
(Describe the location of the source of the uncontamin	nated soil)
Project Name: CCDD Soil Assessment	Office Phone Number, if available:
Physical Site Location (address, inclduding number a	
Portions of the intersection of Batavia Road and Butte	erfield Road - See Attached Figures
City: Warrenville State: IL	Zip Code: <u>60555</u>
County: DuPage	Township: Winfield
Lat/Long of approximate center of site in decimal deg	rees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):
Latitude: 41.824636 Longitude: -88.181	067
(Decimal Degrees) (-Decin	nal Degrees)
Identify how the lat/long data were determined:	
☐ GPS 🛛 Map Interpolation ☐ Photo Inte	erpolation Survey Other
	· · · · · · · · · · · · · · · · · · ·
IEPA Site Number(s), if assigned: BOL:	BOW: BOA:
II. Owner/Operator Information for Source Site Owner	e Site Site Operator
Name: City of Warrenville	Name:
Street Address: 3S258 Manning Avenue	Street Address:
PO Box:	PO Box:
City: Warrenville State:	
Zip Code: 60555 Phone: 630-393-9	
Contact: Philip Kuchler, Deputy Public Works	
Fmail if available:	Email if available:

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms

IL 532-2922 not to exceed \$10,000 LPC 663 Rev. 8/2012 Management Center.

Project Name:	CCDD Soil Asses	sment	
Latitude:	41 824636	Lonaitude:	-88 181067

#### **Uncontaminated Site Certification**

#### III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

 A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

A limited historical & regulatory review was performed to identify PIPs. Site reconnaissance was performed while sampling to evaluate on-site environmental conditions & potential PIPs. Based on the nature & scope of the project, 3 soil samples were collected for indicator contaminants associated with identified PIPs, and screened with a PID. Figure 2 shows sample location.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

See attached analytical summary tables, laboratory reports and associated NELAC certification. Figure 2 identifies the project area that is covered by this certification.

# IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

l, Ryan M. LaDieu, P.E. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	True North Consultants  1240 Iroquois Avenue, Suite 206		
Street Address:			
City:	Naperville	State: IL Zip Code: 60563	MANAGEMENT AND
Phone:	630.717.2880	, , , , , , , , , , , , , , , , , , ,	WOFESSION
Ryan M. LaDieu  Printed N  Licensed Profession  Licensed Profession			RYAN M. LaDIEU (1) O62-063687

P.E. or L.P.G. Seal:

# State of Illinois Department of Transportation Bureau of Local Roads and Streets

#### SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

City of Warrenville			
DuPage County Division of Transportation			
			The state of the s
		· Printerson a document	
	***************************************		

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.



#### COMPENSABLE DELAY COSTS (BDE)

Effective: June 2, 2017

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 working day contracts the payment will be made according to Article 109.04. For completion date contracts, an adjustment will be determined as follows.

Extended Traffic Control occurs between April 1 and November 30:

ETCP Adjustment (\$) = TE x (%/100 x CUP / OCT)

Extended Traffic Control occurs between December 1 and March 31:

ETCP Adjustment (\$) = TE x 1.5 (%/100 x CUP / OCT)

Where: TE = Duration of approved time extension in calendar days.

% = Percent maintenance for the traffic control, % (see table below).

CUP = Contract unit price for the traffic control pay item in place during the delay.

OCT = Original contract time in calendar days.

Original Contract Amount	Percent Maintenance
Up to \$2,000,000	65%
\$2,000,000 to \$10,000,000	75%
\$10,000,000 to \$20,000,000	85%
Over \$20,000,000	90%

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

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

#### **CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)**

Effective: June 1, 2010 Revised: January 1, 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 1/	600-749	2002
	750 and up	2006
June 1, 2011 2/	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 2/	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 (<a href="http://www.epa.gov/cleandiesel/verification/verif-list.htm">http://www.epa.gov/cleandiesel/verification/verif-list.htm</a>), or verified by the California Air Resources Board (CARB) (<a href="http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm">http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</a>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

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

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

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

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

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

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

#### **Diesel Retrofit Deficiency Deduction**

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

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

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

#### DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: July 2, 2016

<u>FEDERAL OBLIGATION</u>. 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.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that 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 that 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 that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform \_\_\_\_23,00% 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 that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that 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.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
  - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures herein.

(2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to <u>DOT.DBE.UP@illinois.gov</u> or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation Bureau of Small Business Enterprises Contract Compliance Section 2300 South Dirksen Parkway, Room 319 Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, 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. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

- (1) The names and addresses of DBE firms that will participate in the contract;
- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and.
- (6) If the contract goal is not met, evidence of good faith efforts; 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.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that 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. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that 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 that 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 prime 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 subsection (c)(6) of 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 that the apparent successful 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 that it is otherwise eligible for award. If the Department determines that 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 shall include a statement of reasons for the 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 in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and 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 forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order 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 consideration, 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.

<u>CALCULATING DBE PARTICIPATION</u>. 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 prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

- (a) <u>NO AMENDMENT</u>. 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 submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) <u>CHANGES TO WORK</u>. 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, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT 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) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated 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) That 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) That the DBE is aware that 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) That 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 prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime 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) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice 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 prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime 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 shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. 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 thirty 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 that 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) <u>ENFORCEMENT</u>. 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) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my 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.

80029

#### MAST ARM ASSEMBLY AND POLE (BDE)

Effective: July 1, 2016

Revise Article 1077.03(a)(1) of the Standard Specifications to read:

"(1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 2015 Edition. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the "fillet welded, ring stiffened box connection" detail as shown in Figure C5.6.7-2. The mast arm and pole shall be designed assuming the ADT > 10,000, Risk Category Typical, and Fatigue Category I Natural Wind Gust only."

#### PORTLAND CEMENT CONCRETE SIDEWALK (BDE)

Effective: August 1, 2017

Revise the first paragraph of Article 424.12 of the Standard Specifications to read:

"424.12 Method of Measurement. This work will be measured for payment in place and the area computed in square feet (square meters). Curb ramps, including side curbs and side flares, will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp."

#### PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

"(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."



#### **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.

### **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 50 working days.

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

#### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

 Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor

performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection

for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor 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 DOT-assisted contracts. 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 contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391.

The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the

employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates

(expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular

programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this

section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

#### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential

that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both "

### IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

### X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

#### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction.

The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal

Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

### 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

### Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \*

### XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension,

continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

#### Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor agrees—

- "(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

Provisions (1) and (2) apply to materials or equipment that are acquired solely for the project. The two provisions do not apply to goods or materials that come into inventories independent of the project, such as shipments of Portland cement, asphalt cement, or aggregates, when industry suppliers and contractors use these materials to replenish existing inventories.

### MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.