## Letting September 23, 2022

## Notice to Bidders, Specifications and Proposal



Contract No. 61H96
DUPAGE County
Section 19-DCCSS-04-TL
Various Routes
Project 9CTW-805 ()
District 1 Construction Funds

Prepared by

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# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. **TIME AND PLACE OF OPENING BIDS.** Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). All bids must be submitted to the iCX system prior to 12:00 p.m. September 23, 2022 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. 61H96
DUPAGE County
Section 19-DCCSS-04-TL
Project 9CTW-805 ()
Various Routes
District 1 Construction Funds

Installation of conduit, handholes and fiber optic interconnet cable to connect existing traffic signal controllers to the existing DuPage County Central System Network. Includes installation of new PTZ cameras, Layer II (Data Link) switches, Layer III (Network) switches, new traffic signal controllers and cabinets. Project is located in various locations in Dupage County.

- 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 re-advertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Omer Osman, Secretary

#### CONTRACT 61H96

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2022

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

No ERRATA this year.

#### SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec. Page No.

No Supplemental Specifications this year.

#### RECURRING SPECIAL PROVISIONS

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

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31		Concrete Mix Design – Department Provided		
32		Station Numbers in Pavements or Overlays		99

#### LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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#### **BDE SPECIAL PROVISIONS**

The following special provisions indicated by an "X" are applicable to this contract. An  $^{\star}$  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			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2022
	80274			Aggregate Subgrade Improvement	April 1, 2012	April 1, 2022
	80192			Automated Flagger Assistance Device	Jan. 1, 2008	,, _v
	80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Aug. 1, 2017
	80246			Bituminous Surface Treatment with Fog Seal	Jan. 1, 2020	Jan. 1, 2022
	80436	134	Х	Blended Finely Divided Minerals	April 1, 2021	,
	80241			Bridge Demolition Debris	July 1, 2009	
*	50531			Building Removal	Sept. 1, 1990	Aug. 1, 2022
*	50261			Building Removal with Asbestos Abatement	Sept. 1, 1990	Aug. 1, 2022
	80384	135	Х	Compensable Delay Costs	June 2, 2017	April 1, 2019
	80198			Completion Date (via calendar days)	April 1, 2008	•
	80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	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
	80261	139	Х	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
	80434			Corrugated Plastic Pipe (Culvert and Storm Sewer)	Jan. 1, 2021	
	80029	142	Χ	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Mar. 2, 2019
	80229			Fuel Cost Adjustment	April 1, 2009	Aug. 1, 2017
	80433			Green Preformed Thermoplastic Pavement Markings	Jan. 1, 2021	Jan. 1, 2022
	80422			High Tension Cable Median Barrier	Jan. 1, 2020	Jan. 1, 2022
	80443			High Tension Cable Median Barrier Removal	April 1, 2022	
*	80442			Hot-Mix Asphalt	Jan. 1, 2022	Aug. 1, 2022
	80444			Hot-Mix Asphalt – Patching	April 1, 2022	
	80438			Illinois Works Apprenticeship Initiative – State Funded Contracts	June 2, 2021	Sept. 2, 2021
	80411			Luminaires, LED	April 1, 2019	Jan. 1, 2022
	80045			Material Transfer Device	June 15, 1999	Jan. 1, 2022
	80418			Mechanically Stabilized Earth Retaining Walls	Nov. 1, 2019	Nov. 1, 2020
	80430	152	X	Portland Cement Concrete – Haul Time	July 1, 2020	
	34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2022
	80395			Sloped Metal End Section for Pipe Culverts	Jan. 1, 2018	
	80340			Speed Display Trailer	April 2, 2014	Jan. 1, 2022
	80127	450		Steel Cost Adjustment	April 2, 2014	Jan. 1, 2022
	80397	153	X	Subcontractor and DBE Payment Reporting	April 2, 2018	A !! 4 . 0040
	80391	154	Х	Subcontractor Mobilization Payments	Nov. 2, 2017	April 1, 2019
	80437			Submission of Payroll Records	April 1, 2021	I 4 0000
	80435			Surface Testing of Pavements – IRI	Jan. 1, 2021	Jan. 1, 2022
	80410	155		Traffic Spotters	Jan. 1, 2019	Camt 0 0004
	20338	155	X	Training Special Provisions	Oct. 15, 1975	Sept. 2, 2021
	80318			Traversable Pipe Grate for Concrete End Sections	Jan. 1, 2013	Jan. 1, 2018
	80429			Ultra-Thin Bonded Wearing Course	April 1, 2020	Jan. 1, 2022
	80440	158		Waterproofing Membrane System	Nov. 1, 2021	Nov. 1, 2021
	80302 80427	158	X	Weekly DBE Trucking Reports   Work Zone Traffic Control Devices	June 2, 2012	Nov. 1, 2021
	80071	161	X	Working Days	Mar. 2, 2020 Jan. 1, 2002	
	000 <i>1</i> I	101		I Working Days	Jan. 1, 2002	

#### STATE OF ILLINOIS

#### **SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of the DuPage County Central Signal System Expansion 4, Section 19-DCCSS-04-TL, in DuPage County and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Various Routes
Section 19-DCSS-04-TL
Project 9CTW(805)
DuPage County
Contract 61H96

#### **LOCATION OF PROJECT**

The project is located at the intersections and/or locations listed below. All work is located in DuPage County, Illinois within the townships of Addison, Bloomingdale, Downers Grove, Lisle, Milton, Wayne, and York Townships and the villages/cities of Darien, Naperville, Wood Dale, Bensenville, Bloomingdale, Downers Grove, Itasca, Lisle, Lombard, Roselle, Villa Park and Woodridge. See location map on cover of plans.

#### Intersections and/or Locations:

#### Area 1

Bloomingdale Rd and Schick Rd Roselle Rd and Walnut Ct Roselle Rd and Bryn Mawr Ave Roselle Rd and Maple Ave Roselle Rd and Central Ave

#### Area 2

Clover Ridge Ln/Hamilton Lakes Dr and S Thorndale Ave Hamilton Lakes Dr and Park Blvd Hamilton Lakes Dr and Pierce Blvd Arlington Heights Rd and S Thorndale Ave Arlington Heights Rd and Ketter Dr/N Thorndale Ave Prospect Ave and S Thorndale Ave Prospect Ave and N Thorndale Ave Prospect Ave and Pierce Rd/Marino Ct Wood Dale Rd and School St/Foster Ave

Wood Dale Rd and Mittel Dr Wood Dale Rd and S Thorndale Ave Wood Dale Rd and N Thorndale Ave Ketter Dr and Ramp L1 N Thorndale Ave and Supreme Dr

#### Area 3

County Farm Rd and St Charles Rd County Farm Rd and II Rte 64 Jewell Rd and Pleasant Hill Rd Jewell Rd and Gary Ave

#### Area 4

Finley Rd and Eisenhower Ln

Finley Rd and 22<sup>nd</sup> St

Finley Rd and Oak Creek Dr

Main St and 22<sup>nd</sup> St

Main St and 16<sup>th</sup> St

Main St and Morris Ave

Main St and Edward Ave

Main St and Glenbard East High School Ent

Main St and Wilson Ave

Main St and Madison St

Main St and Hickory St

Main St and Maple St

Main St and Parkside Ave

St Charles Rd and Main St

Highland Ave and 39<sup>th</sup> St

Highland Ave and Good Samaritan Hospital

31st St and Highland Ave

Highland Ave and I-88 EB Ramp (South)

Highland Ave and IL Rte 56

Highland Ave and Yorktown (South)

Highland Ave and Yorktown (Center)

Highland Ave and Majestic Dr

22<sup>nd</sup> St and Highland Ave

Fairview Ave and 39<sup>th</sup> St

Meyers Rd and 35<sup>th</sup> St

31st St and Meyers Rd

Meyers Rd and 22<sup>nd</sup> St

Meyers Rd and Corporate Center Ent

Meyers Rd and 16th St

Meyers Rd and 14<sup>th</sup> St

Westmore-Meyers Rd and Highridge Rd

Westmore-Meyers Rd and Wilson Rd

Westmore-Meyers Rd and Jackson St

Westmore-Meyers Rd and Madison St

Westmore-Meyers Rd and Washington Blvd

Westmore-Meyers Rd and Maple St

Westmore-Meyers Rd and St Charles Rd

Midwest Rd and 35<sup>th</sup> St (South)

Midwest Rd and 35<sup>th</sup> St (North) Midwest Rd and I-88/Baybrook

31st St and Highland Pkwy

31st St and Midwest U Ent/Ave La Tours

31st St and Midwest Rd

31st St and Concord Dr

31st St and Regent Dr

22<sup>nd</sup> St and Grace St

22<sup>nd</sup> St and Convention Way

St Charles Rd and Swift Rd

St Charles Rd and Crescent Blvd

St Charles Rd and Elizabeth St

St Charles Rd and Park Ave

St Charles Rd and Grace St

Lombard Fire Station No. 1

Lombard Fire Station No. 2

Lombard Village Hall

Lombard Public Works

Lombard Police Department

#### Area 5

Wehrli Rd/College Rd and Hobson Rd

College Rd and Green Trails Dr

Yackley Ave and Ohio St

Yackley Ave and Warrenville Rd

Hobson Rd and Washington St

Hobson Rd and Olesen Dr

Hobson Rd and Naper Blvd

Hobson Rd and Greene Rd

Hobson Rd and Double Eagle Dr

Hobson Rd and Woodridge Dr

Maple Ave and Patton Dr/Lake Dr

Maple Ave and Primrose Ave

#### Area 6

Cass Ave and Ashbrook Ct/Concord PI

Cass Ave and Plainfield Rd

Plainfield Rd and High Rd

Plainfield Rd and Willowbrook TC/Willows of Willowbrook Ent

Plainfield Rd and Madison Dr

Plainfield Rd and Fieldstone Dr/Garfield Ave

63<sup>rd</sup> St and Ridge Rd

63rd St and Clarendon Hills Rd

63rd St and Americana Dr/Hinsdale Lake Commons Ent

63<sup>Rd</sup> St and Madison St

#### **DESCRIPTION OF PROJECT**

The work includes, but is not limited to, the installation of new conduit, handholes, and fiber optic interconnect cable to connect existing traffic signal controllers to the existing DuPage County Central System network. The work also includes the installation of new PTZ cameras, Layer II (Data Link) switches, Layer III (Network) switches, new traffic signal controllers and cabinets and all incidental and collateral work necessary to complete the project as shown on the plans and described herein. This project shall require the maintenance of existing traffic signal installations.

#### MAINTENANCE OF ROADWAYS (D1)

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.

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

Effective: January 22, 2003 Revised: August 10, 2017

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

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

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

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

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

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

One lane or ramp blocked = \$1,000.00

Two lanes blocked = \$2,500.00

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.

#### **PUBLIC CONVENIENCE AND SAFETY (D1)**

Effective: May 1, 2012 Revised: July 15, 2012

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

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

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

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

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

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

#### **STATUS OF UTILITIES (D1)**

Effective: June 1, 2016 Revised: January 1, 2020

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information regarding 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.

#### **UTILITIES 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 below; 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 anticipated.

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.

#### **UTILITIES TO BE WATCHED AND PROTECTED**

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 owner's part can be secured.

STAGE / LOCATION	TYPE	DESCRIPTION	OWNER
22ND ST, CROSS ROAD APPROX 126 FT E OF FAIRVIEW AVE	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT CONVENTION WAY	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT EDSON ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT FINLEY RD	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT LINCOLN DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT MAIN ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS ROAD AT MEYERS RD	FIBER	Existing Underground Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	WINDSTREAM KDL/MCLEOD USA

			Contract 6 1H96
22ND ST, CROSS ROAD E OF CONVENTION WAY	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM APPROX 190 FT W OF SCHOOL AVE TO SCHOOL AVE, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM FAIRVIEW AVE TO APPROX 126 FT E OF FAIRVIEW AVE, LT	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM FINLEY RD TO MAIN ST, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM FINLEY RD TO MEYERS RD	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
22ND ST, FROM HIGHLAND AVE TO APPROX 190 FT W OF SCHOOL AVE, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM SCHOOL AVE TO MEYERS RD, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
31ST ST, CROSS ROAD APPROX 1125 FT W OF REGENT DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, CROSS ROAD APPROX 140 FT W OF OAKBROOK HILLS RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, CROSS ROAD APPROX 155 FT W OF MIDWEST CLUB PKWY	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
31ST ST, CROSS ROAD APPROX 325 FT E OF MEYERS RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, CROSS ROAD APPROX 720 FT E OF MEYERS RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, CROSS ROAD AT MEYERS RD	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
31ST ST, CROSS ROAD	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
AT MIDWEST RD	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
31ST ST, CROSS ROAD AT OAK BROOK HILLS RD	WATER	Existing 6" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF

	1		001111401 0 111100
31ST ST, CROSS ROAD W OF MIDWEST CLUB PKWY	STORM	Existing 27" Storm Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
31ST ST, FROM APPROX 502 FT W OF MIDWEST RD TO MIDWEST RD, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
31ST ST, FROM CONCORD PL TO APPROX 780 FT E OF CONCORD PL, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, FROM MEYERS RD TO APPROX 380 FT E OF MIDWEST RD, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
31ST ST, FROM MEYERS RD TO E OF MIDWEST CLUB PKWY, RT	WATER	Existing 8" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
31ST ST, FROM MEYERS RD TO MIDWEST RD, RT	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
31ST ST, FROM OAK BROOK HILLS RD TO E OF MIDWEST CLUB PKWY, RT	STORM	Existing Storm Sewer Varying in size from 6" to 27". Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
31ST ST, FROM TRINITY RD TO APPROX 76 FT E OF PRIVATE DR	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63 RD ST, FROM CLARENDON HILLS RD TO MADISON ST, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
63RD ST, CROSS ROAD APPROX 1660 FT W OF MADISON ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD APPROX 220 FT E OF CANTERBURY LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD APPROX 415 FT E OF CLARENDON HILLS RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD APPROX 450 FT W OF IL RTE 83	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD APPROX 560 FT E OF CLARENDON HILLS RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD AT APPROX 200 FT E OF MARTIN DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD AT APPROX 210 FT W OF MARTIN DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

		<u> </u>	Contract of 11190
63RD ST, CROSS ROAD AT APPROX 460 FT E OF MARTIN DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD AT CANTERBURY LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD AT GODAIR DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD AT HIGH RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD AT IL 83	O/NO	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
	WATER	Existing 48" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
63RD ST, CROSS ROAD AT MADISON ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD AT RICHMOND AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
AT WESTERN AVE	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
63RD ST, CROSS ROAD E OF IL RTE 83	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, CROSS ROAD E OF RIDGE RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, CROSS ROAD EAST OF QUINCY CT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
		Existing 12" HPPP. Contractor will be constructing underground conduit nearby, avoid the existing utility.	WEST SHORE PIPE LINE
63RD ST, CROSS ROAD WEST OF IL 83	PETROLEUM	Existing 14" HPPP. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BUCKEYE PARTNERS
		Existing 16" HPPP. Contractor will be constructing underground conduit nearby, avoid the existing utility.	WEST SHORE PIPE LINE
63RD ST, FROM APPROX 1660 FT W OF MADISON ST TO MADISON ST, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

	ı		Contract of 11190
63RD ST, FROM APPROX 317 FT W OF CLARENDON HILLS RD TO CLARENDON HILLS RD, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, FROM BENTON LAKES DR TO MADISON ST, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, FROM CLARENDON HILLS RD TO APPROX 220 E OF CANTERBURY LN, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, FROM CLARENDON HILLS RD TO HIGH RD, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
63RD ST, FROM IL 83 TO E OF QUINCY CT, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
63RD ST, FROM RIDGE RD TO RICHMOND AVE, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
63RD ST, RIDGE RD TO CLARENDON HILLS RD, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
CASS AVE, CROSS ROAD APPROX 210 FT N OF 79TH ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
CASS AVE, CROSS ROAD APPROX 540 FT N OF CONCORD PL	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
CASS AVE, CROSS ROAD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
AT 79TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
CASS AVE, CROSS ROAD SOUTH OF PLAINFIELD RD	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
CASS AVE, FROM CONCORD PL TO PLAINFIELD RD, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	D
COLLEGE RD, CROSS RD APPROX 100 FT N OF SUN VALLEY RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
COLLEGE RD, CROSS RD APPROX 200 FT S OF SUN VALLEY RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
COLLEGE RD, CROSS RD APPROX 2750 FT N OF HOBSON RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
COLLEGE RD, CROSS RD AT HOBSON RD	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF

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COLLEGE RD, CROSS ROAD AT 815' N OF HOBSON RD	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
COLLEGE RD, CROSS ROAD AT CULPEPPER DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
COLLEGE RD, CROSS ROAD AT SUN VALLEY RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
COLLEGE RD, FROM APPROX 1500 FT S OF GREEN TRAILS DR TO GREEN TRAILS DR, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
COLLEGE RD, FROM HOBSON RD TO 815' N OF HOBSON RD, LT	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
COLLEGE RD, FROM N OF CULPEPPER DR TO APPROX 3000 FT N OF HOBSON RD, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
COUNTY FARM RD,	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
CROSS ROAD N OF ST CHARLES RD	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
COUNTY FARM RD, FROM ST CHARLES TO IL 64, RT	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINLEY RD, 22ND ST TO N OF FOXWORTH BLVD	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
FINLEY RD, CROSS RD APPROX 590' S OF OAK CREEK DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FINLEY RD, CROSS RD APPROX 705' S OF OAK CREEK DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FINLEY RD, CROSS ROAD AT 22ND ST	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
FINLEY RD, CROSS ROAD N OF FOXWORTH BLVD	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
FINLEY RD, CROSS ROAD SOUTH OF OAK CREEK DR	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
FINLEY RD, CROSSS RD S OF FOXWORTH BLVD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FINLEY RD, FROM 22ND ST TO OAK CREEK DR, RT	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)

TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
SANITARY	Existing 14" CIP/15" VCP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST
TELEPHONE	be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ELECTRIC	constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
SANITARY	Existing 15" VCP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST
SANITARY	Existing 10" CIP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST
	FIBER  ELECTRIC  GAS  SANITARY  TELEPHONE  ELECTRIC  ELECTRIC  ELECTRIC  ELECTRIC  ELECTRIC  ELECTRIC  ELECTRIC  SANITARY	TELEPHONE    Be constructing underground conduit nearby, avoid the existing utility.

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HIGHLAND AVE, CROSS ROAD NORTH OF IL 56	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
HIGHLAND AVE, FROM APPROX 200 FT N OF 33RD ST TO 31ST ST, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HIGHLAND AVE, FROM BUTTERFIELD RD TO YORKTOWN (SOUTH) ENT, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HIGHLAND AVE, OAK HILL RD TO MISTWOOD LN, LT	SANITARY	Existing 8" VCP/DIP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST
HOBSON RD, CROSS RD APPROX 325 FT W OF WOODRIDGE DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS RD APPROX 500 FT W OF DOUBLE EAGLE DR	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD APPROX 1000 FT W OF WOODRIDGE DR TO WOODRIDGE DR, RT	GAS	Existing 12" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD APPROX 410 FT E OF GREENE RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, CROSS ROAD APPROX 420 FT E OF IL RTE 53	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, CROSS ROAD APPROX 470 FT W OF WOODRIDGE DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, CROSS ROAD APPROX. 500' EAST OF WAINWRIGHT DR	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
HOBSON RD, CROSS ROAD AT DOUBLE EAGLE DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, CROSS ROAD AT DUPAGE DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD AT IL 53	GAS	Existing 16" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD AT MARKET DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD AT NAPER BLVD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

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	WATER	Existing 30" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
HOBSON RD, CROSS ROAD AT SHADOW CREEK LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD E OF BRIDGE	SANITARY	Existing Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF COMPASS CT	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF HOBSON	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
MILL DR	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF HOBSON VALLEY DR	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, CROSS ROAD E OF OXFORD LN	SANITARY	Existing Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF SADDLERS CT	SANITARY	Existing Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF SOUTHERN DUPAGE COUNTY REGIONAL TRAIL	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
HOBSON RD, CROSS ROAD W OF JOHNSON DR	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD W OF OLESEN DR	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, FROM APPROX 1200 FT W OF WOODRIDGE DR TO WOODRIDGE DR, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, FROM APPROX 148 FT W OF BRIDGE TO APPROX 185 FT W OF IL 53, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, FROM APPROX 980 FT E OF GREENE RD TO DOUBLE EAGLE DR, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

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HOBSON RD, FROM DOUBLE EAGLE DR TO E OF HOBSON VALLEY DR, RT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, FROM GREENE RD TO APPROX 148 FT W OF BRIDGE, LT	GAS	Existing 8' Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, FROM GREENE RD TO APPROX 475 FT E OF GREENE RD, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, FROM HOBSON MILL RD TO NAPER BLVD, LT	SANITARY	Existing Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, FROM IL 53 TO DUPAGE DR, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, FROM IL 53 TO E OF SOUTHERN DUPAGE COUNTY REGIONAL TRAIL, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
HOBSON RD, FROM WAINWRIGHT DR TO APPROX 440 FT E OF WAINWRIGHT DR, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HOBSON RD, HOBSON OAKS DR TO NAPER BLVD, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD, WASHINGTON ST TO HOBSON OAKS DR, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD. CROSS ROAD AT HOBSON OAKS DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HOBSON RD. CROSS ROAD AT OXFORD RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
JEWELL RD, CROSS RD AT ILLINOIS PRAIRIE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PATH	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, CROSS ROAD AT CHAMPION FOREST CT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
JEWELL RD, CROSS ROAD AT OAK VIEW DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
JEWELL RD, CROSS ROAD AT WOODLAND DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

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JEWELL RD, CROSS ROAD AT WOODLAWN ST	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, CROSS ROAD E OF FALCON DR	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, CROSS ROAD WOF GARY AVE	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, FROM E FALCON DR TO GARY AVE, LT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, FROM E OF FALCON DR TO GARY AVE, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
JEWELL RD, FROM PLEASANT HILL RD TO E OF PLEASANT HILL RD, LT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
JEWELL RD, FROM PLEASANT HILL RD TO SILVER LEAF BLVD, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
JEWELL RD, OAK VIEW DR TO GARY AVE, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
JEWELL RD, SILVER LEAF BLVD TO E OF OAK VIEW DR, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS ROAD AT 22ND ST	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
MAIN ST, CROSS ROAD AT ILLINOIS PRARIE	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
MAIN ST, CROSS ROAD N OF 15TH ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MAIN ST, CROSS ROAD N OF ROOSEVELT RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MAIN ST, CROSS ROAD S OF 16TH ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MAIN ST, CROSS ROAD S OF ANN ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MAIN ST, CROSS ROAD S OF MORRIS AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MAIN ST, FROM S OF 16TH ST TO N OF REBECCA RD, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

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MAPLE AVE, CROSS ROAD APPROX 25 FT E OF IL 53	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
Of IL 33		Existing Fiber. Contractor will be	EVERSTREAM
	FIBER	constructing underground conduit	GLC HOLDING CO
MAPLE AVE, CROSS	TIBER	nearby, avoid the existing utility.	LLC
ROAD AT IL 53		Existing 2" Gas. Contractor will be	
	GAS	constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
MADLE AVE ODGG		Existing 8" Gas. Contractor will be	
MAPLE AVE, CROSS	GAS	constructing underground conduit	NICOR GAS
ROAD AT KINGSTON AVE		nearby, avoid the existing utility.	
		Existing 2" Gas. Contractor will be	
		constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
MAPLE AVE, CROSS		Existing 6" Gas. Contractor will be	
ROAD AT PATTON DR	GAS	constructing underground conduit	NICOR GAS
ROAD AT PATTON DR		nearby, avoid the existing utility.	
		Existing 8" Gas. Contractor will be	
		constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
MAPLE AVE, CROSS		Existing Electric. Contractor will be	
ROAD AT RIVER RD	ELECTRIC	constructing underground conduit	COMED
NOAD AT RIVER ID		nearby, avoid the existing utility.	
MAPLE AVE, CROSS		Existing Telephone. Contractor will	
ROAD AT RIVERVIEW DR	TELEPHONE	be constructing underground conduit	MCI/VERIZON
TOND / I THE ETT BY		nearby, avoid the existing utility.	
MAPLE AVE, CROSS	0.10	Existing 2" Gas. Contractor will be	NICOD CAC
ROAD AT RIVERVIEW RD	GAS	constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
	EL ECTRIC	Existing Electric. Contractor will be	COMED
MADLE AVE ODOGG	ELECTRIC	constructing underground conduit	COMED
MAPLE AVE, CROSS ROAD E OF PATTON DR		nearby, avoid the existing utility.	
ROAD E OF PATTON DR	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit	MCI/VEDIZON
			MCI/VERIZON
MAPLE AVE, CROSS		nearby, avoid the existing utility.  Existing Telephone. Contractor will	
ROAD W OF EXISTING	TELEPHONE	be constructing underground conduit	MCI/VERIZON
BRIDGE	ILLLITIONE	nearby, avoid the existing utility.	IVIOI/ V LIXIZOIN
MAPLE AVE, FROM		Existing 8" Gas. Contractor will be	
APPROX 25 FT E OF IL 53	GAS	constructing underground conduit	NICOR GAS
TO PRIMROSE AVE, RT	<i>S.</i> (5	nearby, avoid the existing utility.	11100110710
MAPLE AVE, FROM II 53		Existing 4" Gas. Contractor will be	
TO APPROX 25 FT E OF	GAS	constructing underground conduit	NICOR GAS
IL 53, RT		nearby, avoid the existing utility.	
MAPLE AVE, FROM		Existing Electric. Contractor will be	
KINGSTON AVE TO	ELECTRIC	constructing underground conduit	COMED
PRIMROSE AVE, RT		nearby, avoid the existing utility.	
		Existing 8" Gas. Contractor will be	
	GAS	constructing underground conduit	NICOR GAS
MAPLE AVE, FROM		nearby, avoid the existing utility.	
PATTON DR TO IL 53, RT		Existing Telephone. Contractor will	
	TELEPHONE	be constructing underground conduit	MCI/VERIZON
		nearby, avoid the existing utility.	

			001111401 0 11 100
MAPLE AVE, FROM PATTON DR TO LAKE DR, RT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAPLE AVE, FROM RIVER RD TO RIVERVIEW RD, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, 35TH ST TO 31ST ST, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
MEYERS RD, CROSS RD APPROX 200 FT N OF 39TH ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MEYERS RD, CROSS RD APPROX 750 FT S OF 35TH ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MEYERS RD, CROSS ROAD APPROX 350' N OF 38TH ST	STORM	Existing 42" Storm Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, CROSS ROAD APPROX 900' N OF 38TH ST	WATER	Existing 10" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, CROSS	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROAD AT 31ST ST	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, CROSS	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROAD AT 35TH ST	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, CROSS ROAD AT 38TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, CROSS ROAD AT 39TH ST	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, CROSS ROAD AT HERITAGE OAK DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, CROSS ROAD AT HERITAGE OAKS LN	WATER	Existing 8" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, CROSS ROAD AT WHITE OAK LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

			Contract of 11190
	STORM	Existing 4" Storm Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
	WATER	Existing 8" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, FROM 35TH	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ST TO 31ST ST, RT	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, FROM 39TH ST TO 35TH ST, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MEYERS RD, FROM 39TH ST TO 38TH ST, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, FROM APPROX 500' S OF 35TH ST TO 35TH ST	STORM	Existing Storm Sewer Varying in size from 12" to 30" on both sides of the roadway. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, FROM APPROX 750' N OF 38TH ST TO APPROX 1300' N OF 38TH ST	STORM	Existing Storm Sewer Varying in size from 6" to 18" on both sides of the roadway. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MEYERS RD, FROM N OF 38TH ST TO FAIRVIEW AVE, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MEYERS RD, FROM N OF FAIRVIEW AVE TO APPROX 180' S OF 35TH ST, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MEYERS RD, FROM S OF 39TH ST TO N OF 39TH ST, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MIDWEST RD, CROSS ROAD AT 31ST ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
	5,10	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MIDWEST RD, CROSS ROAD AT BAYBROOK LN	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

			Contract of 11190
MIDWEST RD, CROSS ROAD AT KIMBERLEY LN	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MIDWEST RD, CROSS ROAD AT KIMBERLY LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MIDWEST RD, CROSS ROAD AT MOCKINGBIRD	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
LN	WATER	Existing 8" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MIDWEST RD, FROM 31ST ST TO N OF MOCKINGBIRD LN, RT	STORM	Existing 42" Storm Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
MIDWEST RD, FROM 400 FT S OF 31ST ST TO 31ST ST, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MIDWEST RD, FROM APPROX 1330 FT N OF 31ST ST TO APPROX 200 FT S OF MOCKINGBIRD LN, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MIDWEST RD, FROM APPROX 315 FT S OF KIMBERLEY LN TO BAYBROOK LN, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MIDWEST RD, FROM APPROX 390 FT N OF MOCKINGBIRD LN TO APPROX 550 FT N OF MOCKINGBIRD LN, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
MIDWEST RD, FROM S OF 31ST ST TO 31ST ST, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MIDWEST RD, FROM S OF 31ST ST TO BAYBROOK LN	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
MIDWEST RD, FROM S OF KIMBERLEY LN TO KIMBERLEY LN	STORM	Existing Storm Sewer Varying in size from 12" to 15" on both sides of the roadway. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
PLAINFIELD RD, CROSS ROAD APPROX 150 FT W OF MADISON ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
PLAINFIELD RD, CROSS ROAD APPROX 160 FT E OF ADAMS ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
PLAINFIELD RD, CROSS ROAD APPROX 224 FT E OF ADAMS ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

			Oontract of 11100
PLAINFIELD RD, CROSS ROAD APPROX 395 FT W	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit	COMED
OF ADAMS ST PLAINFIELD RD, CROSS ROAD APPROX 545 FT E	ELECTRIC	nearby, avoid the existing utility.  Existing Electric. Contractor will be constructing underground conduit	COMED
OF IL RTE 83 PLAINFIELD RD, CROSS	0.10	nearby, avoid the existing utility.  Existing 2" Gas. Contractor will be	
ROAD APPROX 595 FT W OF ADAMS ST PLAINFIELD RD, CROSS	GAS	constructing underground conduit nearby, avoid the existing utility.  Existing Electric. Contractor will be	NICOR GAS
ROAD APPROX 620 FT E OF ADAMS ST	ELECTRIC	constructing underground conduit nearby, avoid the existing utility.	COMED
PLAINFIELD RD, CROSS ROAD AT ADAMS ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PLAINFIELD RD, CROSS ROAD AT HIGH RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PLAINFIELD RD, CROSS	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROAD AT MADISON ST	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PLAINFIELD RD, FROM IL RTE 83 TO APPROX 830 FT E OF IL RTE 83, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
PROSPECT AVE, CROSS ROAD N OF N THORNDALE AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
PROSPECT AVE, CROSS ROAD S OF MARINO CT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
PROSPECT AVE, FROM APPROX 800' S OF MARINO CT TO MARINO CT, RT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
PROSPECT AVE, MARINO CT TO N THORNDALE AVE, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
PROSPECT AVE, N OF N THORNDALE AVE TO N THORNDALE AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ST CHARLES RD, APPROX 500' W OF I-355 TO I-355, RT	SEWER	NRI INTERCEPTOR. Contractor will be constructing underground conduit nearby, avoid the existing utility.	GLENBARD WASTEWATER AUTH
ST CHARLES RD, CROSS ROAD APPROX 224 FT W OF PARK AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ST CHARLES RD, CROSS ROAD APPROX 360 FT W OF I-355	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ST CHARLES RD, CROSS ROAD APPROX 370 FT W OF CHASE AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

			Contract of 11190
ST CHARLES RD, CROSS ROAD APPROX 400 FT E	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit	COMED
OF GRACE ST		nearby, avoid the existing utility.	
ST CHARLES RD, CROSS		NRI INTERCEPTOR. Contractor will	GLENBARD
ROAD APPROX 500' W	SEWER	be constructing underground conduit	WASTEWATER
OF I-355		nearby, avoid the existing utility.	AUTH
ST CHARLES RD, CROSS		Existing Electric. Contractor will be	
ROAD APPROX 535 FT W	ELECTRIC	constructing underground conduit	COMED
	LLLCTRIC		COMED
OF IL RTE 53		nearby, avoid the existing utility.	
ST CHARLES RD, CROSS		Existing 36" Gas in 42" Steel Casing.	
ROAD APPROX 540 FT W	GAS	Contractor will be constructing	NICOR GAS
OF IL 53	O/10	underground conduit nearby, avoid	WOOK OAS
OF IL 33		the existing utility.	
ST CHARLES RD, CROSS		Existing Electric. Contractor will be	
ROAD APPROX 550 FT W	ELECTRIC	constructing underground conduit	COMED
OF GRACE ST		nearby, avoid the existing utility.	3325
ST CHARLES RD, CROSS		Existing 2" Gas. Contractor will be	
	040		NUCCECAC
ROAD AT CHARLOTTE	GAS	constructing underground conduit	NICOR GAS
ST		nearby, avoid the existing utility.	
ST CHARLES RD, CROSS		Existing 2" Gas. Contractor will be	
ROAD AT CRESCENT	GAS	constructing underground conduit	NICOR GAS
BLVD		nearby, avoid the existing utility.	
		Existing 2" Gas. Contractor will be	
ST CHARLES RD, CROSS	GAS	constructing underground conduit	NICOR GAS
ROAD AT FAIRFIELD AVE	0, 10	nearby, avoid the existing utility.	1
		Existing 4" Gas. Contractor will be	
			NICORCAS
07 0114 51 50 55 05000		constructing underground conduit	NICOR GAS
ST CHARLES RD, CROSS	GAS	nearby, avoid the existing utility.	
ROAD AT IL 53		Existing 8" Gas. Contractor will be	
		constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
ST CHARLES RD, CROSS		Existing Electric. Contractor will be	
	ELECTRIC	constructing underground conduit	COMED
ROAD AT IL RTE 53		nearby, avoid the existing utility.	
		Existing Fiber. Contractor will be	EVERSTREAM
	FIBER	constructing underground conduit	GLC HOLDING CO
ST CHARLES RD, CROSS	TIBLIX	nearby, avoid the existing utility.	LLC
ROAD AT MAIN ST		Existing 6" Gas. Contractor will be	LLC
ROAD AT MAIN 31	CAC		NICOR GAS
	GAS	constructing underground conduit	NICOR GAS
		nearby, avoid the existing utility.	
ST CHARLES RD, CROSS		Existing Electric. Contractor will be	
ROAD AT MARTHA ST	ELECTRIC	constructing underground conduit	COMED
1.07.07.11 WARTING		nearby, avoid the existing utility.	
ST CHADLES DD CDCCC		Existing 2" Gas. Contractor will be	
ST CHARLES RD, CROSS	GAS	constructing underground conduit	NICOR GAS
ROAD AT WESTERN AVE		nearby, avoid the existing utility.	
OT 0114 D1 50 DD 00000		Existing 2" HDPE. Contractor will be	
ST CHARLES RD, CROSS	FIBER	constructing underground conduit	ADESTA / G4S
ROAD E OF I-355	5\	nearby, avoid the existing utility.	1.52517(7515
ST CHARLES RD, FROM		noundy, avoid the existing duilty.	
APPROX 155 FT W OF		Existing Electric. Contractor will be	
	ELECTRIC	constructing underground conduit	COMED
WEST RD TO WEST RD,		nearby, avoid the existing utility.	
RT		1 ,	l l

		<u> </u>	Contract of 11 100
ST CHARLES RD, FROM APPROX 185 FT W OF WEST RD TO MAIN ST, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ST CHARLES RD, FROM APPROX 480 FT W OF GRACE AVE TO GRACE AVE, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ST CHARLES RD, FROM CHARLOTTE ST TO APPROX 538 FT E OF CRAIG PL, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ST CHARLES RD, FROM CRAIG PL TO GRACE ST	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ST CHARLES RD, FROM GRACE ST TO ST CHARLES LN, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ST CHARLES RD, FROM GRACE ST TO WESTMORE-MEYERS AVE	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ST CHARLES RD, FROM W OF ELIZABETH ST TO MAIN ST	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ST CHARLES RD, FROM W OF I-355 TO E OF I-355	FIBER	Existing 4" HDPE and 1" HDPE. Contractor will be constructing underground conduit nearby, avoid the existing utility.	ADESTA / G4S
ST CHARLES RD, FROM WESTERN AVE TO EAST OF WESTWOOD AVE, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYER RD, FROM S OF ST CHARLES RD TO N OF ST CHARLES RD, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD APPROX 483 FT S OF WASHINGTON BLVD	GAS	Existing 1 1/2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT DIVISION ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT EMERSON AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT KENILWORTH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT LOMBARD CIR	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT MADISON ST	GAS	Existing 10" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

-		<u> </u>	Contract of 11130
WESTMORE MEYERS RD, CROSS ROAD AT MAPLE AVE	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT ST CHARLES RD	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT WASHINGTON BLVD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, FROM APPROX 80 FT N OF MADISON ST TO WASHINGTON BLVD, LT	GAS	Existing 1 1/2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, FROM HIGHRIDGE RD TO MAPLE ST, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, FROM MAPLE AVE TO ST CHARLES RD, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE-MEYERS RD, CROSS ROAD APPROX 270 FT S OF MADISON ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
WESTMORE-MEYERS RD, CROSS ROAD AT ILLINOIS PRARIER PATH	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
WESTMORE-MEYERS RD, FROM HIGHRIDGE RD TO JACKSON ST, RT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
WILSON AVE, CROSS ROAD AT CHARLOTTE ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WILSON AVE, CROSS ROAD AT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
HAMMERSCHMIDT AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WILSON AVE, CROSS	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
ROAD AT MAIN ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WILSON AVE, CROSS ROAD AT NORBURY AVE	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WILSON AVE, FROM CHARLOTTE ST TO NORBURY AVE, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WILSON AVE, FROM NORBURY AVE TO HAMMERSCHMIDT AVE, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

	ı		Contract of 11 100
WOODDALE RD, FROM HANSEN CT TO E THORNDALE AVE, LT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
YACKELY AVE, CROSS ROAD AT BURLINGTON AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
YACKLEY AVE, CROSS ROAD APPROX 100 FT S OF WARRENVILLE RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, CROSS ROAD AT HITCHCOCK AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, CROSS ROAD AT OHIO ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, CROSS ROAD AT RAILROAD	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
YACKLEY AVE, CROSS ROAD AT RAILROAD AVE	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, CROSS	FIBER	Existing 10" HDPE, 6 - 1 1/2" HDPE, & 8-1 1/4" HDPE. Contractor will be constructing underground conduit nearby, avoid the existing utility.	ADESTA / G4S
ROAD N OF I-88	11021	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
YACKLEY AVE, CROSS	GAS	Existing 30" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROAD S OF I-88	UAU	Existing 36" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, FROM OGDEN AVE TO APPROX 100 FT S OF WARRENVILLE RD, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YACKLEY AVE, RAILROAD TO N OF I-88, LT	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
YAKCLEY AVE, CROSS ROAD APPROX 160 FT S OF OGDEN AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
YAKCLEY AVE, CROSS ROAD AT OGDEN AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PROSPECT AVE, FROM S OF S THORNDALE AVE TO N OF MARINO CT, RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC

			Contract 61H96
HOBSON RD, FROM APPROX 600' W OF NAPER BLVD TO NAPER BLVD, LT	WATER	Existing 30" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
HOBSON RD, CROSS ROAD E OF WASHINGTON ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD W OF HOBSON MILL DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD W OF NAPER BLVD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF NAPER BLVD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD AT OLESEN DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD AT JOHNSON DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
HOBSON RD, CROSS ROAD E OF JOHNSON DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
COLLEGE RD, FROM HOBSON RD TO APPROX 3000 FT N OF HOBSON RD, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
YACKLET AVE, CROSS RD AT US 34 (OGDEN AVE)	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
HOBSON RD, FROM DUPAGE DR TO E OF WOODRIDGE DR, RT	WATER	Existing 30" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
HOBSON RD, CROSS RD AT IL 53	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
HOBSON RD, FROM IL 53 TO WOODRIDGE DR, RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
63RD ST, CROSS RD AT CLARENDON HILLS RD	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	CROWN CASTLE
CASS AVE, FROM CONCORD PL TO 75TH ST, RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
ST CHARLES RD, FROM MARTHA ST TO GRACE ST, LT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	CROWN CASTLE
ST CHARLES RD, FROM APPROX 200 FT W OF CHARLOTTE ST TO CHARLOTTE ST, LT	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM

			Contract 61H96
MAIN ST, CROSS ROAD AT IL 38 (ROOSEVELT RD)	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
MAIN ST, FROM IL 38 (ROOSEVELT RD) TO WASHINGTON BLVD (W), RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
MAIN ST, CROSS ROAD AT WASHINGTON BLVD (W)	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
MAIN ST, FROM S OF 22ND ST TO N OF 16TH ST, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT 20TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT 19TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT 18TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT 17TH PL	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT 17TH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, FROM N OF 15TH ST TO IL 38 (ROOSEVELT RD), LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT REBECCA RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, FROM IL 38 (ROOSEVELT RD) TO HARRISON RD, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD N OF IL 38 (ROOSEVELT RD)	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT ANN ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT MORRIS AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT EDWARD ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT CENTRAL AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT WILSON AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

			Contract of 11190
MAIN ST, CROSS RD AT GRAHAM AVE	GAS	Existing 2 1/2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT TAYLOR RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT MADISON ST	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD APPROX 343 FT N OF MADISON ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, FROM 343 FT N OF MADISON ST TO ASH ST, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT WASHINGTON BLVD (W)	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD APPROX 94 FT N OF WASHINGTON BLVD €	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD APPROX 130 FT N OF WASHINGTON BLVD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT WILLOW ST	GAS	Existing Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT ASH ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, FROM ASH ST TO MAPLE AVE, RT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, CROSS RD AT MAPLE AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MAIN ST, FROM MAPLE AVE TO PARKSIDE AVE, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINLEY RD, FROM EISENHOWER LN TO OAK CREEK DR, RT	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINELY RD, CROSS RD APPROX 185 FT N OF EISENHOWER LN	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINLEY RD, CROSS RD APPROX 90 S OF 22ND ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINLEY RD, CROSS RD S OF FOXWORTH BLVD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
FINLEY RD, CROSS RD AT OAK CREEK DR	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

		<del>-</del>	Contract of 11130
22ND ST, CROSS RD W OF MAIN ST	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	CROWN CASTLE
22ND ST, FROM W OF MAIN ST TO MAIN ST, RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	CROWN CASTLE
WESTMORE MEYERS RD, CROSS ROAD AT GREAT WESTERN TRAIL	WATER	Existing 54" Watermain in 78" Casing. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
HIGHLAND AVE, FROM IL 56 TO APPROX 1600 FT N OF IL 56, LT	WATER	Existing 24" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
MIDWEST RD, FROM S OF 31ST ST TO I-88, RT	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
W SAINT CHARLES RD, CROSS ROAD AT N MARTHA ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
W SAINT CHARLES RD, CROSS ROAD NORTH OF CRAIG PL	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
W SAINT CHARLES RD, CROSS ROAD AT GRACE ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
W 22ND ST, CROSS ROAD AT S HIGHLAND AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMCAST
W 22ND ST, MULTIPLE CROSSINGS ROAD BETWEEN S FAIRFIELD AND VISTA AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMCAST
W 22ND ST, FROM VISTA AVE TO FAIRVIEW AVE, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMCAST
MAIN ST, FROM SOUTH OF 16TH ST TO NORTH OF 16TH ST, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMCAST
MAIN ST, SOUTH OF 16TH ST, ~ 150' CROSS ROAD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMCAST
HIGHLAND AVE, FROM 22ND ST TO 20TH ST, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDLAE RD, CROSS ROAD AT PARK AVE	WATER	Existing 8" Water. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS ROAD AT APPROX 1300 FT N OF US 20	WATER	Existing 8" Water. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF

			Contract of 11190
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 1400 FT N OF US 20, LT	SANITARY	Existing Sanitary. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS RD APPROX 325 FT N OF US 20	SANITARY	Existing Sanitary. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS RD AT FESSLER DR	SANITARY	Existing Sanitary. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS RD APPROX 270 FT N OF FESSLER DR	SANITARY	Existing Sanitary. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS RD APPROX 200 FT N OF PARK AVE	SANITARY	Existing Sanitary. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BLOOMINGDALE, VILLAGE OF
BLOOMINGDALE RD, CROSS ROAD N OF WALTER CT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS RD AT PICTON RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS RD APPROX 180 FT S OF WALNUT ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS RD APPROX 500 FT S OF WALNUT ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS ROAD AT PARK AVE		Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
	WATER	Existing 24" Water. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 950 FT N OF PARK AVE	WATER	Existing 24" Water. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
BLOOMINGDALE RD, CROSS ROAD APPROX 950 FT N OF PARK AVE	WATER	Existing 24" Water. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
BLOOMINGDALE RD, CROSS ROAD AT	GAS	Existing Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PICTON RD	UAU .	Existing Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS ROAD AT LODGE DR	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

BLOOMINGDALE RD, CROSS ROAD AT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit	NICOR GAS
FOREST AVE  ROSELLE RD, FROM  ~200' SOUTH OF TO	SANITARY	nearby, avoid the existing utility.  Existing 12" Sanitary	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD AT FOREST AVE	SANITARY	Existing 10" Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD SOUTH OF WANLUT ST ~200'	SANITARY	Existing 10" Sanitary Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	ROSELLE, VILLAGE OF
ROSELLE RD, FROM FOSTER AVE TO WALNUT ST, LT	WATER	Existing 12" Water Main, LT	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD AT WALNUT ST	WATER	Existing 12" Water Main	ROSELLE, VILLAGE OF
ROSELLE RD, INTERSECTION WITH PICTON RD	WATER	Existing 8" Water Mai	ROSELLE, VILLAGE OF
ROSELLE RD, INTERSECTION WITH FOREST AVE	WATER	Existing 12" Water Main	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD AT FOSTER AVE	WATER	Existing 6" Water Main	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD ~410' SOUTH OF	STORM	Existing 10" Storm Sewer	ROSELLE, VILLAGE OF
FOREST ST	STORW	Existing 36" Storm Sewer	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD ~500' SOUTH OF FOREST ST, LT	STORM	Existing 12" Storm Sewer	ROSELLE, VILLAGE OF
ROSELLE RD, FROM FOSTER AVE TO ~600' SOUTH OF FOSTER AVE, LT	STORM	Existing 12" Storm Sewer	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD AT FOSTER AVE	STORM	Existing 12" Storm Sewer	ROSELLE, VILLAGE OF
ROSELLE RD, CROSS ROAD ~600' SOUTH OF FOSTER AVE	STORM	Existing 15", 24" Storm Sewer	ROSELLE, VILLAGE OF
FINLEY RD, CROSS RD AT OAK CREEK DR	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, CROSS RD W OF MAIN ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
22ND ST, FROM W OF MAIN ST TO MAIN ST, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
WESTMORE MEYERS RD, CROSS ROAD AT GREAT WESTERN TRAIL	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS

			Contract of 11100
HIGHLAND AVE, FROM IL 56 TO APPROX 1600 FT N OF IL 56, LT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
MIDWEST RD, FROM S OF 31ST ST TO I-88, RT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
W SAINT CHARLES RD, CROSS ROAD AT N MARTHA ST	FIBER	Existing Underground Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	WINDSTREAM KDL/MCLEOD USA
W SAINT CHARLES RD, CROSS ROAD NORTH OF CRAIG PL	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
W SAINT CHARLES RD, CROSS ROAD AT GRACE ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
W 22ND ST, CROSS ROAD AT S HIGHLAND AVE	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
W 22ND ST, MULTIPLE CROSSINGS ROAD BETWEEN S FAIRFIELD AND VISTA AVE	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
W 22ND ST, FROM VISTA AVE TO FAIRVIEW AVE, LT	FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
MAIN ST, FROM SOUTH OF 16TH ST TO NORTH OF 16TH ST, LT	SOUTH Existing Telephone. Contractor will be constructing underground conduit		MCI/VERIZON
MAIN ST, SOUTH OF 16TH ST, ~ 150' CROSS ROAD	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
HIGHLAND AVE, FROM 22ND ST TO 20TH ST, LT	GAS	Existing 6" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDLAE RD, CROSS ROAD AT PARK AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, CROSS ROAD AT APPROX 1300 FT N OF US 20	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 1400 FT N OF US 20, LT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS RD APPROX 325 FT N OF US 20	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, CROSS RD AT FESSLER DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

			Contract of 11190
BLOOMINGDALE RD, CROSS RD APPROX 270 FT N OF FESSLER DR	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS RD APPROX 200 FT N OF PARK AVE	FIBER	Existing Fiber. Contractor will be constructing underground conduit nearby, avoid the existing utility.	EVERSTREAM GLC HOLDING CO LLC
BLOOMINGDALE RD, CROSS ROAD N OF WALTER CT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS RD AT PICTON RD	WATER	Existing 6" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
ROSELLE RD, CROSS RD APPROX 180 FT S OF WALNUT ST	STORM	Existing 27" Storm Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
ROSELLE RD, CROSS RD APPROX 500 FT S OF WALNUT ST	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, CROSS ROAD AT PARK AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
AVE	WATER	Existing 8" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 950 FT N OF PARK AVE	WATER	Existing 12" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
BLOOMINGDALE RD, CROSS ROAD APPROX 950 FT N OF PARK AVE	STORM	Existing Storm Sewer Varying in size from 6" to 27". Contractor will be constructing underground conduit nearby, avoid the existing utility.	OAK BROOK, VILLAGE OF
BLOOMINGDALE RD, CROSS ROAD AT	GAS	Existing 4" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PICTON RD	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
BLOOMINGDALE RD, CROSS ROAD AT LODGE DR	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, CROSS ROAD AT FOREST AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, FROM ~200' SOUTH OF TO WALNUT ST, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

			Contract of 11190
ROSELLE RD, CROSS ROAD AT FOREST AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD SOUTH OF WANLUT ST ~200'	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, FROM FOSTER AVE TO WALNUT ST, LT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD AT WALNUT ST	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, INTERSECTION WITH PICTON RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, INTERSECTION WITH FOREST AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD AT FOSTER AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD ~410' SOUTH OF	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FOREST ST	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD ~500' SOUTH OF FOREST ST, LT	DSELLE RD, CROSS  AD ~500' SOUTH OF  GAS  Existing 6" Gas. Contractor will be constructing underground conduit		NICOR GAS
ROSELLE RD, FROM FOSTER AVE TO ~600' SOUTH OF FOSTER AVE, LT	WATER	Existing 48" Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DUPAGE WATER COMM
ROSELLE RD, CROSS ROAD AT FOSTER AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD ~600' SOUTH OF FOSTER AVE	ROSELLE RD, CROSS ROAD ~600' SOUTH OF GAS Existing 2" Gas. Contractor will be constructing underground conduit		NICOR GAS
BLOOMINGDALE RD, CROSS RD APPROX 270 FT N OF FESSLER DR	BLOOMINGDALE RD, Existing 2" Gas. Contractor will be CROSS RD APPROX 270 GAS constructing underground conduit		NICOR GAS
BLOOMINGDALE RD, CROSS RD APPROX 200 FT N OF PARK AVE	MINGDALE RD, Existing Telephone. Contractor will be constructing underground conduit		MCI/VERIZON
BLOOMINGDALE RD, CROSS ROAD N OF WALTER CT	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS RD AT PICTON RD	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS RD APPROX 180 FT S OF WALNUT ST	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON

ROSELLE RD, CROSS RD APPROX 500 FT S OF	PETROLEUM	Existing 12" HPPP. Contractor will be constructing underground conduit	WEST SHORE PIPE LINE
WALNUT ST	DETROI EUM	nearby, avoid the existing utility.  Existing 14" HPPP. Contractor will be constructing underground conduit nearby, avoid the existing utility.	BUCKEYE PARTNERS
BLOOMINGDALE RD, CROSS ROAD AT PARK AVE	PETROLEUM	Existing 16" HPPP. Contractor will be constructing underground conduit nearby, avoid the existing utility.	WEST SHORE PIPE LINE
	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 950 FT N OF PARK AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS ROAD APPROX 950 FT N OF PARK AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS ROAD AT	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
PICTON RD	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, CROSS ROAD AT LODGE DR	BLOOMINGDALE RD, Existing Telephone. Contractor will be constructing underground conduit		MCI/VERIZON
BLOOMINGDALE RD, Existing 2" Gas. Contract CROSS ROAD AT GAS constructing underground constructing underground constructing underground constructing underground constructing underground constructions are constructed as a construction of the const		Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, FROM ~200' SOUTH OF TO WALNUT ST, LT	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ROSELLE RD, CROSS ROAD AT FOREST AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD SOUTH OF WANLUT ST ~200'	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, FROM FOSTER AVE TO WALNUT ST, LT	ROSELLE RD, FROM Existing Electric. Contractor will be constructing underground conduit		COMED
ROSELLE RD, CROSS ROAD AT WALNUT ST	ROSELLE RD, CROSS Existing 2" Gas. Contractor will be		NICOR GAS
ROSELLE RD, Existi INTERSECTION WITH TELEPHONE be co		Existing Telephone. Contractor will be constructing underground conduit MCI/VERIZO nearby, avoid the existing utility.	
ROSELLE RD, INTERSECTION WITH FOREST AVE	Existing Electric. Contractor will be		COMED
ROSELLE RD, CROSS ROAD AT FOSTER AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED

			Contract of 11 190
ROSELLE RD, CROSS	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROAD ~410' SOUTH OF FOREST ST ELECTRIC		Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD ~500' SOUTH OF FOREST ST, LT	WATER	Existing Watermain. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NAPERVILLE, CITY OF
ROSELLE RD, FROM FOSTER AVE TO ~600' SOUTH OF FOSTER AVE, LT	GAS	Existing 8" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD AT FOSTER AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
ROSELLE RD, CROSS ROAD ~600' SOUTH OF FOSTER AVE	GAS	Existing 2" Gas. Contractor will be constructing underground conduit nearby, avoid the existing utility.	NICOR GAS
BLOOMINGDALE RD, CROSS RD APPROX 270 FT N OF FESSLER DR	BLOOMINGDALE RD, Existing Electric. Contractor will be constructing underground conduit		COMED
BLOOMINGDALE RD, CROSS RD APPROX 200 FT N OF PARK AVE	BLOOMINGDALE RD, CROSS RD APPROX 200 GAS Existing 8" Gas. Contractor will be constructing underground conduit		NICOR GAS
BLOOMINGDALE RD, CROSS ROAD N OF WALTER CT	BLOOMINGDALE RD, Existing Electric. Contractor will be constructing underground conduit		COMED
ROSELLE RD, CROSS RD AT PICTON RD	ROSELLE RD, CROSS RD EIRER Sonstructing underground conduit		EVERSTREAM GLC HOLDING CO LLC
ROSELLE RD, CROSS RD APPROX 180 FT S OF WALNUT ST	ROSELLE RD, CROSS RD Existing Telephone. Contractor will be constructing underground conduit		MCI/VERIZON
ROSELLE RD, CROSS RD APPROX 500 FT S OF WALNUT ST	ROSELLE RD, CROSS RD Existing 8" Gas. Contractor will be APPROX 500 FT S OF GAS constructing underground conduit		NICOR GAS
	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
BLOOMINGDALE RD, CROSS ROAD AT PARK AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
BLOOMINGDALE RD, FROM PARK AVE TO APPROX 950 FT N OF PARK AVE	BLOOMINGDALE RD, FROM PARK AVE TO APPROX 950 FT N OF  Existing Telephone. Contractor will be constructing underground conduit		MCI/VERIZON
BLOOMINGDALE RD, CROSS ROAD APPROX 950 FT N OF PARK AVE	TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON

	<u> </u>	Contract of 11190
FIBER	Contractor will be constructing underground conduit nearby, avoid	LEVEL3 (CENTURAYLINK)
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FIBER	Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
TELEPHONE	be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
FIBER	Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
ELECTRIC	constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS Existing 4" Gas. Contractor will be constructing underground conduit		NICOR GAS
SANITARY	Existing 14" CIP/15" VCP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST
TELEPHONE	Existing Telephone. Contractor will be constructing underground conduit nearby, avoid the existing utility.	MCI/VERIZON
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD AT FOSTER AVE  ELECTRIC  Existing Electric. Contractor will be constructing underground conduit		COMED
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ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
FIBER	NATIONAL BURIED ASSET. Contractor will be constructing underground conduit nearby, avoid the existing utility.	LEVEL3 (CENTURAYLINK)
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ROSELLE RD, CROSS ROAD AT FOSTER AVE	ELECTRIC	Existing Electric. Contractor will be constructing underground conduit nearby, avoid the existing utility.	COMED
ROSELLE RD, CROSS ROAD ~600' SOUTH OF FOSTER AVE	SANITARY	Existing 15" VCP Sewer. Contractor will be constructing underground conduit nearby, avoid the existing utility.	DOWNERS GROVE SANIT. DIST

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	Phone	E-mail address
ADESTA	Andrew Tate	331-264-3123	ANDREW.TATE@AUS.COM
Wide Open West	Paul Flinkow	630-803-9660	Paul.Flinkow@wowinc.com
BP Pipelines (North			
America) Inc.	Tim Fehr SR/WA	312-809-4719	timothy.fehr@bp.com
AT&T – T (Long Lines)	Vanessa Ross	(217) 814-2314	vf2021@att.com
AT&T Technology			
Operation, Construction	1	000 570 0444	044000 0 ATT 0 0 M
& Engineering - MW	Janet C Ahern	630-573-6414	G11629@ATT.COM
Village of Bloomingdale	Robert Prohaska	630-671-5671	prohaskar@vil.bloomingdale.il.us
Village of Burr Ridge	David Preissig, P.E.	630-323-4733	dpreissig@burr-ridge.gov
Hamilton Partners	Steve Gendusa	630 461-3544	sgendusa@hpre.com
ComEd	Vincent Mazzaferro	630-576-7094	PlanSubmittalsAndMapRequests@exeloncorp.com
Comcast	Martha Gieras	224-229-5862	martha gieras@comcast.com
Crown Castle	Kelly Klinefelter	724-743-6085	fiber.dig@crowncastle.com
Village of Carol Stream	William N. Cleveland, P.E.	630-868-2260	bcleveland@carolstream.org
Illinois American Water	Charles H Schaefer	618-792-8935	Charles.Schaefer@amwater.com
City of Darien	Mary Belmonte	(630) 353-8115	mbelmonte@darienil.gov
DuPage County Public			
Works	Nicholas Kottmeyer, P.E.	630-407-6800	publicworks@dupageco.org
Downers Grove Highway			
Department	Lawrence Anderson	630-719-6620	lawrence.anderson@dgtownship.com
Downers Grove Sanitary			
District	Keith Shaffner	630-969-0664	kshaffner@dgsd.org
DuPage Water			
Commission	Ken Niles	630-834-0100	niles@dpwc.org
Village of Downers			
Grove Public Works	John M. Welch, P.E. CFM	630-434-5494	jwelch@downers.us
Everstream Solutions	Chris Bower	216-402-1829	<u>cbower@everstream.net</u>
Clearwave			
Communications	Roth Clayton	618-841-2600	rclayton@corp.clearwave.com
Village of Glen Ellyn	Dave Buckley	630-547-5513	dbuckley@glenellyn.org
Glenbard Wastewater			
Authority	Matt Streicher P.E., BCEE	630-790-1901 x126	mstreicher@gbww.org
Village of Hinsdale	Dan Deeter	630-789-7030	ddeeter@villageofhinsdale.org
Flagg Creek Water		630-323-3299	
Reclamation District	Dan Stevenson	x6107	DSTEVENSON@FCWRD.ORG
ADESTA	Andrew Tate	331-264-3123	ANDREW.TATE@AUS.COM

One of Dising			
Great Plains Communications	Dustin Nobbe	(812) 623-4432	dnobbe@gpcom.com
Villagee of Itasca	Vijay Gadde	630-228-5671	vgadde@itasca.com
Windstream	Deven L Barnhill	815-715-2287	Deven.Barnhill@windstream.com
		010-710-2207	relocations@lumen.com
Level 3 / Centurylink	Leslie Dingman	620 074 4474	
Village of Lisle	Jason Elias	630-271-4171	jelias@villageoflisle.org
Village of Lombard	David Gorman	630-620-5765	gormand@villageoflombard.org
Lisle Township Highway	1.1 . 0 .	620 064 0057	
Department	John Quinn	630-964-0057	highway@lisletownship.com
MCI/Verizon	Jason Jarvis	(219) 314-6926	jason.jarvis@Verizon.com
Zayo	Tim Payment	630-203-8003	timothy.payment@zayo.com
ADESTA	ANDREW TATE	331-264-3123	ANDREW.TATE@AUS.COM
Milton Township			
Highway Department	Gary Muehlfelt	630-682-4270	mthd@miltonhighway.com
Nicor Gas	Sakibul Forah	630-388-2903	sforah@southernco.com
City of Naperville	William Bolster	630-420-4122	<u>bolsterb@naperville.il.us</u>
Village of Oak Brook	Rick Valent	630-368-5272	<u>rvalent@oak-brook.org</u>
BLUEBIRD NETWORK	Brian Art	847-650-1348	brian.art@bluebirdnetwork.com
Power Solutions			
International		630-445-3065	todd.seerveld@psiengines.com
RedSpeed	Jose Chavez	630-317-5705	Jose.Chavez@redspeed-illinois.com
Village of Roselle	Kristin Mehl	(630) 980-2000	kmehl@roselle.il.us
Sprint	Steve Hughes	513-459-5796	steven.hughes@sprint.com
AT&T (SBC)	Bobby Akhter	630-719-1483	Ba3817@att.com
Turnkey Network	•		
Solutions	Chad Winkler	616-295-6455	cwinkler@tkns.net
USIC Locating Services			
LLČ	Quinanda Candler	(630) 396-8221	QuinandaCandler@usicllc.com
RVP Fiber Company,		, ,	
LLC	Ryan Miedema	616-223-7144	rjmiedema@ussignal.com
Vinakom	•		
Communications	Dicky Patel	847-592-5785	dicky.patel@vinakom.com
Village of Villa Park	Michael Guerra, P.E.	630-834-8505	mguerra@invillapark.com
Village of Willowbrook	Andrew Passero	630-920-2252	apassero@willowbrook.il.us
Village of Woodridge	Robert Myers	630-719-4752	rmyers@vil.woodridge.il.us
City of Wheaton	Vince Laoang	630-260-2110	vlaoang@wheaton.il.us
Wheaton Sanitary District	Zach Billings	630-668-1516	billings@wsd.dst.il.us
Village of Winfield	Tye Loomis	630-933-7140	tloomis@villageofwinfield.com
Magellan Midstream	. 10 1000	333 330 1110	
Partners, L.P.	Tonya L. Cape	913-310-7740	Tonya.Cape@magellanlp.com
Village of Westmont	Jim Cates	630-981-6270	jcates@westmont.il.gov
City of Wood Dale	Jeff Mermuys	630-766-4900	jmermuys@wooddale.com
Buckeye Partners	Dave Jones	610-904-4409	dajones@buckeye.com
West Shore Pipe Line	Dave Jones	610-904-4409	dajones@buckeye.com
York Township Highway	Dave Jolles	010-304-4403	<u>uajones(w)uukeye.com</u>
Department	Dick Schroeder	630-627-220	yorkhwy@comcast.net
Department	DICK OCHIOEGEI	000-021-220	<u> </u>

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 considered 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 above 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 duration 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 when necessary. The Department's contractor is responsible for contacting J.U.L.I.E. prior to all excavation work.

#### COORDINATION WITH OTHER CONTRACTS

The Contractor is advised that certain operations will involve cooperation with other Contractors performing work on or adjacent to this Contract. The Contractor shall cooperate to the fullest extent with Contractors working on adjacent projects in compliance with the provisions of Article 105.08 of the Standard Specifications for Road and Bridge Construction.

The following projects may be under construction during the construction of this Contract and cooperation between contractors may be required:

- Downtown Sidewalk Improvements, Project No. ST-20-05, Village of Lombard, St Charles Rd from Elizabeth St to Garfield Ave
- 22<sup>nd</sup> Street Shared-Use Path, Section No. 22-00162-00-BT, Village of Lombard, 22<sup>nd</sup> St (south side) from Finley Rd to Meyers Rd
- Large Diameter Sewer Rehabilitation, Project No. SAN-19-01, Village of Lombard, Main St at Washington Blvd.
- North Grace Street Utility Improvements, Project No. WA-22-01, Village of Lombard, St Charles Rd at Grace St
- Central Signal System Expansion 3, Project No. IDLD(702), IDOT Contract No. 61H22, Section No. 19-DCCSS-03-TL, Various Routes, Various Locations
- FAP 870 (IL Route 53) Sidewalk Improvement, Project No. 08MC(421), IDOT Contract No. 61F88, Section No. 17-00077-00-SW, Hobson Rd to Mulligan Dr
- FAU 1467 (CH 34) (31st Street) Widening and Resurfacing, Project No. NE80-(530), IDOT Contract No. 61G12, Section 14-00259-05-CH, Meyers Rd to York Rd
- Elgin O'Hare, Various Projects by ISTHA

#### COORDINATION WITH THE VILLAGE OF LOMBARD

For construction on or adjacent to any Village roadways, the Contractor will be required to contact the Village of Lombard, as listed below, to notify them one week prior to construction of any work on or adjacent to their right of way.

The Contractor is responsible for meeting all requirements of the Village of Lombard. The Contractor is to contact the Village of Lombard to determine any requirements not listed herein.

When work is to be performed at Village of Lombard locations, and the special provisions direct the Contractor to notify specific individuals by title, the below contact information should be used in place of the indicated IDOT or DuDOT personnel.

### Contact Information:

Mike Spolar Village Engineer Village of Lombard 255 E Wilson Ave Lombard, IL 60148 (630) 620-5975 spolarm@villageoflombard.org

#### COORDINATION WITH THE CITY OF NAPERVILLE

For construction on or adjacent to any City roadways, the Contractor will be required to contact the City of Naperville, as listed below, to notify them one week prior to construction of any work on or adjacent to their right of way.

The Contractor is responsible for meeting all requirements of the City of Naperville. The Contractor is to contact the City of Naperville to determine any requirements not listed herein.

All new conduits must maintain 24" radial separation when installed parallel and 12" vertical separation when crossing existing City facilities. JULIE, locate, protect and hand dig as required to avoid conflict or damage to existing City facilities.

Accessing City Street light controllers, electrical pedestals, electrical transformers, or other City owned equipment is strictly prohibited. These actions are subject to fines and penalties per the Electric Service Rules and Policies up to and including the inability to obtain permits. Should access be required for the placement of conduits and/or conductors, the Contractor must contact City Dispatch at 630-420-6187, at least 48 hours in advance to schedule an appointment with Electric Utility personnel.

The Naperville Fire Department shall be notified at least 48 hours prior to any closures on or adjacent to City roadways at 630-305-5900. The date of closure and date of reopening shall be provided to the Naperville Fire Department with the notification.

All qualified electrical workers require appropriate arc flash PPE to access energized equipment, per NFPA 70E. Workers with inadequate PPE will be denied access to energized equipment.

#### Contact Information:

Eric Mikszta, P.E. (630) 420-6180

## TRAFFIC CONTROL PLAN (D1)

Effective: September 30, 1985 Revised: January 1, 2007

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

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

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

STANDARDS: 701006	701011	701101	701106
701301	701311	701426	701427
701501	701502	701601	701602
701606	701701	701801	701901

#### **DETAILS**:

Traffic Control and Protection for Side Roads, Intersections, and Driveways (TC-10)

Traffic Control and Protection at Turn Bays (to remain open to traffic) (TC-14)

Traffic Control for Freeway Shoulder Closures and Partial Ramp Closures (TC-17)

## SPECIAL PROVISIONS:

Maintenance of Roadways (D1)

Public Convenience and Safety (D1)

Keeping Arterial Roadways Open to Traffic (Lane Closures Only)

Work Zone Traffic Control Devices (BDE)

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (PROJECT SPECIFIC)

<u>Description</u>. This work shall consist of the removal and disposal of regulated substances according to Section 669 of the Standard Specifications as revised below.

<u>Contract Specific Sites.</u> The excavated soil and groundwater within the areas listed below shall be managed as either "uncontaminated soil", hazardous waste, special waste or non-special waste. For stationing, the lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit, whichever is less.

<u>Soil Disposal Analysis.</u> When the waste material requires sampling for landfill disposal acceptance, the Contractor shall secure a written list of the specific analytical parameters and analytical methods required by the landfill. The Contractor shall collect and analyze the required number of samples for the parameters required by the landfill using the appropriate analytical procedures. A copy of the required parameters and analytical methods (from landfill email or on

landfill letterhead) shall be provided as Attachment 4A of the BDE 2733 (Regulated Substances Final Construction Report). The price shall be responsible for determining the specific disposal facilities to be utilized; and collect and analyze any samples required for disposal facility acceptance using a NELAP certified analytical laboratory registered with the State of Illinois.

## Site 1: 27 West St. Charles Rd, West Chicago, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

# Site 2: 2N255 County Farm Rd, West Chicago, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 3: 2001 Ogden Ave, Lisle, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 4: 1917 Ogden Ave, Lisle, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 5: 103 W Lake St, Bloomingdale, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 6: 128 N Bloomingdale Rd, Bloomingdale, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 7: 152 N Bloomingdale Rd, Bloomingdale, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 8: 4 W Irving Park Rd, Roselle, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 9: 403 N Roselle Rd, Roselle, IL

## Site 10: 444 W 22nd St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 11: 1 E Roosevelt Rd, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 12: 1150 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 13: 1014 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 14: 610 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 15: 591 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 16: 400-412 S Main St, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 17: 338-350 S Main St, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 18: 345 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

# Site 19: 330 S Main St, Lombard, IL

## Site 20: 300-310 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 21: 220 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 22: 130 S Main St, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 23: 15 E Parkside Ave, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 24: 3815 Highland Ave, Downers Grove, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 25: 203 Yorktown Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 26: 18 W 700 Thorndale Rd, Wood Dale, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 27: 1005 E Division St, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 28: 321 S Westmore, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 29: 250 S Westmore, Lombard, IL

### Site 30: 200 S Westmore, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 31: 543 N Wood Dale Rd, Wood Dale, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 32: 100 Mittel Drive, Wood Dale, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 33: 900 N Wood Dale Rd, Wood Dale, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 34: 2800 S Midwest Rd, Oak Brook, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 35: 7532 Cass Ave, Darien, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 36: 7533 Cass Ave, Darien, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 37: 6200 S Madison St, Hinsdale, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 38: 3450 Hobson Rd, Woodridge, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 39: 3004 Hobson Rd, Woodridge, IL

## Site 40: 133 Plainfield Rd, Darien, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 41: 5421 Main (Maple) St, Lisle, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 42: 1117 Maple Ave, Lisle, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 43: 3400 St Paschal Dr, Oak Brook, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 44: 1356 Gary Ave, Wheaton, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 45: 881 W St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 46: 309 W St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 47: 226 W St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 48: 225 W St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 49: 143 W St Charles Rd, Lombard, IL

### Site 50: 50 E St Charles Rd, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 51: 236 E St Charles Rd, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 52: 404 E St Charles Rd, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 53: 600-611 Western Ave, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 54: 638 E St Charles Rd, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## Site 55: 833 E St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 56: 938 E St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

#### Site 57: 935 E St Charles Rd, Lombard, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 58: 1000 N Wood Dale Rd, Wood Dale, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

### Site 59: 2010 S Highland Ave, Lombard, IL

Site 60: 2150 S Highland Ave, Lombard, IL

All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

Site 61: 9S610 Green Rd, Naperville, IL

• All excavations planned at this site. This material meets the criteria of Article 669.05(a)(1) and shall be managed in accordance to Article 669.05. Potential contaminants of concern sampling parameters: VOCs, SVOCs and Metals.

## **Work Zones**

Three distinct OSHA HAZWOPER work zones (exclusion, decontamination, and support) shall apply to projects adjacent to or within sites with documented leaking underground storage tank (LUST) incidents, or sites under management in accordance with the requirements of the Site Remediation Program (SRP), Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or as deemed necessary. For this project, the work zones apply for the following ISGS PESA Sites:

Site 1: LUST Site with NFR 5/3/1999 (Recorded 9/3/1999).

Site 2: LUST Site with NFR 8/13/2019 (Recorded 8/21/2019).

Site 3: LUST Site with NFR 3/17/2011 (Recorded 4/15/2011).

Site 4: UST and LUST Site with multiple NFR(s)

NFR 5/19/2015 (Recorded 6/2/2015) with groundwater use restriction.

NFR 4/30/2012 (Recorded 5/21/2021)

Non-LUST 10/25/2001 with no NFR Listed

NFR 3/10/2000 (Recorded 4/25/2000)

NFR 6/18/1997 (Recorded 5/11/1998)

NFR 7/19/2000 (Recorded 8/28/2000)

Site 5: LUST Site with NFR 11/02/1992

Site 6: LUST Site with NFR 6/24/1998 (Recorded 7/13/1998).

Site 7: LUST Site with NFR 7/8/1998

Site 8: UST and LUST Site with NFR 4/9/2001 with groundwater use restriction and HAA.

Site 9: LUST Site with multiple NFR(s)

NFR 5/20/2005 (Recorded 6/29/2005)

NFR 11/7/1995

Site 10: UST and LUST Site with NFR 1/27/1998 (Recorded 2/6/1998)

Site 11: LUST Site with multiple NRF(s)

Non-LUST 5/28/13

NFR Date 6/4/2002 (Recorded 6/24/2002) with Pavement Barrier, groundwater use restriction, Worker Caution and HAA

Site 12: LUST Site

Non-LUST 7/18/2002

Non-LUST 9/8/2000

NFR Date 11/29/2004 (Recorded 1/10/2005) with Building/Pavement Barrier, groundwater use restriction, Industrial/Commercial Land Use Restriction, and Worker Caution.

Site 13: LUST Site (Heating Oil 3/21/2011)

Site 15: LUST Site with NFR 1/14/1993

Site 16: LUST Site with NFR 9/13/2002 (Recorded 5/14/2002) with Pavement Barrier

Site 17: LUST Site with NFR 2/24/2021

Site 18: LUST Site with NFR 8/30/1993

Site 19: LUST Site with 45-Day Report 6/7/1999

Site 20: LUST Site with multiple NFR(s)

NFR 7/17/2006 (Recorded 8/3/2006) with Groundwater use restriction and HAA NFR 6/18/1993

Site 21: LUST Site with

Heating-Oil 3/16/2004

NFR 3/7/1994

Site 22: LUST Site with NFR 6/22/2004 (Recorded 8/9/2004)

Site 23: LUST Site with multiple NFR(s)

NFR 1/8/2010 (Recorded 3/12/2010) with Ordinance

NFR 10/1/1999 (Recorded 11/23/1999)

Site 25: LUST Site with NFR 6/15/2004 (Recorded 3/8/2005)

Site 26: LUST Site with NFR 4/19/1995

Site 27: LUST Site with NFR 2/6/2019 (Recorded 3/22/2019)

Site 28: LUST Site with

45-Day Report 8/8/1997

45-Day Report 2/29/1988

Site 29: LUST Site with multiple NFR(s)

NFR 5/8/2018 (Recorded 6/20/2018)

NFR 9/25/2001 (Recorded 11/5/2001)

Site 30: LUST Site (Heating-Oil 3/4/2002)

Site 31: LUST Site with NFR 2/8/2011

Site 32: LUST Site with 45-Day Report 10/16/2019

Site 33: LUST Site (Heating-Oil 7/17/2008)

Site 34: LUST Site with NFR 2/26/1996

Site 35: LUST Site with multiple NFR(s)

NFR 5/31/2018 (Recorded 6/7/2018) with groundwater use restriction, Industrial/Commercial Land Use Restriction.

NFR 8/17/2010 (Recorded 9/13/2010) with Building/Pavement Barriers

Site 36: LUST Site with multiple NFR(s)

NFR 1/14/2014 (Recorded 2/10/2014) with Ordinance

NFR 1/20/2000 (Recorded 5/12/2000) with Worker Caution and HAA

Site 37: LUST Site with NFR 8/25/1999 (Recorded 9/15/1999)

Site 38: LUST Site with NFR 3/23/2004 (Recorded 5/5/2004)

Site 39: LUST Site with

Non-LUST 3/5/2008 (Letter 3/5/2008)

NFR 3/27/2000 (Recorded 4/10/2000) with Pavement Barrier, groundwater use restriction and worker caution

Site 40: LUST Site NFR 4/22/2002 (Recorded 8/28/2002)

Site 41: LUST Site with NFR 11/5/2004 (Recorded 11/29/2004) with Pavement Barrier, Groundwater Use Restriction, Worker Caution, Soil Handling and HAA.

Site 42: LUST Site with NFR 10/19/2012 (Recorded 11/9/2012) with Groundwater use restriction and HAA

Site 43: LUST Site with NFR 1/30/2009

Site 44: LUST Site (Heating-Oil 9/22/2000)

Site 45: LUST Site with IEPA date 6/25/1990

Site 46: LUST Site with NFR 2/10/2006 (Recorded 3/21/2006)

Site 47: LUST Site with NFR 9/17/2001 (Recorded 9/28/2001) with Groundwater Use Restriction

Site 48: LUST Site with NFR 8/28/1992

Site 49: LUST Site with

IEMA 11/28/2003 NFR 3/17/1995

Site 50: LUST Site with

IEMA 7/18/2007 NFR 7/31/2020

Site 51: LUST Site with IEMA 1/3/1997

Site 52: LUST Site with NFR 5/16/2005 (Recorded 8/5/2005)

Site 53: LUST Site with NFR 9/22/1994

Site 54: LUST Site with NFR 5/21/2002 (Recorded 7/24/2002) Site 55: LUST Site with NFR 4/12/2007 (Recorded 1/26/2010)

Site 56: LUST Site with 45-Day Report 2/11/2002

Site 57: LUST Site with NFR 5/11/2005 (Recorded 7/8/2005) with Pavement Barriers,

Groundwater Use Restriction, Worker Caution and HAA

Site 58: LUST Site with

NFR 8/15/2012 (Recorded 10/22/2012) Non-LUST 8/3/2001 (Letter 8/3/2001) Non-LUST 11/5/1992 (Letter 11/5/1992)

Site 59: LUST Site with NFR 7/16/1993

Site 60: LUST Site with

NFR 12/13/2006 (Recorded 1/29/2007) with Groundwater Use Restriction

Non-LUST 10/18/2001 (Letter 10/18/2001) NFR 11/8/2001 (Recorded 12/13/2001)

Site 61: LUST Site and NPL

Non-NPL 8/23/1989

NFR 9/1/1998 (Recorded 1/21/199)

Additional information on the above sites is available from DuPage County Division of Transportation.

# **AVAILABLE REPORTS**

☐ No project specific reports were prepared.
When applicable, the following checked reports and record information is available for Bidders reference upon request:
☐ Record structural plans
☐ Preliminary Site Investigation (PSI) (IDOT ROW)
☐ Preliminary Site Investigation (PSI) (Local ROW)
☐ Preliminary Environmental Site Assessment (PESA) (IDOT ROW)
☑ Preliminary Environmental Site Assessment (PESA) (Local ROW)
☐ Soils/Geotechnical Report
☐ Boring Logs
☐ Pavement Cores
□ Location Drainage Study (LDS)
☐ Hydraulic Report
☐ Noise Analysis
□ Other:
These endings these separate should require these

Those seeking these reports should request access from:

William C. Eidson, P.E., PTOE DuPage County Division of Transportation Assistant County Engineer

Phone: (630) 407-6900

Email: William.eidson@dupageco.org

### TRAFFIC SIGNAL GENERAL REQUIREMENTS

Effective: May 22, 2002 Revised: March 25, 2016

800.01TS

These Traffic Signal Special Provisions and the "District One Standard Traffic Signal Design Details" supplement the requirements of the State of Illinois "Standard Specifications for Road and Bridge Construction." The intent of these Special Provisions is to prescribe the materials and construction methods commonly used for traffic signal installations.

- All material furnished shall be new unless otherwise noted herein.
- Traffic signal construction and maintenance work shall be performed by personnel holding current IMSA Traffic Signal Technician Level II certification. A copy of the certification shall be immediately available upon request of the Engineer.
- The work to be done under this contract consists of furnishing, installing and maintaining all traffic signal work and items as specified in the Plans and as specified herein in a manner acceptable and approved by the Engineer.

### Definitions of Terms.

Add the following to Section 101 of the Standard Specifications:

101.56 Vendor. Company that sells a particular type of product directly to the contractor or the Equipment Supplier.

101.57 Equipment supplier. Company that supplies, represents and provides technical support for IDOT District One approved traffic signal controllers and other related equipment. The Equipment Supplier shall be located within IDOT District One and shall:

- Be full service with on-site facilities to assemble, test and trouble-shoot traffic signal controllers and cabinet assemblies.
- Maintain an inventory of IDOT District One approved controllers and cabinets.
- Be staffed with permanent sales and technical personnel able to provide traffic signal controller and cabinet expertise and support.
- Technical staff shall hold current IMSA Traffic Signal Technician Level III certification and shall attend traffic signal turn-ons and inspections with a minimum 14 calendar day notice.

#### Submittals.

Revise Article 801.05 of the Standard Specifications to read:

All material approval requests shall be submitted electronically through the District's SharePoint System unless directed otherwise by the Engineer. Electronic material submittals shall follow the District's Traffic Operations Construction Submittals guidelines. General requirements include:

- 1. All material approval requests shall be made prior to or no later than the date of the preconstruction meeting. A list of major traffic signal items can be found in Article 801.05. Material or equipment which is similar or identical shall be the product of the same manufacturer, unless necessary for system continuity. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
- 2. Product data and shop drawings shall be assembled by pay item. Only the top sheet of each pay item submittal will be stamped by the Department with the review status, except

shop drawings for mast arm pole assemblies and the like will be stamped with the review status on each sheet.

- 3. Original manufacturer published product data and shop drawing sheets with legible dimensions and details shall be submitted for review.
- 4. When hard copy submittals are necessary, four complete copies of the manufacturer's descriptive literatures and technical data for the traffic signal materials shall be submitted. For hard copy or electronic submittals, the descriptive literature and technical data shall be adequate for determining whether the materials meet the requirements of the plans and specifications. If the literature contains more than one item, the Contractor shall indicate which item or items will be furnished.
- 5. When hard copy submittals are necessary for structural elements, four complete copies of the shop drawings for the mast arm assemblies and poles, and the combination mast arm assemblies and poles showing, in detail, the fabrication thereof and the certified mill analyses of the materials used in the fabrication, anchor rods, and reinforcing materials shall be submitted.
- 6. Partial or incomplete submittals will be returned without review.
- 7. Certain non-standard mast arm poles and special structural elements will require additional review from IDOT's Central Office. Examples include ornamental/decorative, non-standard length mast arm pole assemblies and monotube structures. The Contractor shall account for the additional review time in his schedule.
- 8. The contract number or permit number, project location/limits and corresponding pay code number must be on each sheet of correspondence, catalog cuts and mast arm poles and assemblies drawings.
- 9. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall be complete with all test data, dates, and times.
- 10. After the Engineer reviews the submittals for conformance with the design concept of the project, the Engineer will stamp the drawings indicating their status as 'Approved', 'Approved-As-Noted', 'Disapproved', or 'Incomplete'. Since the Engineer's review is for conformance with the design concept only, it is 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, layout drawings, or other documents by the Department's approval thereof. The Contractor must still be in full compliance with contract and specification requirements.
- 11. The Contractor shall secure approved materials in a timely manner to assure construction schedules are not delayed.
- 12. All submitted items reviewed and marked 'APPROVED AS NOTED', 'DISAPPROVED', or 'INCOMPLETE' are to be resubmitted in their entirety, unless otherwise indicated within the submittal comments, with a disposition of previous comments to verify contract compliance at no additional cost to the contract.
- 13. Exceptions to and deviations from the requirements of the Contract Documents will not be allowed. It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Engineer. In general, substitutions will not be acceptable. Requests for substitutions must demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Engineer.
- 14. Contractor shall not order major equipment such as mast arm assemblies prior to Engineer approval of the Contractor marked proposed traffic signal equipment locations to assure proper placement of contract required traffic signal displays, push buttons and other

facilities. Field adjustments may require changes in proposed mast arm length and other coordination.

## Marking Proposed Locations.

Revise "Marking Proposed Locations for Highway Lighting System" of Article 801.09 to read "Marking Proposed Locations for Highway Lighting System and Traffic Signals."

Add the following to Article 801.09 of the Standard Specifications:

It shall be the contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction. This shall include locating the mast arm foundations and verifying the mast arms lengths.

### Inspection of Electrical Systems.

Add the following to Article 801.10 of the Standard Specifications:

(c) All cabinets including temporary traffic signal cabinets shall be assembled by an approved equipment supplier in District One. The Department reserves the right to request any controller and cabinet to be tested at the equipment supplier's facility prior to field installation, at no extra cost to this contract.

### Maintenance and Responsibility.

Revise Article 801.11 of the Standard Specifications to read:

- a. Existing traffic signal installations and/or any electrical facilities at all or various locations may be altered or reconstructed totally or partially as part of the work on this Contract. The Contractor is hereby advised that all traffic control equipment, presently installed at these locations, may be the property of the State of Illinois, Department of Transportation, Division of Highways, County, Private Developer, Municipality or Transit Agency in which they are located. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this contract or those which have the item "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," shall become the full responsibility of the Contractor. The Contractor shall supply the Engineer, Area Traffic Signal Maintenance and Operations Engineer, IDOT ComCenter and the Department's Electrical Maintenance Contractor with two 24-hour emergency contact names and telephone numbers.
- b. Automatic Traffic Enforcement equipment such as red lighting running and railroad crossing camera systems are owned and operated by others and the Contractor shall not be responsible for maintaining this equipment.
- c. 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 and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
- d. When the project has a pay item for "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," the Contractor must notify both the Area

Traffic Signal Maintenance and Operations Engineer at (847) 705-4424 and the Department's Electrical Maintenance Contractor, of their intent to begin any physical construction work on the Contract or any portion thereof. This notification must be made a minimum of seven (7) working days prior to the start of construction to allow sufficient time for inspection of the existing traffic signal installation(s) and transfer of maintenance to the Contractor. The Department will attempt to full-fill the Contractor's inspection date request(s), however workload and other conditions may prevent the Department from accommodating specific dates or times. The Contractor shall not be entitled to any other compensation if the requested inspection date(s) cannot be scheduled by the Department. If work is started prior to an inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection. The Contractor will become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs or 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.

- e. The Contractor is advised that the existing and/or temporary 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.
- f. The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals and other equipment noted herein. Any inquiry, complaint or request by the Department, the Department's Electrical Maintenance Contractor or the public, shall be investigated and repairs begun within one hour. Failure to provide this service will result in liquidated damages of \$1000 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$1000 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. The Department may inspect any signalizing device on the Department's highway system at any time without notification.
- g. 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.

- h. 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.
- i. 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 for separately but shall be included in the contract.

## Damage to Traffic Signal System.

Add the following to Article 801.12(b) of the Standard Specifications to read:

Any traffic signal control equipment 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 are only allowed at the bases pf post and mast arms.

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 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.

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.

## Traffic Signal Inspection (TURN-ON).

Revise Article 801.15(b) of the Standard Specifications to read:

It is the intent to have all electric work completed and equipment field tested by the Equipment Supplier prior to the Department's "turn-on" field inspection. If in the event the Engineer determines work is not complete and the inspection will require more than two (2) hours to complete, the inspection shall be canceled and the Contractor will be required to reschedule at another date. The maintenance of the traffic signals will not be accepted until all punch list work is corrected and re-inspected.

When the road is open to traffic, except as otherwise provided in Section 850 of the Standard Specifications, the Contractor may request a turn-on and inspection of the completed traffic signal installation at each separate location. This request must be made to the Area Traffic Signal Maintenance and Operations Engineer at (847) 705-4424 a minimum of seven (7) working days prior to the time of the requested inspection. The Department will attempt to full-fill the Contractor's turn-on and inspection date request(s), however workload and other conditions may prevent the Department from accommodating specific dates or times. The Contractor shall not be

entitled to any other compensation if the requested turn-on and inspection date(s) cannot be scheduled by the Department. The Department will not grant a field inspection until written or electronic notification is provided from the Contractor that the equipment has been field tested and the intersection is operating according to Contract requirements. The Contractor must invite local fire department personnel to the turn-on when Emergency Vehicle Preemption (EVP) is included in the project. When the contract includes the item RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, OPTIMIZE TRAFFIC SIGNAL SYSTEM, or TEMPORARY TRAFFIC SIGNAL TIMINGS, the Contractor must notify the SCAT Consultant of the turn-on/detour implementation schedule, as well as stage changes and phase changes during construction.

The Contractor must have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and turn-on of the traffic signal installation. The Contractor shall be responsible to provide a police officer to assist with traffic control at the time of testing.

The Contractor shall provide a representative from the control equipment vendor's office who is knowledgeable of the cabinet design and controller functions to attend the traffic signal inspection for both permanent and temporary traffic signal turn-ons.

Upon demonstration that the signals are operating and all work is completed in accordance with the Contract and to the satisfaction of the Engineer, the Engineer will then allow the signals to be placed in continuous operation. The Agency that is responsible for the maintenance of each traffic signal installation will assume the maintenance upon successful completion of this inspection.

The District requires the following Final Project Documentation from the Contractor at traffic signal turn-ons in electronic format in addition to hard copies where noted. A CD/DVD shall be submitted with separate folders corresponding to each numbered title below. The CD/DVD shall be labelled with date, project location, company and contract or permit number. Record Drawings, Inventory and Material Approvals shall be submitted prior to traffic signal turn-on for review by the Department as described here-in.

#### Final Project Documentation:

- 1. Record Drawings. Signal plans of record with field revisions marked in red ink. One hard copy set of 11"x17" record drawings shall also be provided.
- 2. Inventory. Inventory of new and existing traffic signal equipment including cabinet types and devices within cabinets in an Excel spread sheet format. One hard copy shall also be provided.
- Pictures. Digital pictures of a minimum 12M pixels of each intersection approach showing all traffic signal displays and equipment. Pictures shall include controller cabinet equipment in enough detail to clearly identify manufacture and model of major equipment.
- 4. Field Testing. Written notification from the Contractor and the equipment vendor of satisfactory field testing with corresponding material performance measurements, such as for detector loops and fiber optic systems (see Article 801.13). One hard copy of all contract required performance measurement testing shall also be provided.
- 5. Materials Approval. The material approval letter. A hard copy shall also be provided.
- 6. Manuals. Operation and service manuals of the signal controller and associated control equipment. One hard copy shall also be provided.

- 7. Cabinet Wiring Diagram and Cable Logs. Five (5) hard copies 11" x 17" of the cabinet wiring diagrams shall be provided along with electronic pdf and dgn files of the cabinet wiring diagram. Five hard copies of the cable logs and electronic excel files shall be provided with cable #, number of conductors and spares, connected device/signal head and intersection location.
- 8. Controller Programming Settings. The traffic signal controller's timings; backup timings; coordination splits, offsets, and cycles; TBC Time of Day, Week and Year Programs; Traffic Responsive Program, Detector Phase Assignment, Type and Detector Switching; and any other functions programmable from the keyboard. The controller manufacturer shall also supply a printed form, not to exceed 11" x 17" for recording that data noted above. The form shall include a location, date, manufacturer's name, controller model and software version. The form shall be approved by the Engineer and a minimum of three (3) copies must be furnished at each turn-on. The manufacturer must provide all programming information used within the controller at the time of turn-on.
- 9. Warrantees and Guarantees. All manufacturer and contractor warrantees and guarantees required by Article 801.14.
- 10. GPS coordinate of traffic signal equipment as describe in the Record Drawings section herein.

Acceptance of the traffic signal equipment by the Department shall be based upon inspection results at the traffic signal "turn on", completeness of the required documentation and successful operation during a minimum 72 hour "burn-in" period following activation of the traffic signal. If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. The Contractor shall be responsible for all traffic signal equipment and associated maintenance thereof until Departmental acceptance is granted.

All equipment and/or parts to keep the traffic signal installation operating shall be furnished by the Contractor. No spare traffic signal equipment is available from the Department.

All punch list work shall be completed within two (2) weeks after the final inspection. The Contractor shall notify the Electrical Maintenance Contractor to inspect all punch list work. Failure to meet these time constraints shall result in liquidated damage charges of \$500 per month per incident.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements shall be subject to removal and disposal at the Contractor's expense.

### Record Drawings.

The requirements listed for Electrical Installation shall apply for Traffic Signal Installations in Article 801.16. Revise the 2<sup>nd</sup> paragraph of Article 801.16 of the Standard Specifications to read:

"When the work is complete, and seven days before the request for a final inspection, the reduced-size 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 for review and approval.

If the contract consists of multiple intersections, each intersection shall be saved as an individual PDF file with TS# and location name in its file name.

In addition to the record drawings, copies of the final catalog cuts which have been Approved or Approved as Noted shall be submitted in PDF format along with the record drawings. The PDF files shall clearly indicate the pay item either by filename or PDF Table of Contents referencing the respective pay item number for multi-item PDF files. Specific part or model numbers of items which have been selected shall be clearly visible."

As part of the record drawings, the Contractor shall inventory all traffic signal equipment, new or existing, on the project and record information in an Excel spreadsheet. The inventory shall include equipment type, model numbers, software manufacturer and version and quantities.

Add the following to Article 801.16 of the Standard Specifications:

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

- All Mast Arm Poles and Posts
- Traffic Signal Wood Poles
- Rail Road Bungalow
- UPS
- Handholes
- Conduit roadway crossings
- Controller Cabinets
- Communication Cabinets
- Electric Service Disconnect locations
- CCTV Camera installations
- Fiber Optic Splice Locations
- Conduit Crossings

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:

- File shall be named: TSXXX-YY-MM-DD (i.e. TS22157 15-01-01)
- Each intersection shall have its own file
- Row 1 should have the location name (i.e. IL 31 @ Klausen)
- Row 2 is blank
- Row 3 is the headers for the columns
- Row 4 starts the data
- Column A (Date) should be in the following format: MM/DD/YYYY
- Column B (Item) as shown in the table below
- Column C (Description) as shown in the table below
- Column D and E (GPS Data) should be in decimal form, per the IDOT special provisions

## Examples:

Date	Item	Description	Latitude	Longitude
01/01/2015	MP (Mast Arm Pole)	NEQ, NB, Dual, Combination Pole	41.580493	-87.793378
01/01/2015	HH (Handhole)	Heavy Duty, Fiber, Intersection, Double	41.558532	-87.792571
01/01/2015	ES (Electrical Service)	Ground mount, Pole mount	41.765532	-87.543571
01/01/2015	CC (Controller Cabinet)		41.602248	-87.794053
01/01/2015	RSC (Rigid Steel Crossing)	IL 31 east side crossing south leg to center HH at Klausen	41.611111	-87.790222
01/01/2015	PTZ (PTZ)	NEQ extension pole	41.593434	-87.769876
01/01/2015	POST (Post)		41.651848	-87.762053
01/01/2015	MCC (Master Controller Cabinet)		41.584593	-87.793378
01/01/2015	COMC (Communication Cabinet)		41.584600	-87.793432
01/01/2015	BBS (Battery Backup System)		41.558532	-87.792571
01/01/2015	CNCR (Conduit Crossing)	4-inch IL 31 n/o of Klausen	41.588888	-87.794440

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 1 foot. 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.

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 a minimum 1 foot 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."

Delete the last sentence of the 3<sup>rd</sup> paragraph of Article 801.16.

#### Locating Underground Facilities.

Revise Section 803 to the Standard Specifications to read:

IDOT traffic signal facilities are not part of any of the one-call locating service such as J.U.L.I.E or Digger. If this Contract requires the services of an Electrical Contractor, the Contractor shall be responsible at his/her own expense for locating existing IDOT electrical facilities prior to performing any work. If this Contract does not require the services of an Electrical Contractor, the Contractor may request one free locate for existing IDOT electrical facilities from the District

One Electrical Maintenance Contractor prior to the start of any work. Additional requests may be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any facilities damaged during construction at their expense.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities, locally owned equipment, and leased enforcement camera system facilities, the local Counties or Municipalities may need to be contacted: in the City of Chicago contact Digger at (312) 744-7000 and for all other locations contact J.U.L.I.E. at 1-800-892-0123 or 811.

## Restoration of Work Area.

Add the following article to Section 801 of the Standard Specifications:

801.17 Restoration of work area. Restoration of the traffic signal work area shall be included in the related pay items such as foundation, conduit, handhole, underground raceways, etc. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be replaced in kind. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded. All brick pavers disturbed in the work area shall be restored to their original configuration as directed by the Engineer. All damaged brick pavers shall be replaced with a comparable material approved by the Engineer. Restoration of the work area shall be included in the contract without any extra compensation allowed to the Contractor.

## Bagging Signal Heads.

Light tan colored traffic and pedestrian signal reusable covers shall be used to cover dark/unenergized signal sections and visors. Covers shall be made of outdoor fabric with urethane coating for repelling water, have elastic fully sewn around the cover ends for a tight fit over the visor, and have a minimum of two straps with buckles to secure the cover to the backplate. A center mesh strip allows viewing without removal for signal status testing purposes. Covers shall include a message indicating the signal is not in service.

## **DUPAGE COUNTY DOT TRAFFIC SIGNAL GENERAL REQUIREMENTS**

Revised: DC800.01

All work and equipment performed and installed under this Contract shall be governed by and shall comply with:

SPECIFICATION	ADOPTED/DATED	
The State of Illinois "Standard Specifications for Road and Bridge Construction" referred to as "Standard Specifications"	January 1, 2022	
The State of Illinois "Manual on Uniform Traffic Control Devices for Streets and Highways," referred to as "MUTCD"	November 2021	
The National Electrical Code referred to as "NEC"	2011 Edition	
The National Electrical Manufacturers Association (All publications for traffic control items) referred to as "NEMA"	All applicable current documents published prior to Contract Letting Date	
The International Municipal Signal Association ("Official Wire & Cable Specifications Manual,") referred to as "IMSA"	All applicable current documents published prior to Contract Letting Date	
The Institute of Transportation Engineers ATC 5.2b Standard	September 25, 2006	
AASHTO "Standard Specifications" LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals	2015 Edition & 2017 Interim Revisions	
Supplemental Specifications and Recurring Special Provisions	January 1, 2022	

The project Special Provisions supplement the above specifications, manuals, and codes. In case of conflict with any part or parts of said documents, the project Special Provisions shall take precedence and shall govern.

The following terms and acronyms are used in the DUDOT traffic signal special provisions:

IDOT Illinois Department of Transportation

District 1 IDOT District 1

DUDOT The DuPage County Division of Transportation
Traffic Engineer The DUDOT Traffic Engineer or designee

Central Signal System DuPage County's ITS System

The intent of these Special Provisions is to prescribe the materials and construction methods commonly used in traffic signal installations. The locations and the details of all installations shall be indicated on the plans or as directed by the Engineer.

All traffic signal work related to the traffic signal cabinet shall be performed with at least one electrician holding a current IMSA Traffic Signal Technician Level 2 certification present on site and actively overseeing and directing the work, unless approved in advance by the Traffic Engineer.

The work performed under this Contract shall consist of furnishing and installing all traffic signal work as shown on the plans and as specified herein in a manner acceptable and approved by the Resident Engineer. All materials furnished shall be new unless otherwise noted herein.

The phone number to contact DUDOT for all contract electrical questions or request is (630) 407-6900, which includes requests for detector location approval, transfer of maintenance, Traffic Signal Maintenance Contractor locates, equipment inspections, and traffic signal turn-ons.

### Definitions of Terms.

Add the following to Section 101 of the Standard Specifications:

101.56 Vendor. Company that sells a particular type of product directly to the Contractor or the Equipment Supplier.

101.57 Equipment Supplier. Company that supplies, represents, and provides technical support for District 1 approved traffic signal controllers and other related equipment. The Equipment Supplier shall be located within District 1 and shall:

- a. Be full service with on-site facilities to assemble, test, and trouble-shoot traffic signal controllers and cabinet assemblies.
- b. Maintain an inventory of District 1 approved controllers and cabinets.
- c. Be staffed with permanent sales and technical personnel able to provide traffic signal controller and cabinet expertise and support.
- d. Technical staff shall attend traffic signal "turn-on" and inspection with a minimum 14 calendar day notice.

# **SUBMITTALS**

Revise Article 801.05 of the Standard Specifications to read:

All material approval requests shall be submitted electronically unless otherwise directed by the Traffic Engineer. The submittal shall be by email, and shall include a cover letter and one PDF file with all pay items for the project.

### General requirements include:

- a. All material approval requests shall be submitted within 7 calendar days after the preconstruction meeting. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
- b. Original manufacturer published product data and shop drawing sheets with legible dimensions and details shall be submitted for review.
- c. Product data and shop drawings shall be arranged by pay item. Pages of the submittal should be numbered. If the literature contains more than one item, the Contractor shall indicate which item or items will be furnished.
- d. When hard copy submittals are necessary for another agency, four complete copies of the manufacturer's descriptive literatures and technical data for the traffic signal materials will be submitted, in addition to the electronic copy required above.
- e. When hard copy submittals are necessary for structural elements, four complete copies of the shop drawings for the mast arm assemblies and poles, and the combination mast arm assemblies and poles showing, in detail, the fabrication thereof and the certified mill analyses of the materials used in the fabrication, anchor rods, and reinforcing materials, shall be submitted, in addition to the electronic copy required above.
- f. Partial or incomplete submittals will be returned without review.
- g. Certain non-standard mast arm poles and structures will require additional review from IDOT's Bureau of Bridges and Structures. Examples include special mast arms and nonstandard length mast arm pole assemblies. The Contractor shall account for the additional review time in their schedule.
- h. The County Section Number, permit number, or IDOT contract number, project location/limits and corresponding pay code number shall be on each sheet of correspondence, catalog cuts, and mast arm pole and assembly drawings.
- i. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall include all test data, dates, and times.
- j. The Contractor shall secure approved materials in a timely manner to assure construction schedules are not delayed.
- k. After the Traffic Engineer reviews the submittals for conformance with the design concept of the project, the drawings will be stamped indicating their status as 'APPROVED', 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT'. Review schedule will be according to Article 801.05(b). Since the Traffic Engineer's review is for conformance with the design concept only, it is 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, layout drawings, or other documents by the Traffic Engineer's approval thereof.

- I. All submitted items reviewed and marked 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT' shall be resubmitted in their entirety, unless otherwise indicated within the submittal comments, with a disposition of previous comments to verify Contract compliance at no additional cost to the contract.
- m. It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Resident Engineer. In general, substitutions will not be acceptable. Requests for substitutions shall demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Resident Engineer and the Traffic Engineer.
- n. The Contractor shall not order major equipment (i.e., mast arm assemblies) prior to Resident Engineer approval of the Contractor marked proposed traffic signal equipment locations to assure proper placement of Contract required traffic signal displays, push buttons and other facilities. Field adjustments may require changes in proposed mast arm length and other coordination.

# **MARKING PROPOSED LOCATIONS**

Revise "Marking Proposed Locations for Highway Lighting System" of Article 801.09 to read "Marking Proposed Locations for Highway Lighting System and Traffic Signals."

Add the following to Article 801.09 of the Standard Specifications:

It shall be the Contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction. This shall include locating the mast arm foundations and verifying the mast arms lengths.

### **INSPECTION OF ELECTRICAL SYSTEMS**

Add the following to Article 801.10 of the "Standard Specifications":

(c) All cabinets, including temporary traffic signal cabinets, shall be assembled by an approved Equipment Supplier in District 1. DUDOT reserves the right to request that any controller and cabinet be tested at a District 1 approved Equipment Supplier's facility prior to field installation. Such testing will be at no extra cost to the contract. All permanent or temporary "railroad interconnected" controllers and cabinets, shall be new, built, tested and approved by the controller Equipment Supplier, in the Equipment Supplier's District 1 approved facility, prior to field installation. The test shall be conducted in the presence of DUDOT and Illinois Commerce Commission personnel, or as directed by the Traffic Engineer. The Equipment Supplier shall provide the technical equipment and assistance as required by the Traffic Engineer to fully test this equipment.

# **LIQUIDATED DAMAGES FOR UNTIMELY WORK**

A primary concern is to maintain a safe and efficient roadway for the public. Therefore, the Contractor shall proceed with the traffic signal work as soon as conditions and project staging permit. If in the opinion of the Traffic Engineer construction conditions are suitable for traffic signal work, and the Contractor has not yet begun the traffic signal work, the Resident Engineer shall notify the Contractor to proceed. The Contractor shall begin the traffic signal work within seven

calendar days after notification to proceed. The Contractor shall continue to prosecute the traffic signal work until completion, or until they can no longer proceed due to conditions beyond their control. The Contractor shall notify the Resident Engineer of any conditions impeding and/or delaying their prosecution of the work. Failure by the Contractor to proceed with the traffic signal work as specified herein shall result in liquidated damages of \$500.00 per calendar day per occurrence.

For projects involving detector loop installations or replacement, the following additional conditions apply. If, in the opinion, of the Traffic Engineer construction conditions are suitable for loop installation(s), the Resident Engineer shall notify the Contractor to proceed. The detector loops shall be installed and fully operational within 14 calendar days following notification to proceed by the Resident Engineer. This 14-day period shall be in effect throughout the entire year, including the off season, regardless of the Contractor's working day status. Failure by the Contractor to complete the loop installation(s) within the specified timeframe shall result in liquidated damages in the amount of \$500.00 per calendar day, per intersection.

For projects involving pavement resurfacing where radar, microwave, video, or other above-ground detection systems are included in the plans, the Contractor shall install the proposed detection system and make it operational prior to the grinding of the pavement loops, unless directed otherwise by the Engineer. In this case, the above-ground detection system will function as a temporary detector system, as well as the permanent system. The Contractor shall maintain the system according to these specifications, including adjusting detector orientation and detection zones, as necessary, to maintain proper detection throughout all stages of construction. Failure by the Contractor to install and operate the detector system within the specified timeframe shall result in liquidated damages in the amount of **\$500.00** per calendar day, per intersection.

## MAINTENANCE AND RESPONSIBILITY

Revise Article 801.11 of the "Standard Specifications" to read:

- a. Existing traffic signal installations and/or any electrical facilities at locations included in this Contract may be altered or reconstructed totally or partially as part of the work on this contract. The Contractor is hereby advised that all traffic control equipment presently installed at these locations may be the property of the County of DuPage, State of Illinois, Department of Transportation, Division of Highways, County, Transit Agency, Private Developer, or a local governmental entity. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this Contract that have the pay item MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION, TEMPORARY TRAFFIC SIGNAL INSTALLATION, and/or MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, shall become the full responsibility of the Contractor, unless otherwise approved in advance by the Traffic Engineer. The Contractor shall supply the Resident Engineer and the County's Traffic Signal Maintenance Contractor one 24-hour emergency contact name and telephone number. The Contractor shall provide sufficient qualified personnel to respond to all notifications of malfunctions on a round-the-clock basis (24 hours a day, 7 days a week). The Contractor is required to keep a time and date log of all maintenance items, including the time of the initial report, the response time, and the time of final permanent repair. The Contractor shall provide this information to the Resident Engineer, upon request.
- b. When the project has a pay item for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION, TEMPORARY TRAFFIC SIGNAL INSTALLATION, and/or MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, the Contractor

shall notify the Traffic Engineer at **(630) 407-6900** and the County's Traffic Signal Maintenance Contractor of their intent to begin any physical construction work on the project. This notification shall be a minimum of ten calendar days prior to the start of construction to allow sufficient time for an inspection of the existing traffic signal installation(s) and the transfer of maintenance to the Contractor. If work is started prior to the inspection, maintenance of the traffic signal installation(s) will be immediately transferred to the Contractor without an inspection. The Contractor shall then become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs to or the replacement of damaged equipment shall meet the approval of the Traffic Engineer at the time of final inspection or the traffic signal installation will not be accepted.

- c. DUDOT, regional transit, IDOT, and other agencies may also have equipment connected to existing traffic signal or peripheral equipment including PTZ cameras, switches, transit signal priority (TSP and BRT) servers, modems, traffic counters, and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.
- d. For contracts that include pay items for milling or pavement patching that may result in destruction of loop detectors, but do not include installation or modification of the traffic signals, maintenance transfers are not required. These contracts do require a notification of intent to work and an inspection. A minimum of ten calendar days prior to the loop removal, the Contractor shall notify the Traffic Engineer at (630) 407-6900, at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.
- e. The Contractor is advised that the existing and/or temporary traffic signal installation shall remain in operation during all construction stages, except for the most unavoidable down time. Any plan to shut down the traffic signal installation for a period exceeding 15 minutes shall require prior approval from the Traffic Engineer. Except in extraordinary circumstances, approval to shut down the traffic signal installation will only be granted during the hours of 9:00 A.M. to 3:00 P.M. on weekdays, exclusive of holiday periods. Requests for shutdowns outside of these hours, or during holiday periods, will not be granted unless the Traffic Engineer determines that the alternate schedule is beneficial to DuPage County highway operations. Shutdowns will not be allowed during inclement weather.
- f. The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals. Any inquiry, complaint or request by DUDOT, the County's Traffic Signal Maintenance Contractor or the public, shall be investigated and repairs started. The Contractor shall restore service and complete permanent repairs according to the following Repair Timetable. Failure to provide this service will result in liquidated damages of \$500 per calendar day per occurrence. The Traffic Engineer reserves the right to assign any work not completed within this timeframe to the County's Traffic Signal Maintenance Contractor. All costs associated with the completion of the uncompleted repair shall be the responsibility of the Contractor. Failure to pay these costs to the Traffic Signal Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. County personnel, the County's Traffic Signal Maintenance Contractor, and the County's Network Integration Consultant may inspect any signalizing device on DUDOT's highway system at any time without notification.

- g. At signals where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are operational but not yet accepted by the County, the Contractor shall be responsible for clearing snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment in compliance with the REPAIR TIMETABLE. Two clearly visible signal indications of all colors and arrows are required to be maintained at all time.
- h. In the event of power loss at locations where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are not yet accepted by the County, the Contractor shall be responsible for working with DuPage County personnel to make connections of portable County-supplied generators at the maintained location, as directed by the Traffic Engineer or Resident Engineer.

All items shall be repaired within the period described in the Repair Timetable. The times listed are noncumulative. Any repairs not specifically covered in the Repair Timetable, or described elsewhere, shall be completed within a period matching the most similar line item in the Repair Timetable.

# REPAIR TIMETABLE

(non cumulative)

ITEM	RESPONSE TIME	<u>SERVICE</u> RESTORATION	PERMANENT REPAIRS
KNOCKDOWNS/FAILURE/DAMAGE:			
Cabinet	1 hr	24 hrs	2 wks
Controller (Local or Master)	1 hr	24 hrs	2 wks
Detector Loop/Magnetometer	1 hr	n.a.	2 wks
Loop Detector Amplifier	1 hr	4 hrs	2 wks
Video Detection Camera/Processing Hardware	1 hr	4 hrs	2 wks
PTZ Camera	2 hrs	48 hrs	2 wks
Modem	2 hrs	NWD	2 wks
Load Switch/BIU	1 hr	2 hrs	2 hrs
Signal Head/Lenses	1 hr	2 hrs	NWD
Pole/Mast Arm	1 hr	2 hrs	ENG
Cabling/Conduit	1 hr	4 hrs	ENG
Interconnect/Communication	NWD	NWD	ENG
Graffiti/Advertising	NWD	NWD	NWD
Telemetry, Electrical	1 hr	2 hrs	NWD
Ethernet Switches/Video Encoders	NWD	48 hrs	2 wks
Indicators/switches/LEDs/displays	NWD	n.a.	2 wks
Snow/Ice/Debris/Other Obstructions	1 hr	2 hrs	NWD
Outages not covered elsewhere	1 hr	2 hrs	NWD
Filter/Cleanliness/fans/thermostat	NWD	NWD	n.a.
Misalignment (conflicting)	1 hr	2 hrs	NWD
Misalignment (non-conflicting)	4 hrs	6 hrs	NWD
COMPLAINTS/CALLS/ALARMS:			
Timing/Phasing/Programming	1 hr	2 hrs	ENG
Coordination Alarm/Cycle Fail	NWD	ENG	ENG
Controller Alarm/Status Change	1 hr	NWD	1 wk
Detector Alarm/Status change	NWD	NWD	ENG
UPS	1 hr	2 hrs	2 wks
CMU Flash/Local Flash	1 hr	2 hrs	1 wk
Door Open	1 hr	n.a.	NWD

**LEGEND:** hr=hour, hrs=hours, NWD=next week day, days=calendar days, ENG=acceptable to Traffic Engineer, wk=week, wks=weeks, n.a.=not applicable

# **WORK NEAR HIGHWAY-RAIL GRADE CROSSINGS**

Any proposed activity in the vicinity of a highway-rail grade crossing shall adhere to the guidelines set forth in the 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.

## MODIFICATION OF IDOT SPECIAL PROVISION REQUIREMENTS

When IDOT Special Provisions for traffic signal items are included in a DUDOT Contract or Permit project, the following modifications shall apply to the noted Special Provisions.

<u>Contact Information:</u> The Contractor shall utilize the DUDOT contact information for DUDOT projects in place of the personnel, phone numbers, and directives provided in the following District 1 Special Provisions when they are included in the Contract:

800.02TS Optimize Signal System 800.03TS Re-Optimize Signal System 805.01TS Electric Service Installation 886.01TS Detector Loop 886.02TS Detector Loop Replacement and/or Installation 890.01TS Temporary Traffic Signal Installation 890.02TS Temporary Traffic Signal Timing

All references in the above special provisions to Traffic Signal Engineer, Area Traffic Signal Engineer, Area Traffic Signal Maintenance and Operations Engineer, Bureau of Traffic Operations, Traffic Operations Engineer, State, State's Traffic Signal Maintenance Contractor, and State's Electrical Maintenance Contractor shall be replaced with the DUDOT Traffic Engineer and the phone number shall be **630-407-6900**. Submittals, requests for reviews, scheduling of appointments, and requests for materials and information shall be directed to the DUDOT Traffic Engineer instead of IDOT, District 1, or the State's Maintenance Contractor.

<u>Traffic Signal Timing Consultant Requirements:</u> Add the following paragraph to the following District 1 Special Provisions:

800.02TS Optimize Signal System 800.03TS Re-Optimize Signal System 890.02TS Temporary Traffic Signal Timing

Graphics displays for DUDOT signal systems are not required if the signalized intersection is already connected to the county's Centracs software or if it is being added to Centracs under this contract.

<u>Pedestrian Pushbutton Station Requirements:</u> Add the following paragraph to the following District 1 Special Provisions:

888.01TS Pedestrian Push Button 888.02TS Accessible Pedestrian Signals

The pedestrian push button signs shall be retroreflective R10-3e, 9"x15" signs displaying the "Push Button To Cross" legend with the Walking Man symbol and properly oriented arrow, unless shown otherwise in the plans. The pedestrian push button station shall be yellow with rounded corners sized to accommodate the 9"x15" sign.

If extensions are required to ensure proper positioning of the buttons, the extensions shall be included in the cost of the applicable push button pay item at no additional cost to the contract. Catalog cuts are required for the push button extensions prior to ordering.

All accessible buttons shall be programmed for the audible walk indication regardless of their placement. All buttons shall also be capable of producing a user-selectable audible percussive tone.

The required accessible pedestrian signal training will be scheduled for DUDOT personnel in conjunction with the requesting person or group.

<u>Handhole Requirements:</u> Add the following paragraph to the following District 1 Special Provision:

814.01 TS Handholes

The "Traffic Signals" label for the handhole lid shall also be applicable to DUDOT handholes.

## DAMAGE TO TRAFFIC SIGNAL SYSTEM

Revise Article 801.12(b) of the "Standard Specifications" to read:

Any traffic control equipment damaged or not operating properly from any cause whatsoever shall be repaired and/or replaced. All inoperable components shall be replaced with new equipment meeting the special provisions, or in the absence of applicable special provisions, meeting the requirements of the Traffic Engineer. The Contractor shall provide replacement components at no additional cost to the Contract and/or owner of the traffic signal system. Final repairs or replacement of damaged equipment shall meet the approval of the Traffic 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, unless approved by the Traffic Engineer.

When present, Automatic Traffic Enforcement equipment, including Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause whatsoever, shall be the responsibility of the municipality or the Automatic Traffic Enforcement company according to the Permit or governing agreement.

# **VIDEO AND NETWORK SYSTEM REQUIREMENTS**

For all projects including installation or relocation of video and/or network equipment, the Contractor shall contact the Traffic Engineer at 630-407-6900 after installation to confirm proper operation of the equipment within the Ethernet-based field communications system. This includes confirming that the camera horizon is properly adjusted, camera lens is clear, network settings are correct and all devices are communicating correctly with the Central Signal System. For equipment requiring an IP address or other DUDOT assigned parameters, the Traffic Engineer will provide all available IP and programming details upon request, but no earlier than at the pre-construction meeting. The Contractor should request the information from the Traffic Engineer a minimum of one week in advance of the traffic signal "turn-on." The Contractor shall

be responsible for making any changes necessary to the camera mounting, aiming, and/or equipment programming to meet the DUDOT requirements and/or to operate the equipment to the satisfaction of the Traffic Engineer. Contacting the Traffic Engineer for confirmation of equipment operation does not constitute an installation review and does not relieve the Contractor of the responsibility to correct deficiencies identified at the "turn-on." The cost of meeting these requirements shall be included in the associated pay item and no additional compensation shall be made. Calls to the Traffic Engineer shall be made according to the Central Signal System Support section of this special provision.

# TRAFFIC SIGNAL INSPECTION ("TURN-ON")

Revise Article 801.15(b) of the "Standard Specifications" to read:

When the road is open to traffic, except as otherwise provided in Section 850 of the Standard Specifications, the Contractor may request a "turn-on" and inspection of the completed traffic signal installation at each separate location. This request shall be made to the Traffic Engineer at (630) 407-6900 a minimum of ten calendar days prior to the time of the requested inspection. Prior to the date of the "turn-on," the Contractor must provide written notification (by letter or email) that the equipment has been field tested and the intersection is capable of operating according to Contract requirements.

When the Contract includes the pay item RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, OPTIMIZE TRAFFIC SIGNAL SYSTEM, or TEMPORARY TRAFFIC SIGNAL TIMINGS, the Contractor shall notify the Signal Coordination and Timing (SCAT) Consultant of the "turn-on"/detour implementation schedule, as well as stage changes and signal phase changes during construction. The SCAT Consultant shall be in attendance at each temporary and permanent traffic signal "turn-on." When Emergency Vehicle Preemption (EVP) equipment is included in the project, the Contractor must invite local fire department personnel to each temporary and permanent traffic signal "turn-on."

It is DUDOT's intent to have all electric work completed and the equipment field-tested by the Equipment Supplier prior to DUDOT's "turn-on" field inspection. The Contractor shall have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and "turn-on" of the traffic signal installation. In the event the Traffic Engineer determines that the work is not complete and that the inspection will require more than two hours to complete, the inspection may be cancelled and the Contractor will be required to reschedule at another date.

The Contractor shall provide a representative from the Equipment Supplier's office to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-ons." Signal indications being tested shall match the lane configurations and markings at the intersection. If any conflicting signal indications are visible to motorist or pedestrians while testing, the Contractor shall be responsible to provide police officer(s) to assist with traffic control at the time of testing.

Upon demonstration that the signals are operating properly according to the Contract and to the satisfaction of the Traffic Engineer, the Traffic Engineer will allow the signals to be placed in continuous operation. The Traffic Engineer will inspect the traffic signal installation, with the assistance of the Contractor, and provide a written "punch-list" of deficient items requiring completion. The traffic signals will not be transferred to DUDOT maintenance until all "punch-list" work is corrected and re-inspected. The Contractor shall complete all "punch-list" work within 30 calendar days of notification. If this work is not completed within 30 days, DUDOT reserves the

right to have the work completed by others at the Contractor's expense. This cost will be in addition to Liquidated Damages for Untimely Work.

The Contractor shall furnish all equipment and/or parts to keep the traffic signal installation operating. No spare traffic signal equipment is available from DUDOT. The Contractor shall be responsible for all traffic signal equipment and associated maintenance thereof until DUDOT acceptance is granted.

When the Contractor has completed the "punch-list" work, he shall contact the Traffic Engineer to schedule a follow-up inspection of the traffic signal installation. If the Traffic Engineer determines that any "punch-list" items have not been completed, he may cancel the inspection, and the Contractor will need to reschedule.

It is possible that during any follow-up inspections of the traffic signal installation, deficient items may be identified that were not identified at the "turn-on" inspection, or included in the initial "punch-list." The Traffic Engineer shall advise the Contractor of any such items, and it shall be the Contractor's responsibility to complete these items prior to acceptance of the traffic signal.

Acceptance of the traffic signal by DUDOT shall be based on the inspection results and successful operation during a minimum 72-hour "burn-in" period following activation of the traffic signal and related equipment. Therefore, due to the required "burn-in" period, acceptance of the traffic signal shall not occur at the time of the "turn-on." Upon notification by the Contractor that all noted deficiencies have been corrected, and after the "burn-in" period, the Traffic Engineer shall perform an acceptance inspection of the traffic signal installation. If approved, the traffic signal acceptance shall be given verbally at the inspection, followed by written correspondence from the Traffic Engineer. When DUDOT is acting as a representative of other agencies, the agency that is responsible for the maintenance of each traffic signal installation will assume the traffic signal maintenance upon acceptance by the Traffic Engineer.

DUDOT requires the following Final Project Documentation from the Contractor prior to acceptance of the traffic signal. The documentation shall be provided in hard copy and electronic format as indicated below.

- 1. One (1) copy (11"x17") and one electronic PDF file of as-built signal plans with field revisions marked in red, including the location and labeling of detection equipment that differs from that shown in the plans.
- 2. One (1) copy of the operation and service manuals for the signal controller and the associated control equipment.
- 3. Five (5) copies (11"x17") and one electronic PDF file of the cabinet wiring diagrams.
- 4. Five (5) copies of the traffic signal installation cable log, along with electronic PDF and DGN files.
- 5. Original certificates for all manufacturer and Contractor warranties and guarantees required by Article 801.14 of the Standard Specifications.
- 6. GPS coordinates of traffic signal equipment as detailed in the Record Drawings section herein.

7. For new cabinet installations, two (2) cabinet keys and one (1) police door key.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

# **LOCATING UNDERGROUND FACILITIES**

Revise Section 803 of the "Standard Specifications" to read:

Once the Contractor has taken maintenance of an existing County facility or has constructed underground facilities, they are responsible for locating the facilities according the J.U.L.I.E. requirements at no additional cost to the Contract.

Contractor requests for equipment locates will be granted only once prior to the start of construction. Additional requests shall be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any item(s) damaged during the construction, at his/her own expense.

Locate requests shall be directed to DUDOT's Traffic Signal Maintenance Contractor or to the DUDOT Traffic Engineering Department at (630) 407-6900.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities call J.U.L.I.E. at 1-800-892-0123. The location of some utilities may require contacting other Agencies or Municipalities.

The Contractor should note that IDOT does not participate in J.U.L.I.E. Underground work that is proposed to take place within IDOT right-of-way requires the Contractor to contact IDOT for the procedures involved in locating their facilities.

### **RESTORATION OF WORK AREA**

Add to Section 801 of the "Standard Specifications":

Restoration of the traffic signal work area shall be included in the related pay item including foundation, conduit, handhole, trench and backfill, etc. and no extra compensation shall be allowed. All roadway surfaces including shoulders, medians, sidewalks, pavement, etc. shall be restored to match the previously existing conditions. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded, according to Section 250 and Section 252 of the Standard Specifications respectively. All brick pavers disturbed in the work area shall be restored to their original configuration as directed by the Resident Engineer. All damaged brick pavers shall be replaced with a comparable material approved by the Resident Engineer. Areas in front of residences are to be restored within two weeks of the completion of work causing the disturbance regardless of the duration of the project remaining. The traffic signal work area includes any area where the Contractor or their subcontractors perform work to install, repair, or maintain County owned traffic, lighting, or ITS equipment or facilities, regardless of the presence of an actual traffic signal.

# **LOCATION AND ORIENTATION OF ITS EQUIPMENT**

The Contractor shall confirm the viability of the proposed mounting location for ITS equipment prior to installing cable, affixing mounting hardware to supporting posts or mast arms, and drilling holes in supporting posts or mast arms. When line-of-sight is required for proper equipment

operations, including but not limited to antennas and detection cameras, the Contractor shall review the proposed installation with the Engineer, in consultation with the vendor's representative, to confirm that the location shown in the plans is still viable. When a PTZ camera or other comparable device is proposed, the Contractor shall review the proposed location with the Engineer prior to installation to ensure that the Agency's preference for visibility can be met within the built environment. In any case, if the Contractor installs cable or hardware, or drills holes, prior to receiving the Engineer's approval, the cost to relocate the equipment to provide proper operation or preferred visibility, including the cost of removing and installing new electrical or communications cable, will be borne by the Contractor. The Contractor will be paid for the actual quantity of cable and equipment based on the final accepted installation location regardless of the quantities shown in the plan, and no additional compensation shall be made under the Contract for excess materials installed prior to approval.

### **CABINET NEATNESS AND WIRING**

The Contractor shall ensure that all wiring and peripheral equipment in any new traffic signal cabinet is in a neat and orderly fashion that is acceptable to the Traffic Engineer. This applies to controller cabinets, master cabinets, railroad cabinets, communication/ITS cabinets, lighting cabinets, electrical service cabinets, or any other new cabinet called for in the project plans.

All conduit entrances into the cabinet shall be sealed with a pliable waterproof material. Electrical cables inside the cabinet shall be neatly trained along the base and back of the cabinet. Each conductor shall be connected individually to the proper terminal. The spare conductors shall be bound into a neat bundle. All cables, including those for signals, vehicle detection, pushbuttons, emergency vehicle preemption, video transmission, and communication shall be neatly arranged and bundled within the cabinet to the satisfaction of the Traffic Engineer. Each cable shall be marked with an identification number which corresponds to the number and description on the cabinet cable log.

When modernizing or modifying an existing cabinet, the new cables being installed shall be trained, bundled, and labeled to the satisfaction of the Traffic Engineer. When working inside an existing cabinet, the Contractor shall minimize disturbance to existing cables and cabinet wiring. Any existing cables and cabinet wiring disturbed by the Contractor shall be re-trained, bundled, and/or labeled to the satisfaction of the Traffic Engineer.

Unless indicated elsewhere in the plans and specs, all equipment in the cabinet shall be wired through the UPS except lighted street name signs and luminaires.

Components with Ethernet capabilities shall be connected to the Switch or other communications equipment in the cabinet as directed by the Traffic Engineer. All equipment, materials, labor and hardware, including Ethernet patch cables, required to provide cabinet neatness and wiring to the satisfaction of the Traffic Engineer shall be included in the applicable pay item for FULL ACTUATED CONTROLLER AND TYPE IV CABINET SPECIAL, FULL-ACTUATED CONTROLLER IN EXISTING CABINET, and/or MODIFY EXISTING CONTROLLER.

The County will not accept maintenance of the traffic signal installations until the above requirements are satisfied.

# **EQUIPMENT SUPPLIER AND VENDOR REPRESENTATION**

The Traffic Engineer reserves the right to request a representative of the Equipment Supplier and/or Vendor be present at the activation of new traffic equipment. The traffic equipment may include signal heads, cabinets, controllers, amplifiers, preemption, detection, monitoring,

communication/transmission, fiber-optic/telemetry, radio, microwave, infrared, illuminated signs, streetlights, push buttons, lighted crosswalks, uninterruptable power supplies, adaptive, counters, and any other new equipment being installed and activated. The representative shall be a qualified technician trained in the proper installation and operation of the equipment being installed under the Contract or permit.

The Traffic Engineer reserves the right to cancel the "turn-on," transfer, or other scheduled activity if, in their opinion, knowledgeable personnel from the Equipment Supplier or Vendor are not present. Rescheduling, and any associated costs, shall be the responsibility of the Contractor, and shall be subject to availability of DUDOT Traffic staff.

This provision is in addition to the requirement contained herein that the Contractor provide a representative from the Equipment Supplier to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-on".

Any costs associated with Equipment Supplier and/or Vendor representation shall be included in the unit price of the associated traffic equipment being activated. Any unforeseen costs incurred by the Contractor to provide this representation shall not be the responsibility of the County.

### INTERRUPTION OF COMMUNICATION

The interruption of communication with County equipment shall be kept to an absolute minimum. Communication includes controller telemetry, video transmission, camera control signals, Highway Advisory Radio, wireless interconnect, telephone (POTS/ISDN/DSL), high speed Internet, cellular modem, or any other County communication equipment. This provision applies to cable types including copper, multimode fiber optic, singlemode fiber optic, telephone cables, Ethernet cables, or any other cable used by the County to monitor and maintain its various signal and ITS equipment.

The Contractor shall plan ahead, and shall stage their construction work accordingly, so that they can interrupt communication, and then restore communication, with as little down time as possible. For example, when a section of existing interconnect is being relocated, the new handholes and conduits should be installed prior to disconnecting the interconnect cable. The interconnect cable can then be disconnected, pulled out of the existing conduit, pulled through the new conduit, and re-connected. In addition, when an existing fiber optic cable is to be re-used, the Contractor shall be prepared to immediately replace any fiber splices and/or terminations that become damaged.

Prior to disconnecting any DUDOT communication link, the Contractor shall contact the Traffic Engineer for approval of their planned construction method.

### **CENTRAL SIGNAL SYSTEM SUPPORT**

DUDOT Traffic staff are available to provide a limited amount of technical support to the Contractor between the hours of 8:00 AM and 4:30 PM. The Contractor may request the DUDOT staff provide configuration information, settings, and testing support, and other items approved by the Traffic Engineer. Requests that require DUDOT support after 4:30 PM may not be honored until the next business day. Extensions to the Contract working days or completion date will not be authorized solely due to requests for support that do not meet these requirements.

## **CONSTRUCTION WORK UNDER COUNTY HIGHWAY PERMIT**

For projects being completed under DuPage County Highway Access Permits, including resurfacing projects that require replacement of detector loops, the Contractor shall have a copy

of the approved County Highway Permit on-site at all times work is underway, including when working on loops or other signal related equipment at county-owned intersections even if all work is located outside of DuPage County right-of-way. Penalties for non-compliance will be assessed according to the terms detailed in the Highway Permit.

#### LOMBARD TRAFFIC SIGNAL GENERAL REQUIREMENTS

Modify the requirements of the Special Provision Traffic Signal General Requirements under Traffic Signal Inspection (TURN-ON) Final Project Documentation (3) to read:

 Pictures. Digital pictures of minimum 20M pixels of each intersection approach showing all traffic signal displays and equipment. Pictures shall include controller cabinet equipment in enough detail to clearly identify manufacture and model of major equipment, including at least one digital picture of each interior cabinet compartment.

Add to the requirements of Special Provision Traffic Signal General Requirements under Traffic Signal Inspection (TURN-ON) Final Project Documentation:

11. One USB drive with all above items stored electronically.

All new cabinets shall include the Village of Lombard Public Works identification decals mounted to the exterior of the cabinet facing the street.

<u>Handhole Requirements:</u> Add the following paragraph to the following District 1 Special Provision:

814.01 TS Handholes

The "Traffic Signals" label for the handhole lid shall also be applicable to Lombard handholes, except as noted in the plans.

#### **GROUNDING OF TRAFFIC SIGNAL SYSTEMS**

Effective: May 22, 2002 Revised: July 1, 2015

806.01TS

Revise Section 806 of the Standard Specifications to read:

# General.

All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. This work shall be in accordance with IDOT's District One Traffic Signal Design Details.

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations were measured resistance exceeds 25 ohms. Ground

rods are included in the applicable concrete foundation or service installation pay item and will not be paid for separately.

Testing shall be according to Article 801.13 (a) (4) and (5).

- (a) The grounded conductor (neutral conductor) shall be white color coded. This conductor shall be bonded to the equipment grounding conductor only at the Electric Service Installation. All power cables shall include one neutral conductor of the same size.
- (b) The equipment grounding conductor shall be green color coded. The following is in addition to Article 801.04 of the Standard Specifications.
  - Equipment grounding conductors shall be bonded to the grounded conductor (neutral conductor) only at the Electric Service Installation. The equipment grounding conductor is paid for separately and shall be continuous. The Earth shall not be used as the equipment grounding conductor.
  - 2. Equipment grounding conductors shall be bonded, using a UL Listed grounding connector, to all traffic signal mast arm poles, traffic signal posts, pedestrian posts, pull boxes, handhole frames and covers, conduits, and other metallic enclosures throughout the traffic signal wiring system, except where noted herein. Bonding shall be made with a splice and pigtail connection, using a sized compression type copper sleeve, sealant tape, and heat-shrinkable cap. A UL listed electrical joint compound shall be applied to all conductors' terminations, connector threads and contact points. Conduit grounding bushings shall be installed at all conduit terminations including spare or empty conduits.
  - 3. All metallic and non-metallic raceways shall have a continuous equipment grounding conductor, except raceways containing only detector loop lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to include an equipment grounding conductor.
  - 4. Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- (c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, UL listed pressure connectors, and UL listed clamps.

### **COILABLE NON-METALLIC CONDUIT**

Effective: May 22, 2002 Revised: July 1, 2015

810.01TS

# Description.

This work shall consist of furnishing and installing empty collable non-metallic conduit (CNC).

### General.

The CNC installation shall be in accordance with Sections 810 and 811 of the Standard Specifications except for the following:

Add the following to Article 810.03 of the Standard Specifications:

CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways to the handholes.

Add the following to Article 811.03 of the Standard Specifications:

On temporary traffic signal installations with detector loops, CNC meeting the requirements of NEC Article 353 shall be used for detector loop raceways from the saw-cut to 10 feet (3m) up the wood pole, unless otherwise shown on the plans

#### Basis of Payment.

All installations of CNC for loop detection shall be included in the contract and not paid for separately.

#### **UNDERGROUND RACEWAYS**

Effective: May 22, 2002 Revised: July 1, 2015

810.02TS

Revise Article 810.04 of the Standard Specifications to read:

"Installation. All underground conduits shall have a minimum depth of 30-inches (700 mm) below the finished grade."

Add the following to Article 810.04 of the Standard Specifications:

"All metal conduit installed underground shall be Rigid Steel Conduit unless otherwise indicated on the plans."

Add the following to Article 810.04 of the Standard Specifications:

"All raceways which extend outside of a structure or duct bank but are not terminated in a cabinet, junction box, pull box, handhole, post, pole, or pedestal shall extend a minimum or 300 mm (12") or the length shown on the plans beyond the structure or duct bank. The end of this extension shall be capped and sealed with a cap designed for the conduit to be capped.

The ends of rigid metal conduit to be capped shall be threaded, the threads protected with full galvanizing, and capped with a threaded galvanized steel cap.

The ends of rigid nonmetallic conduit and coilable nonmetallic conduit shall be capped with a rigid PVC cap of not less than 3 mm (0.125") thick. The cap shall be sealed to the conduit using a room-temperature-vulcanizing (RTV) sealant compatible with the material of both the cap and the conduit. A washer or similar

metal ring shall be glued to the inside center of the cap with epoxy, and the pull cord shall be tied to this ring."

### **HANDHOLES**

Effective: January 01, 2002 Revised: July 1, 2018 814.01TS

#### Description.

Add the following to Section 814 of the Standard Specifications:

All conduits shall enter the handhole at a depth of 30 inches (762 mm) except for the conduits for detector loops when the handhole is less than 5 feet (1.52 m) from the detector loop. All conduit ends should be sealed with a waterproof sealant to prevent the entrance of contaminants into the handhole.

Steel cable hooks shall be coated with hot-dipped galvanization in accordance with AASHTO Specification M111. Hooks shall be a minimum of 1/2 inch (13 mm) diameter with two 90 degree bends and extend into the handhole at least 6 inches (152 mm). Hooks shall be placed a minimum of 12 inches (305 mm) below the lid or lower if additional space is required.

Precast round handholes shall not be used unless called out on the plans.

The cover of the handhole frame shall be labeled "Traffic Signals" with legible raised letters. Only handholes serving IDOT traffic signal equipment shall have this label. Handhole covers for Red Light Running Cameras shall be labeled "RLRC".

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

"Handholes shall be constructed as shown on the plans and shall be cast-in-place, or precast concrete units. Heavy duty handholes shall be either cast-in-place or precast concrete units."

Add the following to Article 814.03 of the Standard Specifications:

"(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk."

### Cast-In-Place Handholes.

All cast-in-place handholes shall be concrete, with inside dimensions of 21-1/2 inches (546 mm) minimum. Frames and lid openings shall match this dimension.

For grounding purposes the handhole frame shall have provisions for a 7/16 inch (11 mm) diameter stainless steel bolt cast into the frame. The covers shall have a stainless steel threaded stint extended from the eye hook assembly for the purpose of attaching the grounding conductor to the handhole cover.

The minimum wall thickness for heavy duty hand holes shall be 12 inches (305mm).

### Precast Round Handholes.

All precast handholes shall be concrete, with inside dimensions of 30 inches (762mm) diameter. Frames and covers shall have a minimum opening of 26 inches (660mm) and no larger than the inside diameter of the handhole.

For grounding purposes the handhole frame shall have provisions for a 7/16 inch (11 mm) diameter stainless steel bolt cast into the frame. For the purpose of attaching the grounding conductor to the handhole cover, the covers shall either have a 7/16 inch (11 mm) diameter stainless steel bolt cast into the cover or a stainless steel threaded stint extended from an eye hook assembly. A hole may be drilled for the bolt if one cannot be cast into the frame or cover. The head of the bolt shall be flush or lower than the top surface of the cover.

The minimum wall thickness for precast heavy duty hand holes shall be 6 inches (152 mm).

Precast round handholes shall be only produced by an approved precast vendor.

## Materials.

Add the following to Section 1042 of the Standard Specifications:

"1042.17 Precast Concrete Handholes. Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e)."

# MAINTENANCE OF EXISTING TRAFFIC SIGNAL AND FLASHING BEACON INSTALLATION

Effective: May 22, 2002 Revised: July 1, 2015

850.01TS

#### General.

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 6. The energy charges for the operation of the traffic signal installation shall be paid for by the Contractor.

#### Maintenance.

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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 perform 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.

- 7. 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.
- 8. 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.
- 10. 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.
- 11. 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.

12. 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 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. Maintenance of a standalone and or not connected flashing beacon shall be paid for at the contract unit price for MAINTENANCE OF EXISITNG FLASHING BEACON INSTALLATION. Each flashing beacon will be paid for separately.

#### **FULL-ACTUATED CONTROLLER AND CABINET**

Effective: January 1, 2002 Revised: November 1, 2020

857.02TS

# Description.

This work shall consist of furnishing and installing a traffic actuated solid state digital controller in the controller cabinet of the type specified, meeting the requirements of Section 857 of the Standard Specifications, as modified herein, including malfunction management unit, load switches and flasher relays, with all necessary connections for proper operation.

If the intersection is part of an existing system and/or when specified in the plans, this work shall consist of furnishing and installing a(n) "Econolite" brand traffic actuated solid state controller.

## Materials.

Add the following to Article 857.02 of the Standard Specifications:

For installation as a stand-alone traffic signal, connected to a closed loop system or integrated into an advance traffic management system (ATMS), controllers shall be Econolite Cobalt (Graphics Edition) or Eagle/Siemens M60 unless specified otherwise on the plans or elsewhere on these specifications. Only controllers supplied by one of the District One approved closed loop equipment suppliers will be allowed. Unless specified otherwise on the plans or these specifications, the controller shall be of the most recent model and software version supplied by the equipment supplier at the time of the traffic signal TURN-ON. A removable controller data key shall also be provided. Individual load switches shall be provided for each vehicle, pedestrian, and right turn over lap phase. The controller shall prevent phases from being skipped during program changes and after all preemption events and shall inhibit simultaneous display of circular yellow and yellow arrow indications.

For integration into an ATMS such as Centracs, Tactics, or TransSuite, the controller shall have the latest version of NTCIP software installed. For operation prior to integration into an ATMS, the controller shall maintain existing close loop management communications.

Add the following to Article 1074.03 of the Standard Specifications:

- (a) (6) Cabinets shall be designed for NEMA TS2 Type 1 operation. All cabinets shall be pre-wired for a minimum of eight (8) phases of vehicular, four (4) phases of pedestrian and four (4) phases of overlap operation.
- (b) (1) Revise "conflict monitor" to read "Malfunction Management Unit"
- (b) (5) Cabinets Provide 1/8" (3.2 mm) thick unpainted aluminum alloy 5052-H32. The surface shall be smooth, free of marks and scratches. All external hardware shall be stainless steel.
- (b) (6) Controller Harness Provide a TS2 Type 2 "A" wired harness in addition to the TS2 Type 1 harness.
- (b) (7) Surge Protection Shall be a 120VAC Single phase Modular filter Plug-in type, supplied from an approved vendor.
- (b) (8) BIU shall be secured by mechanical means.
- (b) (9) Transfer Relays Solid state or mechanical flash relays are acceptable.
- (b) (10) Switch Guards All switches shall be guarded.
- (b) (11) Heating One (1) 200 watt, thermostatically-controlled, electric heater.
- (b) (12) Lighting One (1) LED Panel shall be placed inside the cabinet top panel and one (1) LED Panel shall be placed on each side of the pull-out drawer/shelf assembly located beneath the controller support shelf. The LED Panels shall be controlled by a door switch. The LED Panels shall be provided from an approved vendor.
- (b) (13) The cabinet shall be equipped with a pull-out drawer/shelf assembly. A 1 ½ inch (38mm) deep drawer shall be provided in the cabinet, mounted directly beneath the controller support shelf. The drawer shall have a hinged top cover and shall be capable of accommodating one (1) complete set of cabinet prints and manuals. This drawer shall support 50 lbs. (23 kg) in weight when fully extended. The drawer shall open and close smoothly. Drawer dimensions shall make maximum use of available depth offered by the controller shelf and be a minimum of 18 inches (610mm) wide.
- (b) (14) Plan & Wiring Diagrams 12" x 15" (305mm x 406mm) moisture sealed container attached to door.
- (b) (15) Detector Racks Fully wired and labeled for four (4) channels of emergency vehicle pre-emption and sixteen channels (16) of vehicular operation.
- (b) (16) Field Wiring Labels All field wiring shall be labeled.
- (b) (17) Field Wiring Termination Approved channel lugs required.
- (b) (18) Power Panel Provide a nonconductive shield.
- (b) (19) Circuit Breaker The circuit breaker shall be sized for the proposed load but shall not be rated less than 30 amps.
- (b) (20) Police Door Provide wiring and termination for plug in manual phase advance switch.

### Basis of Payment.

This work will be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET; FULL-ACTUATED CONTROLLER AND TYPE V CABINET; FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET; FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL; FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL; FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL); FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL).

#### GROUNDING EXISTING HANDHOLE FRAME AND COVER

Effective: May 22, 2002 Revised: July 1, 2015

873.02TS

#### Description.

This work shall consist of all materials and labor required to bond the equipment grounding conductor to the existing handhole frame and handhole cover. All installations shall meet the requirements of the details in the "District One Standard Traffic Signal Design Details," and applicable portions of the Standard Specifications and District One Traffic Signal Special Provisions 806.01TS GROUNDING OF TRAFFIC SIGNAL SYSTEMS and 817.01TS GROUNDING CABLE.

The equipment grounding conductor shall be bonded to the handhole frame and to the handhole cover. Two (2)  $\frac{1}{2}$ -inch diameter x 1  $\frac{1}{4}$ -inch long hex-head stainless steel bolts, spaced 1.75-inches apart center-to-center shall be fully welded to the frame and to the cover to accommodate a heavy duty UL listed grounding compression terminal. The grounding compression terminal shall be secured to the bolts with stainless steel split-lock washers and nylon-insert locknuts.

Welding preparation for the stainless steel bolt hex-head to the frame and to the cover shall include thoroughly cleaning the contact and weldment area of all rust, dirt and contaminates. The Contractor shall assure a solid strong weld. The welds shall be smooth and thoroughly cleaned of flux and spatter. The grounding installation shall not affect the proper seating of the cover when closed.

The grounding cable shall be paid for separately.

#### Method of Measurement.

Units measured for payment will be counted on a per handhole basis, regardless of the type of handhole and its location.

### Basis of Payment.

This work shall be paid for at the contract unit price each for GROUNDING EXISTING HANDHOLE FRAME AND COVER which shall be payment in full for grounding the handhole complete.

## FIBER OPTIC TRACER CABLE

Effective: May 22, 2002 Revised: July 1, 2015

817.02TS

The cable shall meet the requirements of Section 817 of the Standard Specifications, except for the following:

Add the following to Article 817.03 of the Standard Specifications:

In order to trace the fiber optic cable after installation, the tracer cable shall be installed in the same conduit as the fiber optic cable in locations shown on the plans. The tracer cable shall be continuous, extended into the controller cabinet and terminated on a barrier type terminal strip

mounted on the side wall of the controller cabinet. The barrier type terminal strip and tracer cable shall be clearly marked and identified. All tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable will be allowed to be spliced at handholes only. The tracer cable splice shall use a Western Union Splice soldered with resin core flux and shall be soldered using a soldering iron. Blow torches or other devices which oxidize copper cable shall not be allowed for soldering operations. All exposed surfaces of the solder shall be smooth. The splice shall be covered with a black shrink tube meeting UL 224 guidelines, Type V and rated 600V, minimum length 4 inches (100 mm) and with a minimum 1 inch (25 mm) coverage over the XLP insulation, underwater grade.

Add the following to Article 817.05 of the Standard Specifications:

## Basis of Payment.

The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C per foot (meter), which price shall include all associated labor and material for installation.

### **ELECTRIC CABLE**

Revised: DC873.01

**Description:** This work shall consist of furnishing and installing an electric cable of the type, size and number of conductors specified.

**Materials:** The electric cable shall meet the requirements of Article 1070.04 of the "Standard Specifications" and the following:

- Signal Cable: The conductors for signal cable shall be limited to No. 14 AWG solid copper.
- Service Cable: The service cable may be either single or multiple conductor cable.
- The electric service cable shall have an XLP jacket.
- All other cable jackets shall be polyvinyl chloride, meeting the requirements of IMSA 19-1 or IMSA 20-1.
- The jacket color for signal cable shall be black.
- The jacket color for lead-in and communications cable shall be gray.
- All cabling between the signal cabinet and the signal heads shall be signal cable.
- Heat shrink splices shall be used according to the District 1 "Standard Traffic Signal Design Details" as shown on the plans.

General: This work shall be performed according to Section 873 of the "Standard Specifications".

**Method of Measurement:** Electric Cable will be measured for payment in feet according to Article 873.05 of the "Standard Specifications".

**Basis of Payment:** This work will be paid for at the contract unit price per foot for ELECTRIC CABLE, of the method of installation (IN TRENCH, IN CONDUIT, or AERIAL SUSPENDED), of the type, size and number of conductors or pairs specified.

### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Effective: May 22, 2002 Revised: July 1, 2015

895.02TS

Add the following to Article 895.05 of the Standard Specifications:

The traffic signal equipment which is to be removed and is to become the property of the Contractor shall be disposed of outside the right-of-way at the Contractor's expense.

All equipment to be returned to the State shall be delivered by the Contractor to the State's Traffic Signal Maintenance Contractor's main facility. The Contractor shall contact the State's Electrical Maintenance Contractor to schedule an appointment to deliver the equipment. No equipment will be accepted without a prior appointment. All equipment shall be delivered within 30 days of removing it from the traffic signal installation. The Contractor shall provide one hard copy and one electronic file of a list of equipment that is to remain the property of the State, including model and serial numbers, where applicable. The Contractor shall also provide a copy of the Contract plan or special provision showing the quantities and type of equipment. Controllers and peripheral equipment from the same location shall be boxed together (equipment from different locations may not be mixed) and all boxes and controller cabinets shall be clearly marked or labeled with the location from which they were removed. If equipment is not returned according to these requirements, it will be rejected by the State's Electrical Maintenance Contractor. The Contractor shall be responsible for the condition of the traffic signal equipment from the time Contractor takes maintenance of the signal installation until the acceptance of a receipt drawn by the State's Electrical Maintenance Contractor indicating the items have been returned in good condition.

The Contractor shall safely store and arrange for pick up or delivery of all equipment to be returned to agencies other than the State. The Contractor shall package the equipment and provide all necessary documentation as stated above.

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 these Specifications at no cost to the contract.

# 85000200 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

Revised: DC850.01

**Description:** This work shall consist of maintaining an existing traffic signal installation that has been designated to remain in operation during construction.

**General:** This work will be performed according to Section 850 of the "Standard Specifications," the DuPage County DOT Traffic Signal General Requirements DC800.01 Special Provision, and the following:

The Contractor shall provide the Engineer with a 24-hour telephone number for traffic signal maintenance, in accordance with the requirements of the DC800.01 Special Provision. The

Contractor, or his representative, shall be available on a 24-hour basis to respond to emergency calls by the Engineer, Traffic Engineer or other parties.

The Contractor shall have electricians on staff with IMSA Level II certification to provide signal maintenance.

Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the contract or any portion thereof.

This item shall include maintenance of all traffic signal equipment at the intersection, including cameras, emergency vehicle pre-emption equipment, traffic counters, detection equipment, traffic signal control equipment, terminal servers, media converters, transit signal priority equipment, flashing beacons, uninterruptable power supply (UPS) and batteries, handholes, lighted signs, radios, modems, master controllers, telephone service installations, communication equipment, communication cables, conduits to adjacent intersections, and other traffic signal equipment. The Contractor shall at all times maintain in stock a sufficient amount of materials and equipment to provide effective temporary and permanent repairs.

The Contractor shall check all controllers every month, which will include opening the cabinet door and visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. This item includes all portions of the emergency vehicle pre-emption system. The Contractor shall not clear equipment log buffers. The Contractor shall not remove any existing documentation from the cabinet; it shall remain in the cabinet and remain property of the County or the agency that owns the cabinet.

The Contractor shall respond to all emergency calls from the County or others according to the Repair Timetable 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 County. The Contractor may initiate 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 or Traffic Engineer cannot contact the Contractor's designated personnel, the Traffic Engineer shall have the County's Traffic Signal Maintenance Contractor perform the required maintenance work. The County's Traffic Signal Maintenance Contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within 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. At any time requested, the Contractor shall allow the County's Traffic Signal Maintenance Contractor to open the cabinet and review the operation of the existing traffic signal installation that has been transferred to the Contractor for maintenance.

The Contractor shall provide immediate corrective action when any part of the system fails to function properly. Two far side signal 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, 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 Traffic Engineer. When the signal is flashing **RED** or when the power is out, the Contractor shall be required to place at least 1 STOP sign (R1-1-36) meeting MUTCD requirements at each approach of the intersection as a temporary means of regulating traffic according to the Repair Timetable in the project special provisions. At approaches where a yellow flashing indication is directed by the Traffic Engineer,

STOP signs will not be required. The Contractor shall maintain a sufficient number of STOP signs for all the signals under the Contractor's maintenance and have enough spare STOP signs in stock at all times to replace those which may be damaged or stolen.

Traffic signal equipment which is lost or not returned to the County for any reason shall be replaced with new equipment meeting the requirements of the project special provisions. or in the absence of applicable special provisions, meeting the requirements of the Traffic Engineer.

The Contractor shall be responsible for maintaining the hardware and cables related to the County's Ethernet-based signal and ITS communications system, including any Layer II or Layer III switches, video encoders, power supplies, cables, and peripherals, located in the cabinet maintained under this pay item. Routine programming of Video encoders, Layer II and Layer III switches will be maintained by the County's Network Integrator under separate County contract, except as noted in the plans. The Contractor shall provide cabinet access to the Network Integrator as necessary to maintain communications on the County's Ethernet communications network. Any electrical work required to maintain the communications equipment shall be the responsibility of the Contractor.

The Contractor will not be required to pay the energy charges for the operation of the existing traffic signal installation.

The Traffic Engineer may require the Contractor to transfer maintenance of a signal back to the County's Traffic Signal Maintenance Contractor (or other electrical contractor) for a short time. This may become necessary due to other signal projects in the area, or if the County needs to perform work at the signal. Any costs incurred by the Contractor for maintenance transfer inspections of this type shall be included in cost of pay item MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

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 Traffic Engineer.

Maintenance will not include Automatic Traffic Enforcement equipment, e.g. red light enforcement cameras, detectors, or peripheral equipment. If present, this equipment is operated and maintained by the local municipality and should be de-activated while the traffic signal is on Contractor maintenance.

**Basis of Payment:** This work shall be paid for at the Contract unit price each for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. Each intersection will be paid for separately. If two intersections are operated by one traffic signal controller, it shall be considered as one intersection for the purposes of this pay item.

### **EXPLORATION TRENCH, UTILITIES**

Description. This work shall consist of locating and excavating, by methods of hand excavation or vacuum excavation approved by the Engineer, to verify the horizontal and vertical location of existing regulated (e.g., electric, natural gas, telephone) unregulated (e.g., water, sewer, oil) and Illinois Tollway-owned (e.g., roadway lighting, fiber optic cables) utilities within the Contract Limits shown on the Plans and/or as directed by the Engineer.

Materials. The Materials used for Porous Granular Embankment and backfill shall consist of coarse aggregate meeting the gradation of CA-18 in accordance with Article 1004.05 of the Standard Specifications.

#### GENERAL REQUIREMENTS

Revise the sixth paragraph of Article 107.39 of the Standard Specifications to read:

"The State-Wide Once Call Notification System will provide for most horizontal location of utilities. When it is determined that the horizontal and/or vertical location of the utility is necessary to facilitate construction, the Engineer may make the request for location from the utility after receipt of notice from the Contractor. If the utility owner does not field locate their facilities to the satisfaction of the Engineer, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer."

In non-emergency conditions and unless specified elsewhere, the Contractor shall contact the owner of the utility at least seventy-two (72) hours prior to exploratory digging, to provide the anticipated location and to be available during exploration activities. The depth and width of the exploration shall be sufficient to allow positive identification of the type, size and depth of the utility(s).

When an existing utility is encountered, the Contractor shall verify the type of facility, obtain the horizontal and vertical (to the top of conduit or pipe) data, and transmit a copy of this data to the Engineer. Located utilities shall be marked with lath, flags or any other suitable method which will provide positive identification throughout construction.

After positive location, the Engineer will direct the Contractor as follows:

- a. Backfill and/or restore the excavated area.
- b. Leave the excavated area open and protected. The excavated material shall either be stockpiled in an acceptable location and provided with suitable erosion control measures or disposed of off-site in accordance with Article 202.03 of the Standard Specifications.

Method of Measurement. Exploration trench, utilities will not be measured for payment but shall be considered part of the Contractor's Responsibility for Locating and Protecting Utility Property and Services in Article 107.39 of the Standard Specifications.

# RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT

Effective: January 1, 2002 Revised: July 1, 2015 887.03TS

This item shall consist of relocating the existing emergency vehicle priority system phasing unit from an existing traffic signal controller cabinet to a new traffic signal controller cabinet, as indicated in the plans or as directed by the Engineer.

The work shall include disconnecting the emergency vehicle priority system phasing unit(s) and reconnecting it into the new traffic signal controller cabinet.

The emergency vehicle system is not to be inoperative for more than 8 hours and the Contractor must notify the Municipality or Fire Protection District 72 hours prior to the disconnection of the equipment. The Contractor must demonstrate to the satisfaction of the Engineer that the emergency vehicle system operates properly.

### Basis of Payment.

This item will be paid for on a basis of one (1) each per intersection for RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.

#### REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Add the following to Article 895.05(a) of the Standard Specifications:

This special provision shall apply at intersections under the jurisdiction of DuPage County and/or the Village of Lombard as indicated in the plans.

The traffic signal equipment which is to be removed and is to become the property of the Contractor shall be disposed of outside the right-of-way at the Contractor's expense.

All equipment to be returned to the DuPage County Division of Transportation (DUDOT) or the Village of Lombard shall be delivered by the Contractor to the offices of the agency indicated in the plans. The Contractor shall contact the Traffic Engineer at 630-407-6900 to schedule an appointment to deliver the equipment. No equipment will be accepted without a prior appointment. All equipment shall be delivered within 30 days of removing it from the traffic signal installation. The Contractor shall provide one hard copy and one electronic file of a list of equipment that is to remain the property of each agency, including model and serial numbers, where applicable. The Contractor shall also provide a copy of the plan sheet or Contract documents showing the quantities and type of equipment. Controllers and peripheral equipment from the same location shall be boxed together (equipment from different locations may not be mixed) and all boxes and controller cabinets shall be clearly marked or labeled with the location from which they were removed. If equipment is not returned according to these requirements, it will be rejected by the agencies. The Contractor shall be responsible for the condition of the traffic signal equipment from the time Contractor takes maintenance of the signal installation until the acceptance of a receipt drawn by the Traffic Engineer indicating the items have been returned in good condition.

The Contractor shall safely store and arrange for pick up or delivery of all equipment to be returned to agencies other than DUDOT. The Contractor shall package the equipment and provide all necessary documentation as stated above.

Traffic signal equipment which is lost or not returned to DUDOT and/or the Village of Lombard for any reason shall be replaced by the Contractor with new equipment meeting the requirements of these Specifications at no cost to the contract.

For all traffic signal posts or mast arms to remain, all vacated holes remaining in existing posts or mast arms shall be plugged with a kneadable, two-part epoxy putty. The putty shall cure in two hours or less and, when dried, the putty shall be sandable and paintable. It shall be capable of withstanding up to 500 degree Fahrenheit temperatures, with minimum tensile strength of 6000 psi and compressive strength of 18 psi. Products that include asbestos are prohibited.

The epoxy putty shall be applied to each vacated hole according to manufacturer's recommendations. The putty shall be shaped and smoothed, and excess putty shall be removed before it hardens. After the putty is fully hardened, it shall be sanded, cleaned, and painted to match the traffic signal post or mast arm.

#### RELOCATE VIDEO VEHICLE DETECTION SYSTEM

This work shall consist of the removal, storage, and relocation of existing vehicle detection system located at a traffic signal controller cabinet that is to be removed to a new traffic signal controller cabinet that is to be installed by the Contractor.

The existing vehicle detection system, including all necessary peripheral equipment, shall be removed and relocated to the new traffic signal controller cabinet as shown in the plans. Any damage sustained to the vehicle detection system during removal, storage or reinstallation operations shall be repaired or replaced in kind to the satisfaction of the Engineer at the Contractor's expense.

Basis of Payment: This item will be paid for at the contract unit price each for RELOCATE VIDEO VEHICLE DETECTION SYSTEM, which price shall be payment in full for labor, parts and materials necessary for disconnecting the existing vehicle detection system and relocating it to the new traffic signal controller cabinet complete and operating to the satisfaction of the Engineer.

#### **ROD AND CLEAN EXISTING CONDUIT**

Effective: January 1, 2015 Revised: July 1, 2015

810.03TS

#### Description.

This work shall consist of inserting a duct rod or electrical fish rod or tape of sufficient length and rigidity into an electrical conduit opening in one electrical handhole, and pushing the said rod through the conduit to emerge at the next or subsequent handhole in the conduit system at the location(s) shown on the plans. The duct rod may be inserted and removed by any standard construction method which causes no damage to the conduit. The size of the conduit may vary, but there shall be no differentiation in cost for the size of the conduit.

The conduit which is to be rodded and cleaned may exist with various amounts of standing water in the handholes to drain the conduit and to afford compatible working conditions for the installation of the duct rods and/or cables. Pumping of handholes shall be included with the work of rodding and cleaning of the conduit.

Any handhole which, in the opinion of the Engineer contains excessive debris, dirt or other materials to the extent that conduit rodding and cleaning is not feasible, shall be cleaned at the Engineer's order and payment approval as a separate pay item.

Prior to removal of the duct rod, a duct cleaning attachment such as a properly sized wire brush or cleaning mandrel shall be attached to the duct rod, which by removal of the duct rod shall be pulled through the conduit to remove sand, grit, or other light obstructions from the duct to provide a clean, clear passage for the installation of cable. Whenever the installation of cables is not performed as an adjunct to or immediately following the cleaning of the duct, a light weight pulling line such as a 1/8" polyethylene line or conduit measuring tape shall be placed and shall remain in the conduit to facilitate future work. When great difficulty of either inserting the duct rod or removal of the cleaning mandrel is encountered, the duct may require further cleaning by use of a compressed air gun, or a low pressure water hose. In the case of a broken conduit, the conduit must be excavated and repaired. The existence and location of breaks in the conduit may be determined by rodding, but the excavation and repair work required will be paid for separately.

This work shall be measured per lineal foot for each conduit cleaned. Measurements shall be made from point to point horizontally. No vertical rises shall count in the measurement.

#### Basis of Payment.

This work shall be paid for at the contract unit price per lineal foot for ROD AND CLEAN EXISTING CONDUIT for the installation of new electric cables in existing conduits. Such price shall include the furnishing of all necessary tools, equipment, and materials required to prepare a conduit for the installation of cable.

#### RELOCATE RADAR DETECTOR SYSTEM

This work shall consist of the removal, storage, and relocation of existing radar detection system located at a traffic signal controller cabinet that is to be removed to a new traffic signal controller cabinet that is to be installed by the Contractor.

The existing radar detection system, including all necessary peripheral equipment, shall be removed and relocated to the new traffic signal controller cabinet as shown in the plans. Any damage sustained to the radar detection system during removal, storage or reinstallation operations shall be repaired or replaced in kind to the satisfaction of the Engineer at the Contractor's expense.

Basis of Payment: This item will be paid for at the contract unit price each for RELOCATE RADAR DETECTOR SYSTEM, which price shall be payment in full for labor, parts and materials necessary for disconnecting the existing radar detection system and relocating it to the new traffic signal controller cabinet complete and operating to the satisfaction of the Engineer.

### X1400102 OUTDOOR RATED NETWORK CABLE

Revised: DC873.02

**Description:** This work shall consist of furnishing and installing a network cable from the traffic signal cabinet to the associated field device as shown on the plans.

**Materials:** The outdoor rated network cable shall be a black Category 5e cable, meeting the TIA/EIA 568-B.2 telecommunication standards. The cable shall be composed of 24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, inner LLPE jacket, overall shield

(100% coverage), 24 AWG stranded TC drain wire, industrial grade sunlight- and oil-resistant LLPE jacket. The cable shall be capable of performing from -40 °F to 160 °F.

Each end of the cable shall be terminated with an RJ-45 connector installed according to the TIA/EIA 568B standard. The drain wire at the cabinet end shall be terminated with a ring lug and attached to a suitable ground point. When the manufacturer's recommended installation differs from these requirements, the Contractor must notify the Engineer and provide documentation of the deviation for DUDOT review and approval prior to installation.

**General:** The work shall be performed according to the applicable portions of Section 873 of the "Standard Specifications", and details as shown on the plans and the following:

No splices shall be allowed in the cable between the field device and the traffic signal cabinet.

**Basis of Payment:** This work will be paid for at the contract unit price per foot for OUTDOOR RATED NETWORK CABLE. The unit price shall include all equipment, materials and labor required to furnish and install the cable, and making all connections necessary for proper operation. The unit price shall also include furnishing and installing the RJ-45 connectors, ring terminals and grounding the cable.

## **SERVICE INSTALLATION (TRAFFIC SIGNALS)**

Effective: May 22, 2002 Revised: June 15, 2016

805.01TS

Revise Section 805 of the Standard Specifications to read:

### Description.

This work shall consist of all materials and labor required to install, modify, or extend the electric service installation. All installations shall meet the requirements of the "District One Standard Traffic Signal Design Details".

# General.

The electric service installation shall be the electric service disconnecting means and it shall be identified as suitable for use as service equipment.

The electric utility contact information is noted on the plans and represents the current information at the time of contract preparation. The Contractor must request in writing for service and/or service modification within 10 days of contract award and must follow-up with the electric utility to assure all necessary documents and payment are received by the utility. The Contractor shall forward copies of all correspondence between the contractor and utility company to the Engineer and Area Traffic Signal Maintenance and Operations Engineer. The service agreement and sketch shall be submitted for signature to the IDOT's Traffic Operations Programs Engineer.

### Materials.

 General. The completed control panel shall be constructed in accordance with UL Std. 508A, Industrial Control Panel, and carry the UL label. Wire terminations shall be UL listed.

#### b. Enclosures.

- 1. Pole Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 4X, unfinished single door design, fabricated from minimum 0.080-inch (2.03 mm) thick Type 5052 H-32 aluminum. Seams shall be continuous welded and ground smooth. Stainless steel screws and clamps shall secure the cover and assure a watertight seal. The cover shall be removable by pulling the continuous stainless steel hinge pin. The cabinet shall have an oil-resistant gasket and a lock kit shall be provided with an internal O-ring in the locking mechanism assuring a watertight and dust-tight seal. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 14-inches (350 mm) high, 9-inches (225 mm) wide and 8-inches (200 mm) in depth is required. The cabinet shall be channel mounted to a wooden utility pole using assemblies recommended by the vendor.
- 2. Ground Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 3R unfinished single door design with back panel. The cabinet shall be fabricated from Type 5052 H-32 aluminum with the frame and door 0.125-inch (3.175 mm) thick, the top 0.250-inch (6.350 mm) thick and the bottom 0.500-inch (12.70 mm) thick. Seams shall be continuous welded and ground smooth. The door and door opening shall be double flanged. The door shall be approximately 80% of the front surface, with a full length tamperproof stainless steel .075-inch (1.91 mm) thick hinge bolted to the cabinet with stainless steel carriage bolts and nylocks nuts. The locking mechanism shall be slam-latch type with a keyhole cover. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 40-inches (1000 mm) high, 16-inches (400 mm) wide and 15-inches (375 mm) in depth is required. The cabinet shall be mounted upon a square Type A concrete foundation as indicated on the plans. The foundation is paid for separately.
- 3. All enclosures shall include a green external power indicator LED light with circuitry as shown in the Electrical Service-Panel Diagram detail sheet. For pole mounted service enclosures, the power indicator light shall be mounted as shown in the detail. For ground mounted enclosures, the power indicator light shall be mounted on the side of the enclosure most visible from the major roadway.
- c. Electric Utility Meter Housing and Riser. The electric meter housing and meter socket shall be supplied and installed by the contractor. The contractor is to coordinate the work to be performed and the materials required with the utility company to make the final connection at the power source. Electric utility required risers, weather/service head and any other materials necessary for connection shall also be included in the pay item. Materials shall be in accordance with the electric utility's requirements. For ground-mounted service, the electric utility meter housing shall be mounted to the enclosure. The meter shall be supplied by the utility company. Metered service shall not be used unless specified in the plans.
- d. Surge Protector. Overvoltage protection, with LED indicator, shall be provided for the 120 volt load circuit by the means MOV and thermal fusing technology. The response

time shall be <5n seconds and operate within a range of -40C to +85C. The surge protector shall be UL 1449 Listed.

- e. Circuit Breakers. Circuit breakers shall be standard UL listed molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating handles. 120 volt circuit breakers shall have an interrupting rating of not less than 65,000 rms symmetrical amperes. Unless otherwise indicated, the main disconnect circuit breaker for the traffic signal controller shall be rated 60 amperes, 120 V and the auxiliary circuit breakers shall be rated 10 amperes, 120 V.
- f. Fuses, Fuseholders and Power Indicating Light. Fuses shall be small-dimensional cylindrical fuses of the dual element time-delay type. The fuses shall be rated for 600 V AC and shall have a UL listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. The power indicating light shall be LED type with a green colored lens and shall be energized when electric utility power is present.
- g. Ground and Neutral Bus Bars. A single copper ground and neutral bus bar, mounted on the equipment panel shall be provided. Ground and neutral conductors shall be separated on the bus bar. Compression lugs, plus 2 spare lugs, shall be sized to accommodate the cables with the heads of the connector screws painted green for ground connections and white for neutral connections.
- h. Utility Services Connection. The Contractor shall notify the Utility Company marketing representative a minimum of 30 working days prior to the anticipated date of hook-up. This 30 day advance notification will begin only after the Utility Company marketing representative has received service charge payments from the Contractor. Prior to contacting the Utility Company marketing representative for service connection, the service installation controller cabinet and cable must be installed for inspection by the Utility Company.
- i. Ground Rod. Ground rods shall be copper-clad steel, a minimum of 10 feet (3.0m) in length, and 3/4 inch (20mm) in diameter. Ground rod resistance measurements to ground shall be 25 ohms or less. If necessary additional rods shall be installed to meet resistance requirements at no additional cost to the contract.

#### Installation.

- a. General. The Contractor shall confirm the orientation of the traffic service installation and its door side with the engineer, prior to installation. All conduit entrances into the service installation shall be sealed with a pliable waterproof material.
- b. Pole Mounted. Brackets designed for pole mounting shall be used. All mounting hardware shall be stainless steel. Mounting height shall be as noted on the plans or as directed by the Engineer.
- c. Ground Mounted. The service installation shall be mounted plumb and level on the foundation and fastened to the anchor bolts with hot-dipped galvanized or stainless steel nuts and washers. The space between the bottom of the enclosure and the top of the foundation shall be caulked at the base with silicone.

### Basis of Payment.

The service installation shall be paid for at the contract unit price each for SERVICE INSTALLATION of the type specified which shall be payment in full for furnishing and installing the service installation complete. The CONCRETE FOUNDATION, TYPE A, which includes the ground rod, shall be paid for separately. SERVICE INSTALLATION, POLE MOUNTED shall include the 3/4 inch (20mm) grounding conduit, ground rod, and pole mount assembly. Any charges by the utility companies shall be approved by the engineer and paid for as an addition to the contract according to Article 109.05 of the Standard Specifications.

### FIBER OPTIC SPLICE ENCLOSURE

**Description:** This work shall consist of furnishing and installing a 48 port fiber optic distribution enclosure with splice trays in a traffic signal cabinet, building, or other secure facility as indicated in the plans and/or as directed by the Traffic Engineer.

**General:** This work shall be performed according to Section 871 of the "Standard Specifications" and the following:

This work shall consist of furnishing and installing the distribution enclosure and splice tray at the location in the traffic cabinet, building, or other secure facility as directed by the Engineer. When noted in the plans or specifications, all work in facilities owned by other agencies is subject to the terms of the Contractor's permit or existing agreements between DuDOT and the other entity, whichever is applicable.

In cabinets where an existing County-owned enclosure with fewer than 48 ports exists, the Contractor shall remove the existing enclosure and return it to DuDOT, and install the proposed enclosure in its place, unless indicated otherwise on the plans or directed by the Traffic Engineer. The Contractor shall relocate any equipment in the cabinet that is in conflict in a workmanlike manner. The Contractor shall tag or otherwise document existing fiber connections prior to removal. If the Contractor fails to adequately document connections, the testing required to reestablish connections shall be at no additional cost to the County.

In cabinets where existing enclosures are owned by other agencies, the Contractor shall not remove the existing enclosure unless directed to do so by the Traffic Engineer.

**Materials:** The distribution enclosure shall be wall-mountable with capacity for 48 fiber ports using at least four closet connector housing panels per enclosure and at least eight 0.2-inch or four 0.4-inch reduced length splice trays. The enclosure dimensions shall not exceed 14.5" x 17" x 4.5". The enclosure shall include SC connectors capable of accommodating the required number of singlemode fibers. When the plans indicate multimode fibers are to be used, at least one CCH connector panel shall include ST connectors to facilitate serial communications.

The splice trays shall be aluminum and capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The individual tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and each shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. Each individual splice tray shall be labelled.

Basis of Payment: The work shall be paid for at the contract unit price per each for FIBER OPTIC SPLICE ENCLOSURE. The unit price shall include distribution enclosure, splice trays, jumpers, connectors, and mounting hardware required for installation within the indicted cabinet or other secure location, including moving any equipment in conflict with the proposed enclosure mounting. Removal of existing enclosure will be included in the cost of this item. Fiber optic cable, fiber terminations, and fiber splices, shall be paid for as FIBER OPTIC CABLE, TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

# FIBER OPTIC SPLICE CLOSURE, WATERTIGHT

**Description**. This work shall consist of furnishing and installing a rugged fiber optic splice closure to secure and protect fiber optic fusion splices.

**Materials.** Splice closures shall be designed for use under the most severe conditions such as moisture, vibration, impact, cable stress and flex temperature extremes as demonstrated by successfully passing the factory test procedures and minimum specifications listed below:

<u>Physical Requirements</u>. The closures shall provide ingress for up to four cables in a butt configuration. The closure shall prevent the intrusion of water without the use of encapsulates.

The closure shall be capable of accommodating splice organizer trays that accept mechanical or fusion splices. The splice closure shall have provisions for storing fiber splices in an orderly manner, mountings for splice organizer assemblies, and space for excess or unspliced fiber. Splice organizers shall be re-enterable. The splice case shall be UL rated.

Closure re-entry and subsequent reassembly shall not require specialized tools or equipment. Further, these operations shall not require the use of additional parts.

The splice closure shall have provisions for controlling the bend radius of individual fibers to a minimum of 1.5 in.

### **Factory Testing.**

Compression Test. The closure shall not deform more than 10% in its largest cross-sectional dimension when subjected to a uniformly distributed load of 1335 N at temperatures of 0 and 100 degrees Fahrenheit. The test shall be performed after stabilizing at the required temperature for a minimum of two hours. It shall consist of placing an assembled closure between two flat parallel surfaces, with the longest closure dimension parallel to the surfaces. The weight shall be placed on the upper surface for a minimum of 15 minutes. The measurement shall then be taken with weight in place.

Impact Test. The assembled closure shall be capable of withstanding an impact of 28 N-M at temperatures of 0 and 100 degrees Fahrenheit. The test shall be performed after stabilizing the closure at the required temperature for a minimum of 2 hours. The test fixture shall consist of 20 lbs. cylindrical steel impacting head with a 2 in. spherical radius at the point where it contacts the closure. It shall be dropped from a height of 12 in. The closure shall not exhibit any cracks or fractures to the housing that would preclude it from passing the water immersion test. There shall be no permanent deformation to the original diameter or characteristic vertical dimension by more than 5%.

<u>Cable gripping and sealing testing.</u> The cable gripping and sealing hardware shall not cause an increase in fiber attenuation in excess of 0.05 dB/fiber @ 1550 nm when attached to the cables and the closure assembly. The test shall consist of measurements from six fibers, one from each buffer tube or channel, or randomly selected in the case of a single fiber bundle. The measurements shall be taken from the test fibers before and after assembly to determine the effects of the cable gripping and sealing hardware on the optical transmission of the fiber.

<u>Vibration Test</u>. The splice organizers shall securely hold the fiber splices and store the excess fiber. The fiber splice organizers and splice retaining hardware shall be tested per EIA Standard FOTP-II, Test Condition 1. The individual fibers shall not show an increase in attenuation in excess of 0.1 dB/fiber.

<u>Water Immersion Test.</u> The closure shall be capable of preventing a 10 ft. water head from intruding into the splice compartment for a period of 7 days. Testing of the splice closure is to be accomplished by the placing of the closure into a pressure vessel and filling the vessel with tap water to cover the closure. Apply continuous pressure to the vessel to maintain a hydrostatic head equivalent to 10 ft. on the closure and cable. This process shall be continued for 30 days. Remove the closure and open to check for the presence of water. Any intrusion of water in the compartment containing the splices constitutes a failure.

<u>Certification</u>. It is the responsibility of the Contractor to insure that either the manufacturer or an independent testing laboratory has performed all of the above tests, and the appropriate documentation has been submitted to the Department. Manufacturer certification is required for the model(s) of closure supplied. It is not necessary to subject each supplied closure to the actual tests described herein.

# **CONSTRUCTION REQUIREMENTS**

The closure shall be installed according to the manufacturer's recommended guidelines. The Contractor shall prepare the cables and fibers in accordance with the closure and cable manufacturers' installation practices. A copy of these practices shall be provided to the Engineer 21 days prior to splicing operations.

After completing all fusion splices, the Contractor shall secure the splice closure to the side of the splice facility using cable support brackets. All cables shall be properly dressed and secured to rails or racks within the manhole or handhole. No cables or enclosures will be permitted to lie on the floor of the splice facility.

All work shall be neat and in a workmanlike manner. Particular care shall be taken as to not crush or kink the fiber optic cable. If in the opinion of the Engineer the cable has been crushed or kinked, the entire cable span shall be removed and replaced at no additional cost to the Department.

**Basis of Payment.** This work will be paid for at the contract unit price per each for FIBER OPTIC SPLICE CLOSURE. WATERTIGHT.

#### XX005940 REMOTE CONTROLLED VIDEO SYSTEM

Revised: DC801.02

**General:** This work shall consist of furnishing and installing an IP based remote-controlled video system at a location designated by the Traffic Engineer. The work shall include a color camera, dome assembly, all mounting hardware, connectors, cables, power injectors, and related equipment necessary to complete the installation according to the manufacturer's specifications.

Materials: The PTZ camera shall be one of the following approved models:

- TKH Security Solutions PD1103Z2-E
- AXIS Q6075-E
- Cohu 4220HD

The Contractor shall furnish the required number of power injectors for the camera make and model selected, including operation of the camera heater, as well as all required mounting hardware, connectors, patch cables, and power supplies.

The camera shall have an exterior dome and tinted lens cover.

The system shall have anonymous FTP capabilities disabled by the vendor/equipment supplier or provide a feature for the user to disable the functionality through the standard internal menu.

**Installation:** The camera shall be installed as shown on the plans, either on the luminaire arm near the luminaire, or on the combination mast arm assembly pole, angled toward the center of the intersection using a mounting bracket compatible with the camera and procured from one of the approved camera manufacturers. When installed on the pole, the camera shall be mounted to provide a minimum of 12 inches clear space between face of the pole and the camera housing. When installed on the luminaire arm, the camera shall be installed with a 30-degree tilt-adjustable bracket. The camera and any external hardware and housing shall be installed with stainless steel straps.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

The Contractor shall contact the Traffic Engineer prior to installing the camera and associated wiring, to receive final approval on the camera location.

If the Remote Controlled Video System will be connected to the Gigabit Ethernet network, then a Layer II (Datalink) Switch and/or a Layer III (Network) Switch shall be required. Layer II and Layer III switches shall be installed as shown on the plans.

The Contractor shall be responsible for programming the network settings and other parameters to establish operations within the County network. Except where indicated otherwise in the special provisions or plans, DUDOT will provide the IP address upon request.

**Basis of Payment:** This item will be paid for at the contract unit price per each for REMOTE CONTROLLED VIDEO SYSTEM. The unit price shall include all associated equipment, hardware, cables, materials and labor required to install the complete system in place and in operation to

the satisfaction of the Traffic Engineer. The OUTDOOR RATED NETWORK cable from the traffic signal cabinet will be paid for separately. If required, the LAYER II (DATALINK) SWITCH and/or the LAYER III (NETWORK) SWITCH will be paid for separately.

# XX006655 LAYER II (DATALINK) SWITCH

Revised: DC801.01

**Description:** This work shall consist of furnishing and installing a Layer II Ethernet switch used to transmit data from one traffic signal cabinet to another traffic signal cabinet or ITS location containing a Layer II switch or a Layer III (Network) switch.

Materials: The Layer II switch shall be the latest compatible Industrial Ethernet Switch with SFPs capable of operating within the DuPage County Central Signal System. The Layer II (Datalink) Switch shall be procured from the County's Network Integration Consultant, which will provide the proper parts and programming to fit within the DuPage County IP scheme.

The required programming shall be included in the cost of this pay item.

General: The Layer II switch and its power supply shall be mounted to either a standard DIN rail or an equipment mounting channel in the cabinet. The power supply shall be plugged into a separate quad outlet that is connected to the cabinet equipment filtered AC line, but independent of the cabinet GFI

Basis of Payment: This item will be paid for at the contract unit price each for LAYER II (DATALINK) SWITCH. The unit price shall include all equipment, materials, and labor required to furnish and install the switch, including all necessary connectors, cables, fiber optic jumpers, programming, hardware, software, and other peripheral equipment required to place the switch in operation to the satisfaction of the Traffic Engineer.

# **UPGRADE TO NTCIP**

Revised: April 13, 2022

DC801.23

**Description:** This item shall comply with Section 857 of the Standard Specifications and shall also comply with the following requirements:

This pay item shall include enabling the NTCIP mode of operations for the existing ASC/3 or Cobalt controller and updating all the communications parameters necessary for communications in the Ethernet-based signal system, including the NTCIP address. DUDOT will provide the required parameters upon request.

**Basis of Payment:** This work will be paid for at the contract unit price EACH for UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL, which price shall be payment in full for all

material, equipment and labor necessary to update the required communications settings to facilitate operation with DUDOT's Ethernet-based signal system.

# FIBER OPTIC PATCH PANEL, 24 PORT, CABINET MOUNT

**Description:** This work shall consist of furnishing and installing a 24 port fiber optic distribution enclosure with number of ports specified in the plans and splice tray in a traffic signal cabinet, building, or other secure facility as indicated in the plans and/or as directed by the Traffic Engineer.

**General:** This work shall be performed according to Section 871 of the "Standard Specifications" and the following:

This work shall consist of furnishing and installing the distribution enclosure and splice tray at the location in the traffic cabinet, building, or other secure facility as directed by the Engineer. When noted in the plans or specifications, all work in facilities owned by other agencies is subject to the terms of the Contractor's permit or existing agreements between DuDOT and the other entity, whichever is applicable.

In cabinets where an existing County-owned enclosure with fewer than 24 ports exists, the Contractor shall remove the existing enclosure and return it to DuDOT, and install the proposed enclosure in its place, unless indicated otherwise on the plans or directed by the Traffic Engineer. The Contractor shall relocate any equipment in the cabinet that is in conflict in a workmanlike manner. The Contractor shall tag or otherwise document existing fiber connections prior to removal. If the Contractor fails to adequately document connections, the testing required to reestablish connections shall be at no additional cost to the County.

**Materials:** The distribution enclosure shall be wall-mountable with capacity for 24 fiber ports using at least two closet connector housing panels per enclosure and at least eight 0.2-inch or four 0.4-inch reduced length splice trays. The enclosure dimensions for a 24 port enclosure shall not exceed 13.5" x 15.5" x 4.5". The enclosure shall include SC connectors capable of accommodating the required number of singlemode fibers. When the plans indicate multimode fibers are to be used, at least one CCH connector panel shall include ST connectors to facilitate serial communications.

The splice trays shall be aluminum and capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The individual tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and each shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. Each individual splice tray shall be labelled.

Basis of Payment: The work shall be paid for at the contract unit price per each for FIBER OPTIC PACTH PANEL, 24 PORT, CABINET MOUNT. The unit price shall include distribution enclosure, splice trays, jumpers, connectors, and mounting hardware required for installation within the indicted cabinet or other secure location, including moving any equipment in conflict with the proposed enclosure mounting. Removal of existing enclosure will be included in the cost of this item. Fiber optic cable, fiber terminations, and fiber splices, shall be paid for as FIBER OPTIC CABLE, TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

#### WIRELESS TRANSMISSION SYSTEM POINT TO POINT

**Description:** This work shall consist of the installation of a new node on the DuPage County Central Signal System wireless network. The work includes furnishing and installing the directional antenna and power injector; associated cables and/or wiring; and all mounting hardware.

**Materials:** The Wireless Transmission System Point to Point includes:

- One Proxim Tsunami Quick Bridge unit with Integrated 23dBi Antenna (Model QB-8250-LNK-US).
- Two Proxim Model 76394 surge suppressors.
- Power wiring from the radio power injector to the circuit breaker.
- All mounting hardware.

The Wireless Transmission System Subscriber Unit electronics shall be procured from the County's Network Integration Consultant, which will provide the proper parts and programming to fit within the DuPage County IP scheme.

**General:** The power injector and one surge suppressor shall be installed in the signal cabinet as directed by the Traffic Engineer. All remaining mounted components of this item shall be installed as high as possible on the mast arm assembly pole or camera pole as shown on the plans and/or as directed by the Traffic Engineer. The system shall not be installed on the mast arm or luminaire arm unless directed to do so by the Traffic Engineer. In the event existing equipment precludes the highest mounting location, the Contractor shall contact the Traffic Engineer before moving any existing equipment to confirm the preferred mounting location.

The antenna shall be aimed at another antenna on the County's wireless system, (e.g. aimed at corresponding antenna at another intersection), as shown on the plans and/or as directed by the Traffic Engineer. A representative of the County's Network Integration Consultant shall be present during the aiming of the antenna to assess the link performance and direct any necessary adjustments in mounting and/or aiming the antenna.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

Basis of Payment: This item will be paid for at the contract unit price per each for WIRELESS TRANSMISSION SYSTEM POINT TO POINT. The unit price shall include all equipment, materials, and labor required to furnish and install one integrated radio/antenna; power injector; and surge suppressors at one location, placing the system in operation to the satisfaction of the Traffic Engineer. The unit price shall also include all equipment, materials and labor required to furnish and install all associated connectors; cables; hardware; other peripheral equipment; and all programming and field support by the County's Network Integration Consultant. The OUTDOOR RATED NETWORK CABLE from the antenna to the traffic signal cabinet or switch location shall be paid for separately.

XX007018 LAYER III (NETWORK) SWITCH

Revised: DC801.12

**Description:** This work shall consist of furnishing and installing a Layer III network switch used to transmit data from the cabinet location shown on the plans to multiple locations having a Layer II or Layer III switch.

**Materials:** The Layer III switch shall be the latest Industrial Ethernet Switch with SFPs capable of operating within the DuPage County Central Signal System. The Layer III (Network) Switch shall be procured from the County's Network Integration Consultant, which will provide the proper parts and programming to fit within the DuPage County IP scheme. This work shall include furnishing and installing the switch and all appropriate power supplies, switch modules, and associated peripherals.

This pay item shall include the required switch programming, as well as the development of a network configuration document showing the proposed Layer III to Layer III links and related Layer II paths that are added to the proposed switch. The configuration document, which includes the fibers proposed to be used and the details of the proposed cabinet connections, shall be prepared by the Network Integration Consultant and provided to DUDOT by the Contractor within 20 business days following the pre-construction meeting for agency review. The documentation shall comply with DUDOT standard conventions and be furnished in 11"x17" PDF electronic format.

**General:** The Layer III switch shall be installed in the traffic signal cabinet, communications cabinet or server cabinet as shown on the plans. The switch shall be mounted on the shelf inside the cabinet, or in another suitable location in the traffic signal cabinet with the approval of the Traffic Engineer. At server cabinets, the switch shall be rack mounted at a location approved by the Traffic Engineer. Any existing equipment or cables conflicting with the installation of the Layer III switch shall be repositioned in a workmanlike manner. The Layer III switch shall be plugged into the 15A power distribution unit inside the cabinet or server cabinet.

**Basis of Payment:** This item will be paid for at the Contract unit price per each for LAYER III (NETWORK) SWITCH. The unit price shall include all equipment, materials, and labor required to furnish and install the switch, including all necessary connectors, cables, fiber optic jumpers, hardware, software, programming fiber optic transceiver modules, and other peripheral equipment required to place the switch in operation to the satisfaction of the Traffic Engineer. The required programming and development of the proposed network configuration shall be included in the cost of this pay item. If required, MEDIA CONVERTERS will be paid for separately.

# **SERVICE INSTALLATION (SPECIAL)**

#### Description.

This work shall consist of all materials and labor required to install a new electric service installation in accordance with "District One Standard Traffic Signal Design Details" and "Service Installation (Traffic Signals)", modified to install the electric meter at the controller cabinet in accordance with "Electric Meter (DUDOT)".

# Installation.

a. The electric service shall be pole mounted.

b. The electric meter shall be installed on the controller cabinet, opposite of the UPS.

# Basis of Payment.

The service installation shall be paid for at the contract unit price each for SERVICE INSTALLATION (SPECIAL) which shall be payment in full for furnishing and installing the service installation complete. SERVICE INSTALLATION (SPECIAL) shall include the 3/4 inch (20mm) grounding conduit, ground rod, electric meter and pole mount assembly. Any charges by the utility companies shall be approved by the engineer and paid for as an addition to the contract according to Article 109.05 of the Standard Specifications.

# X8570215 FULL-ACTUATED CONTROLLER IN EXISTING CABINET (DUDOT)

Revised: DC857.02

**Description:** This work shall consist of furnishing and installing a full-actuated controller in an existing cabinet at locations shown on the plans and/or as designated by the Traffic Engineer.

**General:** This work shall be performed according to Sections 857 and 863 of the "Standard Specifications" and the following:

The controller shall conform to ITE ATC Standard 5.2b. The controller shall be the latest model available that is compatible with "Centracs" software, currently in use by DuPage County. The controller software compatibility requirements are based upon the controller's location in the communication system, and shall be as shown on the plans. The controller shall have the latest version of NTCIP and ATC software compatible with "Centracs" installed, and be equipped with an Ethernet port and a removable data key or other storage media to save the controller database.

When plan notes indicate that an "Econolite" controller is required, the controller shall be a Cobalt model E controller running ASC/3 software capable of communicating in both serial and Ethernet modes.

The controller shall prevent phases from being skipped during program changes and after all preemption events, and shall inhibit simultaneous display of circular yellow and yellow arrow indications.

**Basis of Payment:** This item will be paid for at the Contract unit price per each for FULL-ACTUATED CONTROLLER IN EXISTING CABINET. The unit price shall include all equipment, materials and labor required to furnish and install the controller, complete with necessary connections and equipment for proper operation.

# X8570226 FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL (DUDOT)

Revised: DC857.01

**Description:** This work shall consist of furnishing and installing a full-actuated controller and Type IV cabinet at locations shown on the plans and/or as designated by the Traffic Engineer.

**General:** This work shall be performed according to Sections 857 and 863 of the "Standard Specifications" and the following:

The controller shall conform to ITE ATC Standard 5.2b. The controller shall be the latest model available that is compatible with "Centracs" software currently in use by DuPage County DOT. The controller software compatibility requirements are based upon the controller's location in the communication system, and shall be as shown on the plans. The controller shall have the latest version of NTCIP and ATC software compatible with "Centracs" installed, and be equipped with an Ethernet port and a removable data key or other storage media to save the controller database.

When plan notes indicate that an "Econolite" controller is required, the controller shall be a Cobalt model E controller running ASC/3 software capable of communicating in both serial and Ethernet modes.

The cabinet shall be designed for NEMA TS2 Type 1 operation. Unless indicated otherwise on the plans, the cabinet shall be pre-wired for a minimum of eight phases of vehicular; four phases of pedestrian; and four phases of overlap operation. Individual load switches shall be provided for each vehicle, pedestrian and right turn overlap phase.

The controller shall prevent phases from being skipped during program changes and after all preemption events, and shall inhibit simultaneous display of circular yellow and yellow arrow indications.

- Cabinets: Controller cabinets shall have a footprint of approximately 44 inches wide by 26 inches deep. Type IV cabinets shall be 65 inches high, and shall provide a third shelf for mounting additional equipment. The cabinets shall be fabricated of 1/8" thick unpainted aluminum alloy 5052-H32. The surface shall be smooth and free of marks and scratches. All external hardware shall be stainless steel. A vented overhang shall be provided above both the front and rear cabinet doors.
- Cabinet Doors: The cabinet shall include front and rear doors of NEMA type 3R construction with a cellular neoprene gasket that is rain tight. The door hinges shall be continuous 14-gauge stainless steel and shall be secured with 1/4-20 stainless steel carriage bolts. The standard equipment shall include a three-point locking system that secures the door at the top, bottom and center. A corbin lock with two keys shall also be furnished. The door shall be equipped with a two-position doorstop, one at 90° and one at 120°. In cases where the plans indicate a cabinet is to be affixed to a wood pole, a single door cabinet is required.
- **Controller Harness:** The cabinet shall include a TS2 Type 2 "A" harness in addition to the TS2 Type 1 harness.
- **Surge Protection:** The cabinet shall have a 120VAC Single Phase Modular filter Plugin type, supplied from an approved vendor.
- **BIU:** The BIU shall be secured by mechanical means.

- Switch Guards: All switches shall include switch guards.
- **Back Panel:** The back panel wiring shall be securely covered with a piece of Plexiglas. The Plexiglas shall have a minimum thickness 1/8-inch.
- Heating: The cabinet shall include one 200-watt, thermostatically-controlled, electric heater.
- **Lighting:** The cabinet shall include four LED light assemblies along the top and sides of the cabinet. The LED panels shall be controlled by a door switch. The LED Panels shall be provided from an approved vendor.
- Plan & Wiring Diagrams: The cabinet shall include a 12" x 15" moisture sealed container attached to door for plan and wiring diagrams.
- **Pull-out Drawer:** The cabinet shall be equipped with a pull-out drawer/shelf assembly. A 1½ inch deep drawer shall be provided in the cabinet, mounted directly beneath the controller support shelf. The drawer shall have a hinged top cover and shall be capable of accommodating one complete set of cabinet prints and manuals. This drawer shall support 50 pounds in weight when fully extended. The drawer shall open and close smoothly. The drawer dimensions shall make maximum use of available depth offered by the controller shelf and be a minimum of 18 inches wide.
- **Detector Racks:** The cabinet shall include a full-size rack fully wired to support one BIU, sixteen channels of vehicle detection, and four channels of EVP. When additional detection inputs are required, a second rack shall be provided at no additional cost to the Contract.
- Field Wiring Labels: All field wiring shall be labeled.
- **Field Wiring Termination:** Approved channel lugs shall be required for all field wiring termination.
- **Power Supply:** The power supply shall include a nonconductive shield.
- **Circuit Breaker:** The signal circuit breaker shall be sized for the proposed load. The signal circuit breaker shall be rated a minimum of 30 amps. When combination lighting is included, an additional circuit breaker shall be provided at no additional cost to the Contract.
- **Police Door:** The cabinet shall include wiring and termination for a plug-in manual phase advance switch.
- Railroad Pre-Emption Test Switch: A railroad pre-emption test switch shall be provided from an approved vendor.
- Malfunction Management Unit (MMU): The cabinet shall include a 16 Channel, LCD display, IP addressable (Ethernet) MMU. The MMU shall be connected to the Ethernet switch with a CAT 5e cable and configured for proper communication.
- **Door Alarm:** The front and rear doors shall be equipped with switches wired to the traffic signal controller alarm 1 input for logging and reporting of a door open condition.
- Photocell: Photocell shall be rated 105-305V, turn on at 1.5 fcs. with a 3-5 second delay and shall operate a contactor sized for the signs and lights shown on the plans. The photocell shall be installed under the front lip of the cabinet in a drilled hole. A manufacturer's warranty of six years shall be provided for the photocell. Photocell power consumption shall be no greater than 1 watt at 120V. The photocell and contactor shall be wired to operate all internally illuminated street name signs and combination street lights at the intersection. The photocell and contactor shall be wired so that the fixtures are not operational when the signal operates under battery or generator power. The photocell and contactor shall be configured so that light fixtures and signs will be energized if the photocell fails.

**Basis of Payment:** This item will be paid for at the Contract unit price per each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL. The unit price shall include all equipment, materials and labor required to furnish and install the cabinet and controller, complete with necessary connections and equipment for proper operation.

#### UNINTERRUPTABLE POWER SUPPLY, SPECIAL

Effective: January 1, 2013 Revised: May 19, 2016

862.01TS

This work shall be in accordance with section 862 of the Standard Specification except as modified herein

Add the following to Article 862.01 of the Standard Specifications:

The UPS shall have the power capacity to provide normal operation of a signalized intersection that utilizes all LED type signal head optics, for a minimum of 6 (six) hours.

Add the following to Article 862.02 of the Standard Specifications:

Materials shall be according to Article 1074.04 as modified in UNINTERRUPTABLE POWER SUPPLY, SPECIAL.

Add the following to Article 862.03 of the Standard Specifications:

The UPS shall additionally include, but not be limited to, a battery cabinet, where applicable. For Super-P (Type IV) and Super-R (Type V) cabinets, the battery cabinet is integrated to the traffic signal cabinet, and shall be included in the cost for the traffic signal cabinet of the size and type indicated on the plans.

The UPS shall provide reliable emergency power to the traffic signals in the event of a power failure or interruption.

Revise Article 862.04 of the Standard Specifications to read:

# Installation.

When a UPS is installed at an existing traffic signal cabinet, the UPS cabinet shall partially rest on the lip of the existing controller cabinet foundation and be secured to the existing controller cabinet by means of at least four (4) stainless steel bolts. The UPS cabinet shall be completely enclosed with the bottom and back constructed of the same material as the cabinet.

When a UPS is installed at a new signal cabinet and foundation, it shall be mounted as shown on the plans.

At locations where UPS is installed and an Emergency Vehicle Priority System is in use, any existing incandescent confirmation beacons shall be replaced with LED lamps in accordance with the District One Emergency Vehicle Priority System specification at no additional cost to the contract. A concrete apron shall be provided and be in accordance with Articles 424 and 202 of

the Standard Specifications. The concrete apron shall also, follow the District 1 Standard Traffic Signal Design Detail, Type D for Ground Mounted Controller Cabinet and UPS Battery Cabinet.

This item shall include any required modifications to an existing traffic signal controller as a result of the addition of the UPS including the addition of alarms.

#### Materials.

Revise Article 1074.04(a)(1) of the Standard Specifications to read:

The UPS shall be line interactive or double conversion and provide voltage regulation and power conditioning when utilizing utility power. The UPS shall be sized appropriately for the intersection(s) normal traffic signal operating load. The UPS must be able to maintain the intersection's normal operating load plus 20 percent (20%) of the intersection's normal operating load. When installed at a railroad-interconnected intersection the UPS must maintain the railroad pre-emption load, plus 20 percent (20%) of the railroad preemption-operating load. The total connected traffic signal load shall not exceed the published ratings for the UPS.

The UPS shall provide a minimum of 6 (six) hours of normal operation run-time for signalized intersections with LED type signal head optics at 77 °F (25 °C) (minimum 1000 W active output capacity, with 86 percent minimum inverter efficiency).

Revise the first paragraph of Article 1074.04(a)(3) of the Standard Specifications to read:

The UPS shall have a minimum of four (4) sets of normally open (NO) and normally closed (NC) single-pole double-throw (SPDT) relay contact closures, available on a panel mounted terminal block or locking circular connectors, rated at a minimum 120 V/1 A, and labeled so as to identify each contact according to the plans.

Revise Article 1074.04(a)(10) of the Standard Specifications to read:

The UPS shall be compatible with the District's approved traffic controller assemblies utilizing NEMA TS 1 or NEMA TS 2 controllers and cabinet components for full time operation.

Revise Article 1074.04(a)(17) of the Standard Specifications to read:

When the intersection is in battery backup mode, the UPS shall bypass all internal cabinet lights, ventilation fans, cabinet heaters, service receptacles, luminaires, any lighted street name signs, any automated enforcement equipment and any other devices directed by the Engineer.

Revise Article 1074.04(b)(2)b of the Standard Specifications to read:

Batteries, inverter/charger and power transfer relay shall be housed in a separate NEMA Type 3R cabinet. The cabinet shall be Aluminum alloy, 5052-H32, 0.125-inch thick and have a natural mill finish.

Revise Article 1074.04(b)(2)c of the Standard Specifications to read:

No more than three batteries shall be mounted on individual shelves for a cabinet housing six batteries and no more than four batteries per shelf for a cabinet housing eight batteries.

Revise Article 1074.04(b)(2)e of the Standard Specifications to read:

The battery cabinet housing shall have the following nominal outside dimensions: a width of 25 in. (785 mm), a depth of 16 in. (440 mm), and a height of 41 to 48 in. (1.1 to 1.3 m). Clearance between shelves shall be a minimum of 10 in. (250 mm).

End of paragraph 1074.04(b)(2)e

The door shall be equipped with a two position doorstop, one a 90° and one at 120°.

Revise Article 1074.04(b)(2)g of the Standard Specifications to read:

The door shall open to the entire cabinet, have a neoprene gasket, an Aluminum continuous piano hinge with stainless steel pin, and a three point locking system. The cabinet shall be provided with a main door lock which shall operate with a traffic industry conventional No. 2 key. Provisions for padlocking the door shall be provided.

Add the following to Article 1074.04(b)(2) of the Standard Specifications:

j. The battery cabinet shall have provisions for an external generator connection.

Add the following to Article 1074.04(c) of the Standard Specifications:

- (8) The UPS shall include a tip or kill switch installed in the battery cabinet, which shall completely disconnect power from the UPS when the switch is manually activated.
- (9) The UPS shall include standard RS-232 and internal Ethernet interface.
- (10) The UPS shall incorporate a flanged electric generator inlet for charging the batteries and operating the UPS. The generator connector shall be male type, twist-lock, rated as 15A, 125VAC with a NEMA L5-15P configuration and weatherproof lift cover plate. Access to the generator inlet shall be from a secured weatherproof lift cover plate or behind a locked battery cabinet police panel.
- (11) The bypass switch shall include an internal power transfer relay that allows removal of the battery back-up unit, while the traffic signal is connected to utility power, without impacting normal traffic signal operation.

Revise Article 1074.04(d)(3) of the Standard Specifications to read:

All batteries supplied in the UPS shall be either gel cell or AGM type, deep cycle, completely sealed, prismatic lead calcium based, silver alloy, valve regulated lead acid (VRLA) requiring no maintenance. All batteries in a UPS installation shall be the same type; mixing of gel cell and AGM types within a UPS installation is not permitted.

Revise Article 1074.04(d)(4) of the Standard Specifications to read:

Batteries shall be certified by the manufacturer to operate over a temperature range of -13 to 160 °F (-25 to + 71 °C) for gel cell batteries and -40 to 140 °F (-40 to + 60 °C) for AGM type batteries.

Add the following to Article 1074.04(d) of the Standard Specifications:

- (9) The UPS shall consist of an even number of batteries that are capable of maintaining normal operation of the signalized intersection for a minimum of 6 (six) hours. Calculations shall be provided showing the number of batteries of the type supplied that are needed to satisfy this requirement. A minimum of four batteries shall be provided.
- (10) Battery Heater mats shall be provided, when gel cell type batteries are supplied.

Add the following to the Article 1074.04 of the Standard Specifications:

- (e) Warranty. The warranty for an uninterruptable power supply (UPS) and batteries (full replacement) shall cover a minimum of 5 years from date the equipment is placed in operation.
- (f) Installation. Bypass switch shall completely disconnect the traffic signal cabinet from the utility provider.
- (g) The UPS shall be set-up to run the traffic signal continuously, without going to a red flashing condition, when switched to battery power unless otherwise directed by the Engineer. The Contractor shall confirm set-up with the Engineer. The continuous operation mode when switched to battery may require modification to unit connections and these modifications are included in the unit price for this item.

Revise Article 862.05 of the Standard Specifications to read:

# Basis of Payment.

This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL. Replacement of Emergency Vehicle Priority System confirmation beacons and any required modifications to the traffic signal controller shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item. The concrete apron and earth excavation required shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item.

#### FIBER OPTIC CABLE

Revised:

DC871.01

**Description:** This work shall consist of furnishing and installing all accessories required and fiber optic cable of the type, size, and number of fibers specified.

**Materials:** The Fiber Optic Cable shall meet the requirements of Article 1076.02 of the "Standard Specifications" and the following:

The Fiber Optic Cable may be gel filled or have an approved water blocking tape.

**General:** This work shall be performed according to Section 871 of the "Standard Specifications" and the following:

This work shall consist of furnishing and installing fiber optic cable in conduit with all accessories and connectors. The cable shall be of the type, size, and the number of fibers specified with a maximum of twelve fibers per buffer tube. The work includes making all fiber splices and terminations to the proposed fiber optic cable as indicated on the plans and/or as directed by the Traffic Engineer.

The distribution enclosure shall be wall-mountable with capacity for four closet connector housing panels per enclosure and up to eight 0.2-inch or four 0.4-inch reduced length splice trays. The enclosure dimensions shall not exceed 13.5" x 8.5" x 4.5". The enclosure shall be capable of accommodating the required number of fibers. The distribution enclosure shall be included in the cost of FIBER OPTIC CABLE of the type, size, and number of fibers specified, including connections to any existing cables.

All fibers being terminated shall be connected to the distribution enclosure and labeled at the connector and also at the enclosure bulkhead. The label shall include the direction and also the fiber number (e.g. S1, S2, N11, N12).

All splices and terminations on the installed fiber optic cable shall be included in the cost of the fiber optic cable, including the splicing of the installed fiber optic cable to any existing fiber optic cable. Splice trays and connector bulkheads required for the installed fiber optic cable shall be included in the cost of FIBER OPTIC CABLE of the type, size, and number of fibers specified.

All terminations and splices required only on existing fiber optic cable shall be paid for separately according to the pay item TERMINATE FIBER IN CABINET or SPLICE FIBER IN CABINET.

A minimum of 13 feet of slack cable shall be provided for the controller cabinet. The controller cabinet slack cable shall be stored as directed by the Traffic Engineer.

The quality of the fiber optic cable, including all splices and terminations, shall be verified by testing and documentation according to Article 801.13(d) of the "Standard Specifications", to the satisfaction of the Traffic Engineer.

<u>Multimode</u>: When multimode fiber is required, the Contractor shall coordinate with the traffic signal controller vendor/equipment supplier and shall terminate as many multimode fibers as are necessary to establish proper communications over the serial communications protocol between new and/or existing signal controllers and/or video transmission equipment. In addition, the Contractor shall terminate four unused multimode fibers and attach them to the distribution enclosure. All multimode terminations shall be ST compatible connectors with ceramic ferrules.

<u>Singlemode:</u> The Contractor shall splice and/or terminate the number of singlemode fibers shown on the project plans, if any, according to the following requirements:

<u>Singlemode Fiber Terminations:</u> All singlemode fiber terminations shall utilize prefabricated, factory-terminated (SC compatible with ceramic ferrules) pigtails fusion spliced to bare fibers. The pre-fabricated pigtails shall have all of their fibers color coded to match the singlemode fibers in the fiber optic cable. Connector bulkheads shall be the proper type for the fiber enclosure at the location, and shall be properly secured to the enclosure.

<u>Singlemode Fiber Splices:</u> All splices shall be made using a fusion splicer that automatically positions the fibers using a system of light injection and detection. The Contractor shall provide all equipment and consumable supplies.

Splices shall be secured in fiber optic splice trays within fiber optic distribution enclosures. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled.

All optical fibers shall be spliced to provide continuous runs. Splices shall only be allowed in equipment cabinets except where otherwise shown on the plans.

Basis of Payment: The work shall be paid for at the contract unit price per foot for FIBER OPTIC CABLE of the type, size, and number of fibers specified. The unit price shall include distribution enclosure(s), all connectors, pigtails, splice trays, connector bulkheads, testing and documentation, and the required number of fiber splices and terminations shown on the plans. Additional fiber terminations and/or splices required by the Traffic Engineer, (not included in this item), shall be paid for as TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

#### MODIFY EXISTING CONTROLLER CABINET, SPECIAL

The work shall consist of modifying an existing controller cabinet and relocation of existing controller cabinet items in accordance with Section 895 of the Standard Specifications to prepare the existing cabinet for the following work:

- a) Uninterruptable Power Supply (UPS). The addition of uninterruptable power supply (UPS) to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the uninterruptable power supply (UPS) components inside the existing controller cabinet as outlined under Sections 862 and 1074.04 of the Standard Specifications and the wiring of UPS alarms.
- b) Electric Meter. The addition of an electric meter to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the electric meter components inside the existing controller cabinet.
- c) Switches. The addition of a Layer II (Datalink) switch or a Layer III (Network) switch to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the switch inside the existing controller cabinet.
- d) Remote Controlled Video System. The addition of a remote controlled video system to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the remote controlled video system components inside the existing controller cabinet.
- e) Power Over Ethernet (POE) Extender. The addition of a POE Extender to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the POE Extender inside the existing controller cabinet.

- f) Video Detection System, Special. The addition of a vehicle detection system to an existing cabinet could require the relocation of the existing controller cabinet items to allow for the installation of the video detection system components inside the existing cabinet.
- g) Fiber Optic Cable and Patch Panel. The addition of fiber optic cable to an existing controller cabinet could require the relocation of the existing controller cabinet items to allow for the termination of the fiber optic cable inside the existing controller cabinet.
- h) Grounding. The grounding of traffic signal equipment may require additional power terminals and/or ground terminals inside the existing controller cabinet.

# Basis of Payment.

Modifying an existing controller cabinet will be paid for at the contract unit price per each for MODIFY EXISTING CONTROLLER CABINET, SPECIAL. This shall include all material and labor required to complete the work as described above, the removal and disposal of all items removed from the controller cabinet, as directed by the Engineer.

The equipment, materials and labor needed to install new equipment in the existing controller cabinet shall be included in MODIFY EXISTING CONTROLLER CABINET, SPECIAL, unless specified elsewhere in the specifications.

#### REMOVE FIBER OPTIC CABLE FROM CONDUIT

**Description:** This work shall consist of removing a portion of the existing fiber optic interconnect cable from conduit as shown on the plans.

Materials: None.

**Construction:** The existing fiber optic cable shall be disconnected from the communications end equipment and fiber enclosures, and removed from the existing conduits. Removal of the fiber optic cable shall prevent damage to end equipment from the cable being tugged. Cables shall be taken off site for proper disposal.

**Basis of Payment:** This work will be paid for at the contract unit price per foot for REMOVE FIBER OPTIC CABLE FROM CONDUIT which price shall be payment in full for disconnecting the existing fiber optic cable from the end locations and removing the existing fiber optic cable from the existing conduits.

#### RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM

This work shall consist of the removal, storage, and relocation of an existing UPS Battery Back-Up System from an existing traffic signal controller cabinet that is to be removed to a new traffic signal controller cabinet that is to be installed by the Contractor.

The existing UPS Battery Back-Up System, including all necessary peripheral equipment, shall be removed and relocated to the new traffic signal controller cabinet as shown in the plans. Any damage sustained to the UPS Battery Back-up System during removal, storage or reinstallation

operations shall be repaired or replaced in kind to the satisfaction of the Engineer at the Contractor's expense.

Basis of Payment: This item will be paid for at the contract unit price each for RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM, which price shall be payment in full for labor, parts and materials necessary for disconnecting the existing UPS Battery Back-Up System and relocating it to the new traffic signal controller cabinet complete and operating to the satisfaction of the Engineer.

# XX007017 TERMINATE FIBER IN CABINET

Revised: DC871.03

**Description:** This work shall consist of terminating existing or new fibers in a field cabinet, inside a building, as shown on the plans and/or as directed by the Traffic Engineer.

**General:** This pay item shall include splices between existing fiber optic cables and any splices shown on the plans as a bid item.

All multimode connectors shall be ST compatible, with ceramic ferrules. Singlemode fiber terminations shall utilize pre-fabricated, factory-terminated (SC compatible with ceramic ferrules) pigtails fusion spliced to bare fibers. The splicing of pigtails for singlemode fibers is included in the cost of TERMINATE FIBER IN CABINET. The pre-fabricated pigtails shall have all of their fibers color coded to match the singlemode fibers in the fiber optic cable. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled. Splice trays and connector bulkheads shall be included in the cost of TERMINATE FIBER IN CABINET. Connector bulkheads shall be the proper type for the fiber enclosure at the location, and shall be properly secured to the enclosure.

The quality of all fiber splices shall be verified by testing and documentation according to Article 801.13(d) of the "Standard Specifications," to the satisfaction of the Traffic Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per each for TERMINATE FIBER IN CABINET. The unit price shall include all equipment; materials; connectors; pigtails; splice trays; bulkheads; testing and documentation; and labor required to terminating each required multimode or singlemode fiber. Terminations involving new fiber optic cable installed under this contract, including any terminations shown on the plans as an included item, shall be included in the unit cost of the applicable FIBER OPTIC CABLE of the type, size, and number of fibers specified.

#### RELOCATE EXISTING TRANSCEIVER

This work shall consist of the removal, storage, and relocation of existing transceiver located at a traffic signal controller cabinet that is to be removed to a new traffic signal controller cabinet that is to be installed by the Contractor.

The existing transceiver, including all necessary peripheral equipment, shall be removed and relocated to the new traffic signal controller cabinet as shown in the plans. Any damage sustained to the transceiver during removal, storage or reinstallation operations shall be repaired or replaced in kind to the satisfaction of the Engineer at the Contractor's expense.

Basis of Payment: This item will be paid for at the contract unit price each for RELOCATE EXISTING TRANSCIEVER, which price shall be payment in full for labor, parts and materials necessary for disconnecting the existing transceiver and relocating it to the new traffic signal controller cabinet complete and operating to the satisfaction of the Engineer.

#### TRAFFIC SIGNAL PAINTING

**Description.** This work shall include surface preparation, powder coated finish application and packaging of new galvanized steel camera mounting assemblies. All work associated with applying the painted finish shall be performed at the vendor's facility for the pole assembly or post or at a painting facility approved by the Engineer.

Surface Preparation. All weld flux and other contaminates shall be mechanically removed. The traffic mast arms and post assemblies shall be degreased, cleaned, and air dried to assure all moisture is removed.

Painted Finish. All galvanized exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a dry film thickness of 2.0 mils. Prior to application, the surface shall be mechanically etched by brush blasting (Ref. SSPC-SP7) and the zinc coated substrate preheated to 450 °F for a minimum one (1) hour. The coating shall be electrostatically applied and cured by elevating the zinc-coated substrate temperature to a minimum of 400 °F.

The finish paint color shall be one of the vendor's standard colors and shall be as selected by the local agency responsible for paint costs. The Contractor shall confirm, in writing, the color selection with the local responsible agency and provide a copy of the approval to the Engineer and a copy of the approval shall be included in the material catalog submittal.

Painting of traffic signal heads, pedestrian signal heads and controller cabinets is not included in this pay item.

Any damage to the finish after leaving the vendor's facility shall be repaired to the satisfaction of the Engineer using a method recommended by the vendor and approved by the Engineer. If while at the vendor's facility the finish is damaged, the finish shall be re-applied at no cost to the contract.

Warranty. The Contractor shall furnish in writing to the Engineer, the paint vendor's standard warranty and certification that the paint system has been properly applied.

Packaging. Prior to shipping, the camera mounting assemblies shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

Basis of Payment. This work shall be paid for at the contract unit price each for PAINT TRAFFIC SIGNAL EQUIPMENT, which shall be payment in full for painting and packaging the traffic signal camera mounting assemblies.

# XX007622 ELECTRIC METER (DUDOT)

Revised: DC805.02

**Description:** This work shall consist of furnishing a ringless meter socket meeting the requirements of the power company. The meter socket shall be installed on the side of the existing traffic signal controller cabinet, opposite of the UPS side of the cabinet in accordance with the details provided in the plans at existing unmetered traffic signal locations, or as directed by the engineer.

**Materials:** The meter socket shall meet the following requirements:

- CECHA Approved
- Single Position
- Number of Jaws = 4 Terminal
- Voltage rating of 600 Volts Alternating Current
- Amperage rating of 200 Continuous Ampere

**Basis of Payment:** This item will be paid for at the contract unit price per each for ELECTRIC METER. The unit price shall include all equipment, materials, and labor required to furnish, and install the electric meter socket and related hardware components.

# XX007952 TERMINAL SERVER

Revised: DC801.15

**Description:** This work shall consist of furnishing and installing a terminal server used to transmit signal controller data from one or more traffic signal controllers onto the DuPage County Central Signal System Ethernet network. The Contractor shall furnish and install the required hardware at the location shown on the plans and/or as directed by the Traffic Engineer.

**General:** The terminal server shall be one of the following:

- Digi PortServer TS Hcc 4 four-port serial-to-Ethernet device with 120V power supply and Digi RJ45/DB25-male-DCE-48" cable
- Comtrol DeviceMaster DM-2304 four-port serial-to-Ethernet device with 120V power supply and a 9-pin to 25-pin serial cable

The Contractor shall provide a null modem if required by the manufacturer for communication.

The terminal server shall have anonymous FTP capabilities disabled by the vendor/equipment supplier or provide a feature for the user to disable the functionality through the standard device menus.

The terminal server shall be properly configured for its location within the DuPage County Ethernet Network, and for proper communication with the signal equipment being connected to it. Except where indicated otherwise in the special provisions or plans, DUDOT will provide the IP address and serial drop addresses upon request.

The required programming shall be included in the cost of this pay item.

**Basis of Payment:** This item will be paid for at the contract unit price per each for TERMINAL SERVER. The unit price shall include all equipment, materials and labor required to furnish, install, configure, and place into operation the terminal server to the satisfaction of the Traffic Engineer.

#### XX008251 SPLICE FIBER IN CABINET

Revised: DC871.02

**Description:** This work shall consist of fusion splicing singlemode fibers in a field cabinet, inside a building, as shown on the plans and/or as directed by the Traffic Engineer.

**General:** This pay item shall include splices between existing fiber optic cables and any splices shown on the plans as a bid item.

Splices shall be secured in fiber optic splice trays within fiber optic distribution enclosures. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled. Splice trays shall be included in the unit cost of SPLICE FIBER IN CABINET.

The quality of all fiber splices shall be verified by testing and documentation according to Article 801.13(d) of the "Standard Specifications," to the satisfaction of the Traffic Engineer.

All optical fibers shall be spliced to provide continuous runs. Splices shall only be allowed in equipment cabinets, in buildings, as shown on the plans and/or as directed by the Traffic Engineer.

All splices shall be made using a fusion splicer that automatically positions the fibers using a system of light injection and detection. The Contractor shall provide all equipment and consumable supplies.

**Basis of Payment:** This work shall be paid for at the contract unit price per each for SPLICE FIBER IN CABINET. The unit price shall include all equipment; materials; fiber optic splice trays;

testing and documentation; and labor required to fusion splice singlemode fiber optic cable. Splices involving new fiber optic cable installed under this contract, and any splices shown on the plans as an included item, shall be included in the unit cost of the applicable FIBER OPTIC CABLE of the type, size, and number of fibers specified.

# LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE (DUDOT)

Revised:

DC801.13

**Description:** This work shall consist of furnishing and installing a fiber optic transceiver module that plugs into a Cisco Layer III Ethernet switch.

**Materials:** The module shall be a small form pluggable (SFP), long distance, single mode transceiver, Cisco GLC-FE-1000FX-RGD.

**General:** The transceiver shall be installed in the Cisco Layer III switch at the location shown on the plans.

**Basis of Payment:** This item will be paid for at the contract unit price per each for LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE. The unit price shall include all equipment, materials, and labor required to furnish and install the module, including all necessary connectors, cables, hardware, software, and other peripheral equipment required to place the module in operation to the satisfaction of the Traffic Engineer.

# XX008396 CAMERA MOUNTING ASSEMBLY, SPECIAL

Revised: DC801.10

**Description:** This work shall consist of furnishing and installing an extension pole suitable for mounting a pan-tilt-zoom (PTZ) style closed circuit television camera on an existing traffic signal mast arm pole.

**Materials:** The pole extension shall be a Schedule 80 galvanized steel pipe, 20 feet in length and 4 inches in diameter.

**General:** The pole extension shall be fastened to the existing mast arm pole with adjustable, galvanized steel clamps as shown on the plans. The galvanized clamps shall fit securely around the tapered mast arm. The Contractor shall use galvanized shims and shall modified the clamps as required to maintain a plumb vertical alignment of the camera mounting assembly pole. The exposed wires shall be trained into a drip loop and protected with black plastic spiral cable wrap.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

**Basis of Payment:** This work shall be paid for at the contract unit price per each for CAMERA MOUNTING ASSEMBLY. The unit price shall include all equipment, materials, mounting

hardware, shims, gromets, cable wrap, components, and labor required to securely fasten the assembly to an existing pole and place the camera into operation to the satisfaction of the Traffic Engineer. The camera, cables, connectors, and related equipment will be paid for separately as part of unit price for REMOTE CONTROLLED VIDEO SYSTEM or RELOCATE EXISTING REMOTE-CONTROLLED VIDEO SYSTEM.

# **VEHICLE DETECTION SYSTEM, SPECIAL**

**Description:** This work shall consist of furnishing and installing a system that monitors vehicles on a roadway utilizing non-intrusive technologies and that provides detector outputs to a traffic signal controller. This work shall consist of furnishing and installing video cameras, cables, detector processors, a controller interface unit, and a remote communication module to operate the vehicle detection system at one signalized intersection.

Materials: The Vehicle Detection System, Special shall be:

- Autoscope Vision

All the cables from the detection camera(s) or radar unit(s) to the traffic signal cabinet and within the traffic signal cabinet itself shall be included in the cost of this item.

When a video-based system is installed, the Vehicle Detection System, Special shall also include a LCD monitor in the traffic signal cabinet with an industry standard connector for video input that is compatible with commercially available monitors. Surge protection and grounding shall be provided to protect the detection units and any related components located in the traffic signal cabinet.

When detector mounting locations, cables, and quantities are shown in the plan, those are intended to be representative only, and they may not reflect the specific requirements of all the approved systems. The Contractor shall be solely responsible for confirming the exact distances based on the detection zones and the manufacturer's recommended mounting locations prior to procuring the materials.

The system shall have Ethernet capability, with anonymous FTP capabilities disabled by the vendor/equipment supplier or provide a feature for the user to disable the functionality through the standard internal menu.

**General:** The detection system shall be capable of detecting vehicles within the detection zones shown on the plans, including stopped vehicles, and vehicles entering from driveways, parking areas, or side streets adjacent to the detection zone. At the time catalog cuts are submitted, the Contractor shall provide an exhibit prepared by the vendor/equipment supplier showing the proposed location and mounting of the cameras to achieve the required detection, including the proposed cabling requirements of the particular detection system proposed.

The as-built plans shall indicate the type and location of the cameras and cables installed under this pay item.

**Installation:** When a video-based system is installed, the video detection units shall be installed at the highest available location that meets the manufacturer's recommendations. If an alternate

mounting height is proposed, the Contractor shall provide a written explanation of the need for the deviation. The Contractor shall take care to ensure that the proposed mounting locations do not result in obstructed detection fields or views due to overhead utility wires or other existing features at the intersection.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

If the detection system is installed in a traffic signal cabinet with a network switch (Layer II or Layer III), it shall be capable of communicating over 10/100 Base T Ethernet and shall be connected to the switch with an Ethernet patch cable. The Contractor shall be responsible for programming the network settings and other parameters to establish operations within the County network. Except where indicated otherwise in the special provisions or plans, DUDOT will provide the IP address upon request.

Basis of Payment: This item will be paid for at the contract unit price per each for VEHICLE DETECTION SYSTEM, SPECIAL. The unit price shall include all associated equipment, hardware, cables, materials and labor required to install the system at one signalized intersection and in operation to the satisfaction of the Traffic Engineer. If required, the cost of the J-hook, riser(s), and/or other supplemental support hardware shall be included in the cost of VEHICLE DETECTION SYSTEM, SPECIAL. If required, the LAYER II (DATALINK) SWITCH and/or the LAYER III (NETWORK) SWITCH will be paid for separately.

#### RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

Effective: May 22, 2002 Revised: July 1, 2015

800.03TS

#### Description.

This work shall consist of re-optimizing a closed loop traffic signal system according to the following Levels of work.

LEVEL I applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system. The purpose of this work is to integrate the improvements to the subject intersection into the signal system while minimizing the impacts to the existing system operation. This type of work would be commonly associated with the addition of signal phases, pedestrian phases, or improvements that do not affect the capacity at an intersection.

LEVEL II applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system and detailed analysis of the intersection operation is desired by the engineer, or when a new signalized or existing signalized intersection is being added to an existing system, but optimization of the entire system is not required. The purpose of this work is to optimize the subject intersection, while integrating it into the existing signal system with limited impact to the system operations. This item also includes an evaluation of the overall system operation, including the traffic responsive program.

For the purposes of re-optimization work, an intersection shall include all traffic movements operated by the subject controller and cabinet.

After the signal improvements are completed, the signal shall be re-optimized as specified by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (847) 705-4424 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 1 SCAT Guidelines, except as note herein.

A listing of existing signal equipment, interconnect information, phasing data, and timing patterns may be obtained from the Department, if available and as appropriate. The existing SCAT Report is available for review at the District One office and if the Consultant provides blank computer discs, copies of computer simulation files for the existing optimized system and a timing database will be made for the Consultant. The Consultant shall confer with the Traffic Signal Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system, in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the optimization.

# (a) LEVEL I Re-Optimization

- 1. The following tasks are associated with LEVEL I Re-Optimization.
  - a. Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system.
  - b. Proposed signal timing plan for the modified intersection(s) shall be forwarded to IDOT for review prior to implementation.
  - c. Consultant shall conduct on-site implementation of the timings at the turn-on and make fine-tuning adjustments to the timings of the subject intersection in the field to alleviate observed adverse operating conditions and to enhance operations. The consultant shall respond to IDOT comments and public complaints for a minimum period of 60 days from date of timing plan implementation.
- 2. The following deliverables shall be provided for LEVEL I Re-Optimization.
  - a. Consultant shall furnish to IDOT a cover letter describing the extent of the reoptimization work performed.
  - b. Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.

# (b) LEVEL II Re-Optimization

- 1. In addition to the requirements described in the LEVEL I Re-Optimization above, the following tasks are associated with LEVEL II Re-Optimization.
  - a. Traffic counts shall be taken at the subject intersection(s) after the traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. Manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday and on a Saturday and/or Sunday, as directed by the Engineer, to account for special traffic generators such as shopping centers, educational institutes and special event facilities. The turning movement counts shall identify cars, and single-unit, multi-unit heavy vehicles, and transit buses.
  - b. As necessary, the intersection(s) shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District One.

- c. Traffic responsive program operation shall be evaluated to verify proper pattern selection and lack of oscillation and a report of the operation shall be provided to IDOT.
- 2. The following deliverables shall be provided for LEVEL II Re-Optimization.
  - a. Consultant shall furnish to IDOT one (1) copy of a technical memorandum for the optimized system. The technical memorandum shall include the following elements:
    - (1) Brief description of the project
    - (2) Printed copies of the analysis output from Synchro (or other appropriate, approved optimization software file)
    - (3) Printed copies of the traffic counts conducted at the subject intersection
  - b. Consultant shall furnish to IDOT two (2) CDs for the optimized system. The CDs shall include the following elements:
    - (1) Electronic copy of the technical memorandum in PDF format
    - (2) Revised Synchro files (or other appropriate, approved optimization software file) including the new signal and the rest of the signals in the closed loop system
    - (3) Traffic counts conducted at the subject intersection(s)
    - (4) New or updated intersection(s) graphic display file for the subject intersection(s)
    - (5) The CD shall be labeled with the IDOT system number and master location, as well as the submittal date and the consultant logo. The CD case shall include a clearly readable label displaying the same information securely affixed to the side and front.

#### Basis of Payment.

This work shall be paid for at the contract unit price each for RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL I or RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL II, which price shall be payment in full for performing all work described herein per intersection. Following completion of the timings and submittal of specified deliverables, 100 percent of the bid price will be paid. Each intersection will be paid for separately.

#### REMOVE AND REPLACE ANCHOR BOLTS

This item shall consist of replacing anchor rods at existing concrete foundations for traffic signal posts. At locations specified on the plans for new traffic signal post installation, the Contractor shall inspect the existing post foundations prior to removing the existing traffic signal post. The Contractor shall verify that the pattern, spacing, and condition of the existing anchor bolts are acceptable for reuse with a new post. The Contractor shall replace unacceptable anchor bolts as approved by the Engineer.

Anchor bolts shall be according to Article 1006.09 and shall be hot dipped galvanized.

#### Installation.

Existing anchor bolts shall be cut flush with the top of concrete foundation.

The bolt circle of the new anchor bolts shall be rotated a minimum of 2.5-inches away from the existing anchor bolts. New anchor bolts shall be <sup>3</sup>/<sub>4</sub>-inch diameter with minimum 9-inch embedment into the existing concrete foundation and 3-inch threaded length above the top of

foundation. New anchor bolts shall be installed using an injectable epoxy adhesive anchor system.

#### Method of Measurement.

The removal and replacement of anchor bolts will be measured for payment as per each foundation requiring anchor bolt replacement. This shall include all anchor bolts replaced, labor, equipment, and materials required for replacing anchor bolts at an existing foundation as specified herein.

#### Basis of Payment.

This item will be paid for at the contract unit price each for REMOVE AND REPLACE ANCHOR BOLTS.

#### WIRELESS TRANSMISSION SYSTEM SUBSCRIBER UNIT

**Description:** This work shall consist of the installation of a new node on the DuPage County Central Signal System wireless network. The work includes furnishing and installing the directional antenna and power injector; associated cables and/or wiring; and all mounting hardware.

Materials: The Wireless Transmission System Subscriber Unit includes:

- One Proxim Tsunami QB 10150 Subscriber unit with Integrated 23dBi Antenna (Model QB-10150-LNK-US).
- Two Proxim Model 76394 surge suppressors.
- Power wiring from the radio power injector to the circuit breaker.
- All mounting hardware.

The Wireless Transmission System Subscriber Unit electronics shall be procured from the County's Network Integration Consultant, which will provide the proper parts and programming to fit within the DuPage County IP scheme.

**General:** The power injector and one surge suppressor shall be installed in the signal cabinet as directed by the Traffic Engineer. All remaining mounted components of this item shall be installed as high as possible on the mast arm assembly pole or camera pole as shown on the plans and/or as directed by the Traffic Engineer. The system shall not be installed on the mast arm or luminaire arm unless directed to do so by the Traffic Engineer. In the event existing equipment precludes the highest mounting location, the Contractor shall contact the Traffic Engineer before moving any existing equipment to confirm the preferred mounting location.

The antenna shall be aimed at another antenna on the County's wireless system, (e.g. aimed at corresponding antenna at another intersection), as shown on the plans and/or as directed by the Traffic Engineer. A representative of the County's Network Integration Consultant shall be present during the aiming of the antenna to assess the link performance and direct any necessary adjustments in mounting and/or aiming the antenna.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

Basis of Payment: This item will be paid for at the contract unit price per each for WIRELESS TRANSMISSION SYSTEM SUBSCRIBER UNIT. The unit price shall include all equipment, materials, and labor required to furnish and install the antenna and power injector, placing the system in operation to the satisfaction of the Traffic Engineer. The unit price shall also include all equipment, materials and labor required to furnish and install all associated connectors; cables; hardware; other peripheral equipment; and all programming and field support by the County's Network Integration Consultant. The OUTDOOR RATED NETWORK CABLE from the antenna to the traffic signal cabinet or switch location shall be paid for separately.

#### FIBER CONNECTION

**Description:** This work shall consist of the installation of new conduit from the handhole being installed outside of the building to the IT room inside of the building, as indicated in the plans.

#### General:

The plans indicate routing of proposed fiber from the handhole to the IT room through proposed and existing conduit and junction boxes as indicated as the preferred routing by the Village of Lombard. Any changes to the proposed routing shall be approved by the Village of Lombard before installation.

The location of the buildings are:

Location	Building	Address
Building No. 1	Lombard Fire Station No. 1	50 E St. Charles Rd, Lombard IL 60148
Building No. 2	Lombard Fire Station No. 2	2020 S Highland Ave, Lombard IL 60148
Building No. 3	Lombard Village Hall	255 E Wilson Ave, Lombard IL 60148
Building No. 4	Lombard Police Department	235 E Wilson Ave, Lombard IL 60148
Building No. 5	Lombard Public Works	1051 Hammerschmidt Ave, Lombard IL 60148

#### **Definition:**

NECA 1– National Electrical Contractors Association's "Good Workmanship in Electrical Construction" (ANSI)

#### **Equipment:**

The Contractor shall furnish, erect, and move scaffolding or other mechanical equipment to construct and permit close observation of the work. Examples of acceptable access structures include the following.

- (1) Mechanical lifting equipment such as scissor trucks, hydraulic booms, etc.
- (2) Platforms suspended from the structure compromised of trusses or other stiff supporting members and including rails and kick boards.
- (3) Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to OSHA regulations are provided.

When the work surface is more than 6 ft above the ground and fall prevention is not provided (e.g. guardrails) the Contractor shall provide the Engineer with a safety harness and lifeline. The Contractor shall provide a method of attaching the lifeline to the structure independent of

the inspection facility. When the work surface is more than 30 in. above the ground, the Contractor shall provide an approved means of access.

# Wall Penetrations (Coring):

Penetration Firestopping Systems shall be used in Fire-Resistance-Rated Walls with ratings determined per ASTM E814 or UL 1479. New wall penetration firestopping systems are to be compatible with one another, with the substrates forming openings and with penetrating items if any.

Non-fire-rated penetrations shall comply with NECA 1. Standard Schedule 40 conduit cut flush at both ends of the wall shall be used as a sleeve. Non-shrink grout, recommended for interior and exterior sealing of openings shall be used to seal the sleeve. The non-shrink grout shall comply with ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.

#### **Interior Fiber Optic Pathways and Fittings:**

Fiber optic pathways and fittings shall comply with UL 2024; flexible-type pathway with a circular cross section, approved for plenum installation unless otherwise indicated. The pathway shall be labeled in accordance with NFPA 70 and comply with TIA-569-D. The minimum pathway size shall be 1 inch trade size.

Boxes and enclosures shall be NEMA 250, Type 1, except use NEMA, Type 4 Stainless steel units in damp or wet locations. Pathways shall be installed in maximum lengths of 75 feet. Pathways shall be installed with a maximum of two 90-degree bends or equivalent for each length of pathway. Separate lengths with pull or junction boxes or terminations at distribution frames or cabinets where necessary.

Pathway-sealing fittings at accessible locations shall be installed according to NFPA 70 and filled with listed sealing compound. For concealed pathways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces.

Pathway conduit support devices shall be designed for type and size of pathway to be supported.

**Method of Measurement:** All work for each individual location shall be counted separately and measured as lump sum for payment unless it is specifically included with a separate pay item.

**Basis of Payment:** This item will be paid for at the lump sum price for FIBER CONNECTION, at the location specified.

LAYER II (DATALINK) SWITCH or LAYER III (NETWORK) SWITCH and LAYER III FIBER OPTIC TRANSCIEVERS MODULE, SFP TYPE, LONG DISTANCE shall be paid for separately.

RACK MOUNTED SPLICE ENCLOSURE or FIBER OPTIC SPLICE ENCLOSURE shall be paid for separately.

The FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE shall be paid for separately.

The ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C from the Handhole to the Junction Box attached to the building exterior shall be paid for separately.

#### **RACK MOUNTED SPLICE ENCLOSURE**

**Description:** This work shall consist of furnishing and installing a 144 port fiber optic distribution enclosure with splice trays in a building, or other secure facility as indicated in the plans and/or as directed by the Traffic Engineer.

**General:** This work shall be performed according to Section 871 of the "Standard Specifications" and the following:

This work shall consist of furnishing and installing the distribution enclosure and splice tray at the location in the building or other secure facility as directed by the Engineer. When noted in the plans or specifications, all work in facilities owned by other agencies is subject to the terms of the Contractor's permit or existing agreements between DuDOT and the other entity, whichever is applicable.

The Contractor shall relocate any equipment that is in conflict in a workmanlike manner. The Contractor shall tag or otherwise document existing fiber connections prior to removal. If the Contractor fails to adequately document connections, the testing required to reestablish connections shall be at no additional cost to the County.

In locations where existing enclosures are owned by other agencies, the Contractor shall not remove the existing enclosure unless directed to do so by the Traffic Engineer.

**Materials:** The distribution enclosure shall be rack-mountable with capacity for 144 fiber ports using at least six panels per enclosure and at least eight 0.2-inch or four 0.4-inch reduced length splice trays. The enclosure dimensions shall not exceed 2U and be able to be installed in either a 19" or 23" rack. The enclosure shall include SC connectors capable of accommodating the required number of singlemode fibers. When the plans indicate multimode fibers are to be used, at least one CCH connector panel shall include ST connectors to facilitate serial communications.

The splice trays shall be aluminum and capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The individual tray dimensions shall not exceed 7.5" x 4.1" x 0.45" and each shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. Each individual splice tray shall be labelled.

**Basis of Payment:** The work shall be paid for at the contract unit price per each for RACK MOUNTED SPLICE ENCLOSURE. The unit price shall include distribution enclosure, splice trays, jumpers, connectors, and mounting hardware required for installation within the indicted building or other secure location, including moving any equipment in conflict with the proposed enclosure mounting. Removal of existing enclosure will be included in the cost of this item. Fiber optic cable, fiber terminations, and fiber splices, shall be paid for as FIBER OPTIC CABLE, TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

#### **POE EXTENDER**

**Description:** This work shall consist of furnishing and installing a long range power over ethernet (PoE) extender kit for devices powered by PoE with cable runs greater than 250 feet.

**Materials:** The PoE extender kit shall consist of a base extender, device extender, power supply for base extender, mounts and all accessories required to install the PoE extender kit.

The PoE extender shall support IEEE 802.3af and IEEE 802.3at compliant devices. The PoE extender shall be TS2 compatible. The PoE extender shall be able to extend PoE to a maximum distance of 3280 feet and be able to operate in temperatures from -40° F to 158° F with maximum humidity of 85% RH (non-condensing).

The power supply shall have an input voltage of 90-265 V AC and an output voltage of 44-57 V DC with a max current of 0.7 A.

**Installation:** The power supply and base extender shall be installed in the traffic signal control cabinet. The power supply shall be hard-wired to the cabinet power, not plugged into one of the traffic signal cabinet power outlets.

The device extender shall be installed in the devices power supply cabinet located on the traffic signal mast arm pole.

**Basis of Payment:** This item will be paid for at the contract unit price per each for POE EXTENDER. The unit price shall include all associated equipment, hardware, cables, materials and labor required to install the complete system in place and in operation to the satisfaction of the Traffic Engineer.

The OUTDOOR RATED NETWORK cable from the traffic signal cabinet to the PoE device will be paid for separately.

#### IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

Effective: August 1, 2012 Revised: February 2, 2017

In addition to the Contractor's equal employment opportunity (EEO) affirmative action efforts undertaken as required by this Contract, the Contractor is encouraged to participate in the incentive program described below to provide additional on-the-job training to certified graduates of the IDOT pre-apprenticeship training program, as outlined in this Special Provision.

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at \$15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on the Contract, and the number of hours for which the incentive payment provided under this Special Provision will be, or has been claimed for the separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for

each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is 2.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship

Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

# 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:

DuPage County Village of Lombard

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

# **BLENDED FINELY DIVIDED MINERALS (BDE)**

Effective: April 1, 2021

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

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

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

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

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

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# **COMPENSABLE DELAY COSTS (BDE)**

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

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

- "(b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows.
  - (1) Minor Delay. A minor delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two hours, but not to exceed two weeks.
  - (2) Major Delay. A major delay occurs when the work in conflict with the utility in an unanticipated location is completely stopped for more than two weeks.
  - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the rate of production on the work in conflict with the utility in an unanticipated location decreases by more than 25 percent and lasts longer than seven calendar days."

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

- "(c) Payment. Payment for Minor, Major, and Reduced Rate of Production Delays will be made as follows.
  - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.
    - Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).
  - (2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to two weeks plus the cost of move-out to either the

Contractor's yard or another job and the cost to re-mobilize, whichever is less. Rental equipment may be paid for longer than two weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

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

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

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

- "(b) No working day will be charged under the following conditions.
  - (1) When adverse weather prevents work on the controlling item.
  - (2) When job conditions due to recent weather prevent work on the controlling item.
  - (3) When conduct or lack of conduct by the Department or its consultants, representatives, officers, agents, or employees; delay by the Department in making the site available; or delay in furnishing any items required to be furnished to the Contractor by the Department prevents work on the controlling item.
  - (4) When delays caused by utility or railroad adjustments prevent work on the controlling item.
  - (5) When strikes, lock-outs, extraordinary delays in transportation, or inability to procure critical materials prevent work on the controlling item, as long as these delays are not due to any fault of the Contractor.
  - (6) When any condition over which the Contractor has no control prevents work on the controlling item."

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

"(f) Basis of Payment. After resolution of a claim in favor of the Contractor, any adjustment in time required for the work will be made according to Section 108. Any adjustment in the costs to be paid will be made for direct labor, direct materials, direct equipment, direct jobsite overhead, direct offsite overhead, and other direct costs allowed by the resolution. Adjustments in costs will not be made for interest charges, loss of anticipated profit, undocumented loss of efficiency, home office overhead and unabsorbed overhead

other than as allowed by Article 109.13, lost opportunity, preparation of claim expenses and other consequential indirect costs regardless of method of calculation.

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

Add the following to Section 109 of the Standard Specifications.

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

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

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

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

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

	One Clerk
	One Project Manager,
Over \$50,000,000	Two Project Superintendents,
Over \$50,000,000	One Engineer, and
	One Clerk

- (2) Home Office and Unabsorbed Overhead. Payment for home office and unabsorbed overhead will be calculated as 8 percent of the total delay cost.
- (c) Extended Traffic Control. Traffic control required for an extended period of time due to the delay will be paid for according to Article 109.04.

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

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

# CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

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

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
1 0044 2/	100.000	0000
June 1, 2011 <sup>2/</sup>	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

<sup>1/</sup> Effective dates apply to Contractor 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

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

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: March 2, 2019

<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 the Contractor signs with a subcontractor.

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

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

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

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

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

<u>DBE LOCATOR REFERENCES</u>. 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 a material bidding requirement and failure of the bidder to comply will render the bid not responsive.

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

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

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

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
  - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided it is otherwise eligible for award. If the Department determines the

bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification will also include a statement of reasons for the adverse determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period to cure the deficiency.

(c) The bidder may request administrative reconsideration of an adverse determination by emailing the Department at "DOT.DBE.UP@illinois.gov" within the five calendar days after the receipt of the notification of the determination. The determination shall become final if a request is not made on or before the fifth calendar day. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be reviewed by the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<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 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 emailed to the Department at <u>DOT.DBE.UP@illinois.gov</u>.
- (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, a new Request for Approval of Subcontractor will not be required. However, the Contractor must document efforts to assure the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) <u>SUBCONTRACT</u>. The Contractor must provide copies of DBE subcontracts to the Department upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <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) The replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) The DBE is aware its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) The DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

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

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness:
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.

- (6) The Contractor has determined the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides written notice to the Contractor of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after contract award.
  - When a DBE is terminated or fails to complete its work on the Contract for any reason, the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.
- (f) FINAL PAYMENT. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than 30 calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <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 may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

# PORTLAND CEMENT CONCRETE - HAUL TIME (BDE)

Effective: July 1, 2020

Revise Article 1020.11(a)(7) of the Standard Specifications to read:

"(7) Haul Time. Haul time shall begin when the delivery ticket is stamped. The delivery ticket shall be stamped no later than five minutes after the addition of the mixing water to the cement, or after the addition of the cement to the aggregate when the combined aggregates contain free moisture in excess of two percent by weight (mass). If more than one batch is required for charging a truck using a stationary mixer, the time of haul shall start with mixing of the first batch. Haul time shall end when the truck is emptied for incorporation of the concrete into the work. The maximum haul time shall be as follows.

Concrete Temperature at Point of Discharge,	Maximum Haul Time <sup>1/</sup> (minutes)	
°F (°C)	Truck Mixer or Truck Agitator	Nonagitator Truck
50 - 64 (10 - 17.5)	90	45
> 64 (> 17.5) - without retarder	60	30
> 64 (> 17.5) - with retarder	90	45

<sup>1/</sup> To encourage start-up testing for mix adjustments at the plant, the first two trucks will be allowed an additional 15 minutes haul time whenever such testing is performed.

For a mixture which is not mixed on the jobsite, a delivery ticket shall be required for each load. The following information shall be recorded on each delivery ticket: (1) ticket number; (2) name of producer and plant location; (3) contract number; (4) name of Contractor; (5) stamped date and time batched; (6) truck number; (7) quantity batched; (8) amount of admixture(s) in the batch; (9) amount of water in the batch; and (10) Department mix design number.

For concrete mixed in jobsite stationary mixers, the above delivery ticket may be waived, but a method of verifying the haul time shall be established to the satisfaction of the Engineer."

# SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)

Effective: April 2, 2018

Add the following to Section 109 of the Standard Specifications.

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

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

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

# **SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)**

Effective: November 2, 2017

Revised: April 1, 2019

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

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

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

# TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975 Revised: September 2, 2021

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be <u>2</u>. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee it employs on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor Employment Training Administration shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., Training in the laborer where the training is oriented toward construction applications. classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting its performance under this Training Special Provision.

For contracts with an awarded contract value of \$500,000 or more, the Contractor is required to comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and all applicable administrative rules to the extent permitted by Section 20-20(g). For federally funded projects, the number of trainees to be trained under this contract, as stated in the Training Special Provisions, will be the established goal for the Illinois Works Apprenticeship Initiative 30 ILCS 559/20-20(g). The Contractor shall make a good faith effort to meet this goal. For federally funded projects, the Illinois Works Apprenticeship Initiative will be implemented using the FHWA approved OJT procedures. The Contractor must comply with the recordkeeping and reporting obligations of the Illinois Works Apprenticeship Initiative for the life of the project, including the certification as to whether the trainee/apprentice labor hour goals were met.

Method of Measurement. The unit of measurement is in hours.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

# WEEKLY DBE TRUCKING REPORTS (BDE)

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

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

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

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

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

Effective: March 2, 2020

Add the following to Article 701.03 of the Standard Specifications:

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

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

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

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

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

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

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

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

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

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions (impact

attenuators), truck mounted attenuators, and other devices not meeting the definitions of Category 1 or 2. Category 3 devices manufactured after December 31, 2019 shall be MASH-16 compliant. Category 3 devices manufactured on or before December 31, 2019, and compliant with NCHRP 350 or MASH 2009, may be used on contracts let before December 31, 2029. Category 3 devices shall be crash tested for Test Level 3 or the test level specified.

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

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

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

- "(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be approved for use at Test Level 3. Test Level 2 may be used for normal posted speeds less than or equal to 45 mph.
- (k) Temporary Water Filled Barrier. The water filled barrier shall be a lightweight plastic shell designed to accept water ballast and be on the Department's qualified product list.
  - Shop drawings shall be furnished by the manufacturer and shall indicate the deflection of the barrier as determined by acceptance testing; the configuration of the barrier in that test; and the vehicle weight, velocity, and angle of impact of the deflection test. The Engineer shall be provided one copy of the shop drawings.
- (I) Movable Traffic Barrier. The movable traffic barrier shall be on the Department's qualified product list.

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

# WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 150 working days.

#### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Non-segregated 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
- Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

#### **ATTACHMENTS**

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

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild 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) in accordance with 23 CFR 633.102. The designbuilder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

2. 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. 23 CFR 633.102(d).

- 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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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 Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 230, Subpart A, 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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).
- 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, sexual orientation, gender identity, 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, preapprenticeship, 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 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 or other knowledgeable company official.
- 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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. 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 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 recipient deems appropriate, which may include, but is not limited to:
  - (1) Withholding monthly progress payments;
  - (2) Assessing sanctions;
  - (3) Liquidated damages, and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 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 more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

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, 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 Administrator for determination. The 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 (29 CFR 5.5)

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 federally- assisted 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 (29 CFR 5.5)

- 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.
- b.(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. 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 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), 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 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 18 U.S.C. 1001 and 31 U.S.C. 231.
- 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 (29 CFR 5.5)

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. 23 CFR 230.111(e)(2). 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 as provided in 29 CFR 5.5.
- **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 as provided in 29 CFR 5.5.
- **9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 (29 CFR 5.5)

- 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

Pursuant to 29 CFR 5.5(b), 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. 29 CFR 5.5
- 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 currently provided in 29 CFR 5.5(b)(2)\* 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. 29 CFR 5.5.
- \* \$27 as of January 23, 2019 (See 84 FR 213-01, 218) as may be adjusted annually by the Department of Labor; pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990).

- 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 paragraphs 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. 29 CFR 5.5.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

- 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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)
- (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. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

#### **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 Part 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. 23 CFR 635.108.
- 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 Part 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). 29 CFR 1926.10.
- 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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.326.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders

or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.326.

# 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. 2 CFR 180.220 and 1200.220.

#### 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. 2 CFR 180.320.
- 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. 2 CFR 180.325.
- 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. 2 CFR 180.345 and 180.350.
- 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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.
- 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. 2 CFR 180.220 and 180.300.
- 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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>). 2 CFR 180.300, 180.320, and 180.325.
- 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 CFR 180.325.

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 CFR 180.335;.

- (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, 2 CFR 180.800;
- (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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

# 3. 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). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.
- 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, Subpart I, 180.900 180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.
- 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. 2 CFR 180.220 and 1200.220.
- 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 System for Award Management website (<a href="https://www.sam.gov/">https://www.sam.gov/</a>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- 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. 2 CFR 180.325.

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:

- (a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (b) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (c) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

  | Proposal |

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# 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 Part 20, App. A.

- 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.

#### XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor 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. 46 CFR 381.7.
- 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 Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

# 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.