

VILLAGE OF DOWNERS GROVE
Report for the Village
3/7/2023

SUBJECT:	SUBMITTED BY:
Award of Contract - Traffic Signal Modernization (TR-030) – Network Connection	Andy Sikich Public Works Director

SYNOPSIS

A motion is requested to award a contract for the Traffic Signal Modernization project to Meade Inc. of Willowbrook, Illinois in the amount of \$172,998.00, which includes a 5% contingency.

STRATEGIC PLAN ALIGNMENT

The goals for 2021 to 2023 include Top Quality Infrastructure.

FISCAL IMPACT

The FY23 budget includes \$500,000 in the Capital Improvements Fund for Traffic Signal Modernization, Annual Element (TR-030). \$189,481.71 is available for this project.

RECOMMENDATION

Approval on the March 7, 2023 consent agenda.

BACKGROUND

The scope of this project consists of the modernization of seven (7) traffic signal locations to allow for network connections to the DuPage County Central Signal System. The locations included are the following:

Woodward Ave & Prentiss Dr
Fairview Ave & Lincoln Ave
Fairview Ave & Prairie Ave
Fairview Ave & Maple Ave
Fairview Ave & 2nd Street
Fairview Ave & Hill Street
Fairview Ave & 59th Street

A call for bids (CFB) was issued and published in accordance with the Village's Purchasing Policy. Two bids were received on February 15, 2023 and a synopsis of the bids is as follows:

Contractor	Total Bid	
Meade, Inc.	\$164,760.00	Low Bid
Thorne Electric, Inc.	\$208,201.00	

Meade Inc. has successfully completed similar projects for the City of Naperville, DuPage County, and the Village of Lombard.

Staff recommends award of the contract to Meade, Inc.

ATTACHMENTS

Contract Documents

VILLAGE OF DOWNERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Public Works DATE: March 7, 2023
(Name)

RECOMMENDATION FROM: _____ FILE REF: _____
(Board or Department)

NATURE OF ACTION:

STEPS NEEDED TO IMPLEMENT ACTION:

- Ordinance
- Resolution
- Motion
- Other

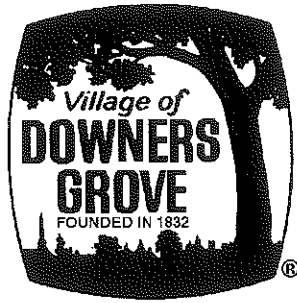
Motion to authorize a contract for traffic signal modernization to Meade, Inc. in the amount of \$164,760 plus a 5% contingency in the amount of \$8,238 for a total not to exceed \$172,998.



SUMMARY OF ITEM:

Adoption of this motion shall authorize a contract for traffic signal modernization to Meade, Inc. in the amount of \$164,760 plus a 5% contingency in the amount of \$8,238 for a total not to exceed \$172,998.

RECORD OF ACTION TAKEN:



CALL FOR BIDS – FIXED WORKS PROJECT

- I. Name of Company Bidding: Meade Inc.
- II. Instructions and Specifications:
- | | |
|----------------------------------|---|
| A. Bid No.: | <u>TR-030</u> |
| B. DemandStar Bid No: | <u>CFB-97-0-2023/MT</u> |
| C. For: | <u>Traffic Signal Modernization- Network Connection</u> |
| D. Bid Opening Date/Time: | <u>Wednesday, February 15, 2023 @ 10:30 AM</u> |
| E. Pre-Bid Conference Date/Time: | <u>None</u> |
| F. Pre-Bid Conference Location: | <u>None</u> |
- III. Required of All Bidders:
- | | |
|--|------------|
| A. Bid Deposit: | <u>5%</u> |
| B. Letter of Capability of Acquiring Performance Bond: | <u>YES</u> |
- IV. Required of Awarded Contractor(s)
- | | |
|--|------------|
| A. Performance Bond or Letter of Credit: | <u>YES</u> |
| B. Certificate of Insurance: | <u>YES</u> |

Legal Advertisement Published: Wednesday, February 1, 2023

This document comprises 78 pages.

RETURN ORIGINAL BID (NO STAPLES) IN SEALED ENVELOPE MARKED WITH THE BID NUMBER AS NOTED ABOVE TO:

MICHAEL TUMAN
 VILLAGE OF DOWNERS GROVE
 5101 WALNUT AVENUE
 DOWNERS GROVE, IL 60515
 PHONE: 630/434-6863
 FAX: 630/434-5495
www.downers.us

CALL FOR BIDS – FIXED WORKS PROJECT

Bid No.: **TR-030**

The VILLAGE OF DOWNERS GROVE will receive bids Monday through Friday, 8:00 A.M. to 5:00 P.M. at the Public Works Building, 5101 Walnut Avenue, Downers Grove, IL 60515.

The Village Council reserves the right to accept or reject any and all bids, to waive technicalities and to accept or reject any item of any Bid.

The documents constituting component parts of this Contract are the following:

- I. CALL FOR BIDS
- II. TERMS & CONDITIONS
- III. GENERAL PROVISIONS
- IV. SPECIAL PROVISIONS
- V. BID & CONTRACT FORM

All Bidders MUST submit the entire bid package, with one original Bid Form. Upon formal Award, the successful Bid will automatically convert to a Contract, and the successful Bidder will receive a copy of the executed contract upon formal award of the Bid with the Notice of Award.

DO NOT DETACH ANY PORTION OF THIS DOCUMENT. INVALIDATION COULD RESULT.

PLEASE DO NOT BIND ANY PORTION OF THE BID WITH STAPLES.

ALL PAGES OF THE BID MUST BE SUBMITTED SINGLE-SIDED.

I. CALL FOR BIDS and INSTRUCTIONS TO BIDDERS

1. GENERAL

- 1.1 Notice is hereby given that Village of Downers Grove will receive sealed bids up to the time and date set forth on the cover page of this Call for Bids.
- 1.2 Defined Terms:
 - 1.2.1 Village – the Village of Downers Grove acting through its officers or agents.
 - 1.2.2 Contract Documents – this document plus any drawings issued therewith, any addenda and the Bidder’s completed proposal, bonds and all required certifications.
 - 1.2.3 Bid – this document completed by an individual or entity and submitted to the Village.
 - 1.2.4 Bidder – the individual or entity who submits or intends to submit a bid proposal to the Village.
 - 1.2.5 Contractor – the individual or entity whose bid is selected by the Village and who enters into a contract with the Village.
 - 1.2.6 Work – the construction or service defined herein.
 - 1.2.7 Day – unless otherwise stated all references to day “Day” “Days”, “day” or “days” shall refer to calendar days.
 - 1.2.8 Proposal Guaranty – the required bid deposit.
- 1.3 Bids must be received at the Village by the time and date specified. Bids received after the specified time and date will not be accepted and will be returned unopened to the Bidder.
- 1.4 Bids shall be sent to the Village of Downers Grove, ATTN: MICHAEL TUMAN, in a sealed envelope marked "SEALED BID." The envelope shall be marked with the name of the project, date, and time set for receipt of Bids. The bid package may be submitted any time prior to the time set for receipt of Bids.
- 1.5 All Bids must be submitted on the forms supplied by the Village and signed by a proper official of the company submitting the Bid. Telephone, email and fax Bids will not be accepted.
- 1.6 Under penalty of perjury, the Bidder certifies by submitting this Bid that he has not acted in collusion with any other Bidder or potential Bidder.

2. BID PREPARATION

- 2.1 It is the responsibility of the Bidder to carefully examine the Contract Documents and to be familiar with all of the requirements, stipulations, provisions, and conditions surrounding the proposed Work.

- 2.2 The Bidder shall inspect the site of the proposed Work in detail, investigate and become familiar with all the local conditions affecting the Work and become fully acquainted with the detailed requirements of the Work. Submitting a Bid shall be a conclusive assurance and warranty that the Bidder has made these examinations and that the Bidder understands all requirements for the performance of the Work. If the Bid is accepted, the Bidder will be responsible for all errors in the Bid resulting from his willing or neglectful failure to comply with these instructions. IN NO CASE WILL THE VILLAGE BE RESPONSIBLE FOR ANY COSTS, EXPENSES, LOSSES OR CHANGES IN ANTICIPATED MARGINS OF PROFIT RESULTING FROM THE WILLING OR NEGLECTFUL FAILURE OF THE BIDDER TO MAKE THESE EXAMINATIONS. THE VILLAGE WILL NOT BE RESPONSIBLE FOR ANY COSTS, EXPENSES, LOSSES OR CHANGES IN ANTICIPATED MARGINS OF PROFIT RESULTING FROM THE WILLING OR NEGLECTFUL FAILURE OF THE CONTRACTOR TO PROVIDE THE KNOWLEDGE, EXPERIENCE AND ABILITY TO PERFORM THE WORK REQUIRED BY THIS CONTRACT. No changes in the prices, quantities or contract provisions shall be made to accommodate the inadequacies of the Bidder, which might be discovered subsequent to award of contract. The Bidder shall take no advantage of any error or omission in the Contract Documents nor shall any error or omission in the Contract Documents serve as the basis for an adjustment of the amounts paid to the Bidder.
- 2.3 When the Contract Documents include information pertaining to subsurface explorations, borings, test pits, and other preliminary investigations, such information is included solely for the convenience of the Bidder. *The Village assumes no responsibility whatsoever with respect to the sufficiency of the information, and does not warrant, neither expressly nor by implication, that the conditions indicated represent those existing throughout the Work, or that unanticipated developments may not occur.*
- 2.4 Any information shown in the Contract Documents regarding the locations of underground utility facilities is included solely for the convenience of the Bidder. The Village assumes no responsibility whatsoever with respect to the sufficiency, accuracy or inadequacy of such information. It shall be the Bidder's responsibility to obtain detailed information from the respective utility companies relating to the location of their facilities and the work schedules of the utility companies for removing or adjusting them. Utilities whose facilities may be affected by the work include, but may not be limited to, the following: Nicor, ComEd, SBC, Comcast Cable, Downers Grove Sanitary District, and Village water, storm sewer, and street lighting systems.
- 2.5 No oral or telephone interpretations of specifications shall be binding upon the Village. All requests for interpretations or clarifications shall be made in writing and received by the Village at least five (5) business days prior to the date set for receipt of Bids or the pre-bid conference, if offered. The Village shall make all changes or interpretations of the Contract Documents in a written addendum and shall provide an addendum to any Bidder of record. Any and all changes to the Contract Documents are valid only if they are included by written addendum to all Bidders. Each Bidder must acknowledge receipt of any addenda by indicating same on the Bid Form. Each Bidder, by acknowledging receipt of any addenda, is responsible for the contents of the addenda and any changes to the Bid therein. Failure to acknowledge any addenda may cause the Bid to be rejected. The Village will not assume responsibility for receipt of any addenda. In all cases, it will be the Bidder's responsibility to obtain all addenda issued. Bidders will provide written acknowledgement of receipt of each addendum issued with the bid submission.

- 2.6 An estimate of the quantities of Work to be performed and the materials to be furnished is shown in the Bid Form. It is given as a basis for comparing the properly submitted Bids, and shall be used by the Village in awarding the Contract. The Village does not expressly warrant nor imply that the estimated quantities shown will correspond with those quantities required to perform the Work. No Bidder shall plead misunderstanding or deception because of such an estimate of quantities, or because of the character, location or other conditions pertaining to the Work. Payment shall be based on the actual quantities of work properly performed in accordance with the Contract, at the Contract unit prices specified. The Village reserves the right to increase, decrease or omit entirely, any or all items. No allowance will be made for any change in anticipated profits due to an increase or decrease in the original estimate of quantities.
- 2.7 The Bid shall be executed properly, and Bids shall be made for all items indicated in the Bid Form. The Bidder shall indicate, in figures, a unit price or lump sum price for each of the separate items called for in the Bid Form. The Bidder shall show the products of the respective quantities and unit prices in the column provided for that purpose. The gross sum shown in the place indicated in the Bid Form shall be the summation of said products. All writing shall be with ink or typewriter, except the signature of the Bidder, which shall be written with ink.
- 2.8 In case of error in the extension of prices in the Bid, the hourly rate or unit price will govern. In case of discrepancy in the price between the written and numerical amounts, the written amount will govern.
- 2.9 All costs incurred in the preparation, submission, and/or presentation of any Bid including the Bidder's travel or personal expenses shall be the sole responsibility of the Bidder and will not be reimbursed by the Village.
- 2.10 The Bidder hereby affirms and states that the prices quoted herein constitute the total cost to the Village for all work involved in the respective items, as well as the materials to be furnished in accordance with the collective requirements of the Contract Documents. The Bidder also affirms that this cost includes all insurance, bonds, royalties, transportation charges, use of all tools and equipment, superintendence, overhead expense, profits and other work, services and conditions necessarily involved in the work to be done.
- 2.11 The Bidder shall complete and submit with the Bid an "Affidavit" (IDOT Form BC-57, or similar) listing all uncompleted contracts, including subcontract work; all pending low bids not yet awarded or rejected, and equipment available.
- 2.12 The Bidder shall complete and submit with the Bid a "Municipal Reference List" indicating other municipalities for which the Bidder has successfully performed similar work.

3. PRE-BID CONFERENCE

- 3.1 A pre-bid conference may be offered to provide additional information, inspection or review of current facilities or equipment, and to provide an open forum for questions from Bidders. This pre-bid conference is not mandatory (unless stated "Mandatory" on the cover of this document), but attendance by Bidders is strongly advised as this will be the last opportunity to ask questions

concerning the Bid.

3.2 Questions may be posed in writing to the Village (faxed and emailed questions are acceptable), but must be received by the Village prior to the scheduled time for the pre-bid conference. Questions received will be considered at the conference. An addendum may be issued as a result of the pre-bid conference. Such an addendum is subject to the provisions for issuance of an addendum as set forth in Section 2.5 above.

3.3 No Contract Documents will be issued after a mandatory pre-bid conference except to attendees.

4. BID SUBMISSION

4.1 An original copy of the sealed bid marked as indicated in Section 1 shall be submitted to the Village. Please do not bind any portion of the bid with staples.

4.2 A bid deposit will be required, which shall not exceed ten percent (10%) of the estimated cost of the work to be furnished. Such bid deposit shall be in the form of a bid bond, certified check, cash or money order. Checks shall be drawn upon a bank of good standing payable to the order of the Village and said deposit shall be forfeited to the Village in the event the Bidder neglects or refuses to enter into a contract and bond when required, with approved sureties, to execute the Work or furnish the material for the price mentioned in his Bid and according to the plans and specifications in case the contract shall be awarded to him.

4.3 Bids shall be publicly opened at the hour and place indicated above.

5. BID MODIFICATION OR WITHDRAWAL

5.1 A Bid that is in the possession of the Village may be altered by a letter bearing the signature of the person authorized for submitting a Bid, provided that it is received prior to the time and date set for the bid opening. Telephone, email or verbal alterations of a Bid will not be accepted.

5.2 A Bid that is in the possession of the Village may be withdrawn by the Bidder, up to the time set for the bid opening, by a letter bearing the signature of the person authorized for submitting Bids. Bids may not be withdrawn after the bid opening and shall remain valid for a period of ninety (90) days from the date set for the bid opening, unless otherwise specified.

6. BID REJECTION

6.1 Bids that contain omissions, erasures, alterations, additions not called for, conditional bids or alternate bids not called for, or irregularities of any kind, shall be rejected as informal or insufficient. Bids otherwise acceptable, which are not accompanied by the proper Proposal Guaranty, shall also be rejected as informal or insufficient. The Village reserves the right however, to reject any or all Bids and to waive such technical error as may be deemed best for the interest of the Village.

7. BIDDER COMPETENCY

7.1 No Bid will be accepted from, or contract awarded to, any person, firm or corporation that is in arrears or is in default upon any debt or contract. The Bidder, if requested, must present evidence to the Village of ability and possession of necessary facilities, and financial resources to comply with the terms of the Contract Documents. Evidence must be presented within three (3) business days.

8. BIDDER DISQUALIFICATION

8.1 Any one or more of the following causes may be considered as sufficient for the disqualification of a Bidder and the rejection of their Bid.

8.1.1 More than one Bid for the same Work from an individual, firm partnership, or corporation under the same or different names.

8.1.2 Evidence of collusion among Bidders.

8.1.3 Unbalanced Bids in which the prices for some items are substantially out of proportion to the prices for other items.

8.1.4 Failure to submit a unit price for each item of Work listed in the Bid Form.

8.1.5 Lack of competency as revealed by financial statement or experience questionnaire.

8.1.6 Unsatisfactory performance record as shown by past work, judged from the standpoint of workmanship and progress.

8.1.7 Uncompleted work which, in the judgment of the Village, might hinder or prevent the prompt completion of this Work.

8.1.8 Failure to submit a signed Bidder's Certificate stating the following:

8.1.8.1 That the Bidder is not barred from bidding on this Contract as a result of a violation of Sections 720 ILCS 5/33-E3 and 720 ILCS 5/33-E4 of the Illinois Compiled Statutes; and

8.1.8.2 The Bidder is not delinquent in the payment of any tax administered by the Illinois Department of Revenue; and

8.1.8.3 The Bidder will maintain the types and levels of insurance required by the terms of this Contract; and

8.1.8.4 The Bidder will comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

9. BASIS OF AWARD

9.1 The Village reserves the exclusive right to accept or reject any and all Bids or to waive sections, technicalities and irregularities, or to accept or reject any Bid or any item of any Bid.

10. AWARD OF CONTRACT

10.1 Unless the Village exercises its right to reject all Bids, the Contract will be awarded to that responsible Bidder whose Bid, conforming to the Contract Documents, will be most advantageous to the Village, price and other factors considered (the credentials, financial information, bonding

capacity, insurance protection, qualifications of the labor and management of the firm, past experience and ability to complete the project within time frame required - lowest responsible bidder).

- 10.2 Unless otherwise specified, if a Contract is not awarded within ninety (90) days after the opening of Bids, a Bidder may file a written request with the Village for the withdrawal of their Bid. The Village will have a maximum of ten (10) days after the receipt of such request to award the Contract or release the Bidder from further obligation by return of the Bidder's bid deposit. Any attempt or actual withdrawal or cancellation of a Bid by the awarded contractor who has been notified by the Village of the acceptance of said Bid shall be considered a breach of contract.

11. RETURN OF BID DEPOSIT

- 11.1 The bid deposit of all except the three (3) lowest responsive bidders on each contract will be returned within fifteen (15) days after the opening of Bids. The remaining bid deposits of each contractor will be returned within fifteen (15) days after the Village Council has awarded the contract and the required appurtenances to the contract have been received.

12. FAILURE TO ENTER INTO CONTRACT

- 12.1 Failure on the part of the successful Bidder to execute a Contract and provide acceptable bonds, as provided herein, within ten (10) days from the date of receipt of the Contract and Notice of Award from the Village, will be considered as just cause for the revocation of the award. The Bidder's bid security shall then be forfeited to the Village, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.
- 12.2 Failure on the part of the successful Bidder to provide the Village a construction schedule for approval within ten (10) calendar days from the date of receipt of the Notice of Award from the Village, and, if required, provide a modified construction schedule as requested by the Village within an additional five (5) calendar days, may be considered as just cause for the revocation of the award. In such case, the Bidder's bid security shall then be forfeited to the Village, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.
- 12.3 The Bidder shall not be allowed to claim lack of receipt where the Contract and Notice of Award was mailed by U.S. Postal Services certified mail to the business address listed in his Bid. In case the Village does not receive evidence of receipt within ten (10) days of the date of Notice of Award, the Village may revoke the award. The Bidder shall then forfeit the bid security to the Village, not as a penalty, but in payment of liquidated damages sustained as the result of such failure to execute the Contract.
- 12.4 By submitting a Bid, the Bidder understands and agrees that, if his Bid is accepted, and he fails to enter into a contract forthwith, he shall be liable to the Village for any damages the Village may thereby suffer.

13. SECURITY FOR PERFORMANCE

- 13.1 The successful Bidder shall, within ten (10) days after acceptance of the Bidder's Bid by the Village, furnish a Performance Bond and a Materials and Labor Payment Bond acceptable to the Village in the full amount of the Bid. Said bonds shall guarantee the Bidder's performance under the Contract Documents and shall guarantee payment of all subcontractors and material suppliers. Any bond shall

include a provision that guarantees faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

14. TAX EXEMPTION

- 14.1 The Village is exempt from Illinois sales or use tax for direct purchases of materials and supplies. A copy of the Illinois Sales Tax Exemption Form will be issued upon request. The Village's federal identification number will also be provided to the selected Bidder.

15. RESERVED RIGHTS

- 15.1 The Village reserves the right to waive sections, irregularities, technicalities and informalities to this Contract and to accept any Bid and to reject any and all Bids and to disapprove of any and all subcontractors as may be in the best interest of the Village. Time and date requirements for receipt of Bids, however, will not be waived.

16. CATALOGS AND SHOP DRAWINGS

- 16.1 Each Bidder shall submit catalogs, descriptive literature, and detailed drawings, where applicable, to fully illustrate and describe the work or material he proposes to furnish.

17. TRADE NAMES AND SUBSTITUTIONS

- 17.1 Certain materials and equipment are specified by a manufacturer or trade name to establish standards or quality and performance and not for the purpose of limiting competition. Products of other manufacturers may be substituted, if, in the opinion of the Village, they are equal to those specified in quality, performance, design, and suitability for intended use. If the Bidder proposes to furnish an "equal", the proposed "equal" item must be so indicated in the written Bid. Where two or more items are specified, the selection among those specified is the Bidder's option, or he may submit his Bid on all such items. Detail specification sheets shall be provided by Bidder for all substituted items.

II. TERMS AND CONDITIONS

18. VILLAGE ORDINANCES

- 18.1 The successful Bidder, now the Contractor, will strictly comply with all ordinances of the Village of Downers Grove and laws of the State of Illinois.

19. USE OF VILLAGE'S NAME

- 19.1 The Contractor is specifically denied the right of using in any form or medium the name of the Village for public advertising unless the Village grants express permission.

20. HOURS OF WORK

- 20.1 The Contractor shall do no work between the hours of 7:00 p.m. and 7:00 a.m., nor on Sundays or legal holidays. The Contractor shall do no work on Saturdays, unless otherwise approved in writing by the Village. If approved by the Village, allowed work hours on Saturdays shall be between the hours of 8:00 a.m. and 3:00 p.m. However, such work may be performed at any time if necessary, for the proper care and protection of work already performed, or in case of an emergency. All after-hour work is still subject to the permission of the Village. Any work, including the starting and/or idling of vehicles or machinery, or a congregation of workers prior to starting work, which may cause any noise level that can be heard by adjacent residents, performed outside of these hours of work and not authorized by the Village shall be subject to a fine of \$250 per day, per violation, which shall be deducted from the value of work completed.

21. PERMITS AND LICENSES

- 21.1 The Contractor shall obtain all necessary permits and licenses required to complete the Work. The cost of acquisition of all necessary permits, bonds, insurance and services as specified herein shall be considered INCLUDED IN THE TOTAL COST, and no additional compensation will be allowed the Contractor.

22. INSPECTION

- 22.1 The Village shall have a right to inspect, by its authorized representative, any material, components or workmanship as herein specified. Materials, components or workmanship that have been rejected by the Village as not in accordance with the terms of the contract specifications shall be replaced by the Contractor at no cost to the Village.

23. DELIVERIES

- 23.1 All materials shipped to the Village must be shipped F.O.B. designated location, Downers Grove, Illinois.

24. SPECIAL HANDLING

- 24.1 Prior to delivery of any product that is caustic, corrosive, flammable or dangerous to handle, the Contractor will provide written directions as to methods of handling such products, as well as the antidote or neutralizing material required for its first aid before delivery. Contractor shall also notify the Village and provide material safety data sheets for all substances used in connection with this Contract which are defined as toxic under the Illinois Toxic Substances Disclosure to Employees Act.

25. NONDISCRIMINATION

25.1 Contractor shall, as a party to a public contract:

25.1.1 Refrain from unlawful discrimination in employment and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination;

25.1.2 By submission of this Bid, the Contractor certifies that he is an "equal opportunity employer" as defined by Section 2000(e) of Chapter 21, Title 42, U.S. Code Annotated and Executive Orders #11246 and #11375, which are incorporated herein by reference. The Equal Opportunity clause, Section 6.1 of the Rules and Regulations of the Department of Human Rights of the State of Illinois, is a material part of any contract awarded on the basis of this Bid.

25.2 It is unlawful to discriminate on the basis of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, sexual identity, or an unfavorable discharge from military service. Contractor shall comply with standards set forth in Title VII of the Civil Rights Act of 1964, 42 U.S.C. Secs. 2000 *et seq.*, The Human Rights Act of the State of Illinois, 775 ILCS 5/1-101 *et seq.*, and The Americans with Disabilities Act, 42 U.S.C. Secs. 12101 *et seq.*

26. SEXUAL HARASSMENT POLICY

26.1 The Contractor, as a party to a public contract, shall have a written sexual harassment policy that:

26.1.1 Notes the illegality of sexual harassment;

26.1.2 Sets forth the State law definition of sexual harassment;

26.1.3 Describes sexual harassment utilizing examples;

26.1.4 Describes the Contractor's internal complaint process including penalties;

26.1.5 Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities; and

26.1.6 Describes the protection against retaliation afforded under the Illinois Human Rights Act.

27. EQUAL EMPLOYMENT OPPORTUNITY

27.1 In the event of the Contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this Contract, the Contractor agrees as follows:

- 27.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, sexual identity, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- 27.1.2 That, if it hires additional employees in order to perform this Contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 27.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, or an unfavorable discharge from military services.
- 27.1.4 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 27.1.5 That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 27.1.6 That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purpose of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 27.1.7 That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this Contract, the Contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

28. DRUG FREE WORK PLACE

28.1 Contractor, as a party to a public contract, certifies and agrees that it will provide a drug free workplace by:

28.1.1 Publishing a statement:

(1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the Village's or Contractor's workplace.

(2) Specifying the actions that will be taken against employees for violations of such prohibition.

(3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:

(A) abide by the terms of the statement; and

(B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

28.1.2 Establishing a drug free awareness program to inform employees about:

(1) the dangers of drug abuse in the workplace;

(2) the Village's or Contractor's policy of maintaining a drug free workplace;

(3) any available drug counseling, rehabilitation and employee assistance programs;

(4) the penalties that may be imposed upon employees for drug violations.

28.1.3 Providing a copy of the statement required by subparagraph 1.1 to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.

28.1.4 Notifying the contracting or granting agency within ten (10) days after receiving notice under part (3)(B) of subparagraph 1.1 above from an employee or otherwise receiving actual notice of such conviction.

28.1.5 Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted as required by section 5 of the Drug Free Workplace Act.

28.1.6 Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

28.1.7 Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

29. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

29.1 In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, Contractor agrees to comply with the Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 *et seq.*, and further agrees that all of its subcontractors shall comply with such Act.. As required by the Act, Contractor agrees that it will file with the Village prior to commencing work

its written substance abuse prevention program and/or that of its subcontractor(s) which meet or exceed the requirements of the Act.

30. PREVAILING WAGE ACT

- 30.1 Contractor agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*, for all work completed under this Contract. Contractor agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this Contract or related subcontract. For applicable rates, go to the State of Illinois – Department of Labor website (www.state.il.us/agency/idol/rates/rates.HTM) and use the most current DuPage County rate. The Department revises the prevailing wage rates and the Contractor or subcontractor has an obligation to check the Department’s website for revisions to prevailing wage rates throughout the duration of this Contract.
- 30.2 Contractor and each subcontractor shall keep or cause to be kept accurate records of all laborers, mechanics and other workers employed by them on the public works project, which records must include each worker’s name, address, telephone number when available, the last four digits of the worker’s social security number, gender, race, ethnicity, veteran’s status, skill level, classification, hourly wage paid (including itemized hourly cash and fringe benefits paid in each pay period), number of hours worked each day, the starting and ending times of work each day, the worker’s hourly wage rate, the worker’s hourly overtime wage rate, the worker’s hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. These records shall be open to inspection at all reasonable hours by any representative of the Village or the Illinois Department of Labor (IDOL) and must be preserved for five (5) years from the date of the last payment on the public work.
- 30.3 Since this is a contract for a public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed.
- 30.4 Because this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, any and all contractors and subcontractors shall submit certified payroll records to IDOL no later than the fifteenth (15th) day of each calendar month for the immediately preceding month in which construction on a public works project has occurred. Contractor shall then provide an IDOL certification and case number to the Village. **WITHOUT THIS PAPERWORK, NO INVOICE SHALL BE PAID BY THE VILLAGE.** Filing false records is a Class A misdemeanor.
- 30.5 In the event that this is a construction project where Motor Fuel tax monies or state grant monies are used in the construction, maintenance and extension of municipal streets, traffic control signals, street lighting systems, storm sewers, pedestrian subways or overhead crossings, sidewalks and off-street parking facilities, and the like, the Village will require an Apprenticeship and Training Certification, attached after the Bidder’s Certification.
- 30.6 Any bond furnished as security for performance shall include a provision that guarantees faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

31. PATRIOT ACT COMPLIANCE

31.1 The Contractor represents and warrants to the Village that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Contractor further represents and warrants to the Village that the it and its principals, shareholders, members, partners, or affiliates, as applicable are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Contract on behalf of any person or entity named as a Specially Designated National and Blocked Person. The Contractor hereby agrees to defend, indemnify and hold harmless the Village, and its elected or appointed officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities and expenses (including reasonable attorney’s fees and costs) arising from or related to any breach of the foregoing representations and warranties.

32. INSURANCE REQUIREMENTS

32.1 Prior to starting the Work, Contractor and any Subcontractors shall procure, maintain and pay for such insurance as will protect against claims for bodily injury or death, or for damage to property, including loss of use, which may arise out of operations by the Contractor or Subcontractor or any Sub-Sub Contractor or by anyone employed by any of them, or by anyone for whose acts any of them may be liable. Such insurance shall not be less than the greater of coverages and limits of liability specified below or any coverages and limits of liability specified in the Contract Documents or coverages and limits required by law unless otherwise agreed to by the Village.

Workers Compensation	\$500,000	Statutory
Employers Liability	\$1,000,000	Each Accident
	\$1,000,000	Disease Policy Limit
	\$1,000,000	Disease Each Employee
Comprehensive General Liability	\$2,000,000	Each Occurrence
	\$2,000,000	Aggregate
		<i>(Applicable on a Per Project Basis)</i>
Commercial Automobile Liability	\$1,000,000	Each Accident
Professional Errors & Omissions	\$2,000,000	Each Claim
(pursuant to section.9 below)	\$2,000,000	Annual Aggregate
Umbrella Liability	\$ 5,000,000	

32.2 Comprehensive General Liability Insurance required under this paragraph shall be written on an

- occurrence form and shall include coverage for Products/Completed Operations, Personal Injury with Employment Exclusion (if any) deleted, Blanket XCU and Blanket Contractual Liability insurance applicable to defense and indemnity obligations and other contractual indemnity assumed under the Contract Documents. The limit must be on a "Per Project Basis".
- 32.3 Commercial Automobile Liability Insurance required under this paragraph shall include coverage for all owned, hired and non-owned automobiles.
- 32.4 Workers Compensation coverage shall include a waiver of subrogation against the Village.
- 32.5 Comprehensive General Liability, Employers Liability and Commercial Automobile Liability Insurance may be arranged under single policies for full minimum limits required, **or** by a combination of underlying policies with the balance provided by Umbrella and/or Excess Liability policies.
- 32.6 Contractor and all Subcontractors shall have their respective Comprehensive General Liability (including products/completed operations coverage), Employers Liability, Commercial Automobile Liability, and Umbrella/Excess Liability policies endorsed to add the "Village of Downers, its officers, officials, employees and volunteers" as "additional insureds" with respect to liability arising out of operations performed; claims for bodily injury or death brought against the Village by any Contractor or Subcontractor employees, or the employees of Subcontractor's subcontractors of any tier, however caused, related to the performance of operations under the Contract Documents. Such insurance afforded to the Village shall be endorsed to provide that the insurance provided under each policy shall be ***Primary and Non-Contributory***.
- 32.7 Contractor and all Subcontractors shall maintain in effect all insurance coverages required by the Contract Documents at their sole expense and with insurance carriers licensed to do business in the State of Illinois and having a current A. M. Best rating of no less than A- VIII. In the event that the Contractor or any Subcontractor fails to procure or maintain any insurance required by the Contract Documents, the Village may, at its option, purchase such coverage and deduct the cost thereof from any monies due to the Contractor or Subcontractor, or withhold funds in an amount sufficient to protect the Village, or terminate this Contract pursuant to its terms.
- 32.8 All insurance policies shall contain a provision that coverages and limits afforded hereunder shall not be canceled, materially changed, non-renewed or restrictive modifications added, without thirty (30) days prior written notice to the Village. Renewal certificates shall be provided to the Village not less than five (5) days prior to the expiration date of any of the required policies. All Certificates of Insurance shall be in a form acceptable to the Village and shall provide satisfactory evidence of compliance with all insurance requirements. The Village shall not be obligated to review such certificates or other evidence of insurance, or to advise Contractor or Subcontractor of any deficiencies in such documents, and receipt thereof shall not relieve the Contractor or Subcontractor from, nor be deemed a waiver of the right to enforce the terms of the obligations hereunder. The Village shall have the right to examine any policy required and evidenced on the Certificate of Insurance.
- 32.9 If the Work under the Contract Documents includes design, consultation, or any other professional

services, Contractor or the Subcontractor shall procure, maintain, and pay for Professional Errors and Omissions insurance with limits of not less than \$2,000,000 per claim and \$2,000,000 annual aggregate. If such insurance is written on a claim made basis, the retrospective date shall be prior to the start of the Work under the Contract Documents. Contractor and all Subcontractors agree to maintain such coverage for three (3) years after final acceptance of the Project by the Village or such longer period as the Contract Documents may require. Renewal policies during this period shall maintain the same retroactive date.

- 32.10 Any deductibles or self-insured retentions shall be the sole responsibility of the Insured. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Village, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

33. INDEMNITY AND HOLD HARMLESS AGREEMENT

- 33.1 To the fullest extent permitted by law, the Contractor shall indemnify, keep and save harmless the Village and its agents, officers, and employees, against all injuries, deaths, strikes, losses, damages, claims, suits, liabilities, judgments, costs and expenses, which may arise directly or indirectly from any negligence or from the reckless or willful misconduct of the Contractor, its employees, or its subcontractors.
- 33.2 The Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and, if any judgment shall be rendered against the Village in any such action, the Contractor shall, at its own expense, satisfy and discharge the same. This agreement shall not be construed as requiring the Contractor to indemnify the Village for its own negligence. The Contractor shall indemnify, keep and save harmless the Village only where a loss was caused by the negligent, willful or reckless acts or omissions of the Contractor, its employees, or its subcontractors.

34. SUBLETTING OF CONTRACT

- 34.1 No contract awarded by the Village shall be assigned or any part subcontracted without the written consent of the Village. In no case shall such consent relieve the Contractor from his obligation or change the terms of this Contract.

All approved subcontracts shall contain language which incorporates the terms and conditions of this Contract.

35. TERMINATION OF CONTRACT

- 35.1 The Village reserves the right to terminate the whole or any part of this Contract, upon written notice to the Contractor, for any reason.
- 35.2 The Village further reserves the right to terminate the whole or any part of this Contract, upon written notice to the Contractor, in the event of default by the Contractor. Default is defined as failure of the Contractor to perform any of the provisions of this Contract or failure to make sufficient progress so as to endanger performance of this Contract in accordance with its terms. In the event that the Contractor fails to cure the default upon notice, and the Village declares default and termination, the

Village may procure, upon such terms and in such manner as it may deem appropriate, supplies or services similar to those so terminated. The Village may also contact the issuer of the Performance Bond to complete the Work. The Contractor shall be liable for any excess costs for such similar supplies or services. Any such excess costs incurred by the Village may be set off against any monies due and owing by the Village to the Contractor.

36. BILLING AND PAYMENT PROCEDURES

36.1 Payment will be made upon receipt of an invoice referencing Village purchase order number. Once an invoice and receipt of materials or service have been verified, the invoice will be processed for payment in accordance with the Village's payment schedule. The Village will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 *et seq.*, in that any bill approved for payment must be paid or the payment issued to the Contractor within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Contractor within this 60-day period, an interest penalty of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60-day period, until final payment is made.

36.2 The Village shall review each bill or invoice in a timely manner after its receipt. If the Village determines that the bill or invoice contains a defect making it unable to process the payment request, the Village shall notify the Contractor as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 *et seq.* The notice shall identify the defect and any additional information necessary to correct it.

36.3 As this Contract is for work defined as a "fixed public work" project under the Illinois Prevailing Wage Act, 820 ILCS 130/2 and pursuant to section 30.4 of this Call For Bid, the Contractor shall provide an IDOL certification and case number to the Village along with the invoice. No invoice shall be paid without said records.

36.4 Please send all invoices to the attention of: Michael Tuman, Village of Downers Grove, Public Works, 5101 Walnut Ave., Downers Grove, IL 60515.

37. COMPLIANCE WITH OSHA STANDARDS

37.1 Equipment supplied to the Village must comply with all requirements and standards as specified by the Occupational Safety and Health Act. All guards and protectors as well as appropriate markings will be in place before delivery. Items not meeting any OSHA specifications will be refused.

38. CERCLA INDEMNIFICATION

38.1 The Contractor shall, to the maximum extent permitted by law, indemnify, defend, and hold harmless the Village, its officers, employees, agents, and attorneys from and against any and all liability, including without limitation, costs of response, removal, remediation, investigation, property damage, personal injury, damage to natural resources, health assessments, health settlements, attorneys' fees, and other related transaction costs arising under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 U.S.C.A. Sec. 9601, *et seq.*, as amended, and all other applicable statutes, regulations, ordinances, and under common law for any release or threatened release of the waste material collected by the Contractor, both before and after its disposal.

38.2 If the Contractor encounters any waste material governed by the above Act, it shall immediately

notify the Village and stop working in the area until the above requirements can be met.

39. COPYRIGHT or PATENT INFRINGEMENT

39.1 The Contractor agrees to indemnify, defend, and hold harmless the Village against any suit, claim, or proceeding brought against the Village for alleged use of any equipment, systems, or services provided by the Contractor that constitutes a misuse of any proprietary or trade secret information or an infringement of any patent or copyright.

40. BUY AMERICA

40.1 The Contractor agrees to comply with 49 U.S.C.5323(j), the Federal Transportation Administration's (FTA) Buy America regulations at 49 C.F.R. Part 661, and any amendments thereto, and any implementing guidance issued by the FTA, with respect to this Contract, when financed by Federal funds (through a grant agreement or cooperative agreement).

40.2 As a condition of responsiveness, the Contractor agrees to submit with its Bid submission, an executed Buy America Certificate, attached hereto.

41. CAMPAIGN DISCLOSURE

41.1 Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.

41.2 The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

41.3 Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

41.4 By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

42. GUARANTEE PERIOD

42.1 The Contractor shall guarantee all work and provide a maintenance bond for the full amount of the contract, covering a minimum period of one (1) year after approval and acceptance of the Work. The bond shall be in such form as the Village may prescribe, unless otherwise noted in the Specifications, and shall be submitted before receiving final payment. If longer guarantee periods are required, they will be noted in the Special Provisions for this project.

43. SUCCESSORS AND ASSIGNS

43.1 The terms of this Contract will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party will assign this Contract in

whole or in part without the prior written approval of the other. The Contractor will provide a list of key staff, titles, responsibilities, and contact information to include all expected subcontractors.

44. WAIVER OF BREACH OF CONTRACT

44.1 The waiver by one party of any breach of this Contract or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited to the particular instance and will not operate or be deemed to waive any future breaches of this Contract and will not be construed to be a waiver of any provision except for the particular instance.

45. CHANGE ORDERS

45.1 The contract price is a "not-to-exceed" cost. At any time additional work is necessary or requested, and the not-to-exceed price is increased thereby, all parties must agree to any change, addition or price increase in writing.

45.2 Change orders for public works projects which authorize an increase in the contract price that is 50% or more of the original contract price or that authorize or necessitate any increase in the price of a subcontract under the contract that is 50% or more of the original subcontract price must be resubmitted for bidding in the same manner by which the original contract was bid. (50 ILCS 525/1)

46. SEVERABILITY OF INVALID PROVISIONS

46.1 If any provisions of this Contract are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Contract, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

47. GOVERNING LAW AND VENUE

47.1 This Contract will be governed by and construed in accordance with the laws of the State of Illinois. Venue is proper only in the County of DuPage for state cases or the Northern District of Illinois for federal cases.

48. NOTICE

48.1 Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to the Village as follows:

**Village Manager
Village of Downers Grove
801 Burlington Ave.
Downers Grove, IL 60515**

And to the Contractor as designated on the Contract Form.

49. AMENDMENT

49.1 This Contract will not be subject to amendment unless made in writing and signed by all parties.

50. COOPERATION WITH FOIA COMPLIANCE

50.1 Contractor acknowledges that the Freedom of Information Act does apply to public records in possession of the Contractor or a subcontractor. Contractor and all of its subcontractors shall cooperate with the Village in its efforts to comply with the Freedom of Information Act. 5 ILCS 140/1 *et seq.*

51. EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS ACT

51.1 If the work contemplated by this Contract is funded or financed in whole or in part with State Funds or funds administered by the State, Contractor agrees to comply with the terms of the Employment of Illinois Workers on Public Works Act by employing at least 90% Illinois laborers on the project. 30 ILCS 570/1 *et seq.* Contractor agrees further to require compliance with this Act by all of its subcontractors.

52. DISADVANTAGED BUSINESS ENTERPRISE (DBE) CERTIFICATION

52.1 Pursuant to 35 ILCS 200/18-50.2, Contractor and all subcontractors are required to complete and submit a Vendor DBE certification, regardless of DBE status. Contractor shall complete and require all its subcontractors to complete the DBE certification for this project at www.downers.us/vss. The information necessary for the Contractor and all subcontractors to complete the certification includes the following: DBE Classification (minority-owned, women-owned, persons with disabilities-owned, veteran-owned, or none); if DBE, whether the company holds a certificate or self-certifies; if self-certifying, whether the company qualifies as a small business under the U.S. Small Business Administration standards; the company's name, address, city, state and zip code; company's contact person's name, title, telephone number and email address. NO PAYMENTS WILL BE MADE TO THE CONTRACTOR BY THE VILLAGE UNLESS AND UNTIL ALL OF THE CERTIFICATIONS FOR THE CONTRACTOR AND SUBCONTRACTORS HAVE BEEN COMPLETED.

III. GENERAL PROVISIONS

1. STANDARD SPECIFICATIONS

- 1.1 The following standards shall govern the construction of the proposed improvements:
- 1.1.1 Standard Specifications for Water and Sewer Main Construction in Illinois, Seventh Edition, 2014 (the Water & Sewer Specs.); and
 - 1.1.2 Standard Specifications for Road and Bridge Construction as adopted by the Illinois Department of Transportation, January 1, 2022; along with Supplemental Specifications and Recurring Special Provisions as adopted by the Illinois Department of Transportation, January 1, 2022 (collectively the “SSRBC”); and
 - 1.1.3 Water Distribution Specifications, Village of Downers Grove, Illinois, revised January 2017.
 - 1.1.4 Standard Detail Drawings, Village of Downers Grove, Illinois revised January, 2019.
- 1.2 These Contract Documents shall take precedence whenever there are conflicts in the wording or statements made by the above specifications and these Contract Documents.
- 1.3 Unless otherwise referenced herein, Division I of the Water and Sewer Specs and Section 102 and Articles 104.03, 104.07, 107.02, 107.27, 107.35, 108.10, 108.11, and 108.12 of the SSRBC are hereby ineffective and not a part of this Contract.

2. COOPERATION OF CONTRACTOR

- 2.1 The Contractor will be supplied with a minimum of 2 sets of approved plans and contract assemblies including Special Provisions, one set of which the Contractor shall keep available on the work site at all times. The Contractor shall give the work site constant attention necessary to facilitate the progress thereof, and shall cooperate with the Village in every way possible.
- 2.2 The Contractor shall assign a superintendent for the work per Sections 105.06 and 108.06 of the SSRBC and as amended herein. The Contractor’s superintendent shall be involved in the work to the extent necessary to prosecute the work per the Contract. Furthermore, the superintendent shall be required to attend weekly progress meetings, provide two-week schedules of expected construction activities, provide updated overall construction schedules and, if required by the Engineer, acknowledge and sign IDOT Form BC-239 Weekly Report of Resident. The Contractor shall not replace the superintendent without prior written notification to the Village.

3. LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

- 3.1 Section 107 of the SSRBC shall govern the Contractor’s legal regulations and responsibility to the public, with the following additions:
- 3.1.1 PROJECT SAFETY. Add the following to Article 107.28:
 - 3.1.1.1 The Contractor shall conduct his work in such a manner as to provide an environment consistent with the safety, health and well-being of those engaged in

the completion of the Work specified in this Contract.

- 3.1.1.2 The Contractor shall comply with all State and Federal Safety Regulations as outlined in the latest revisions of the Federal Construction Safety Standards (Series 1926) and with applicable provisions and/or regulations of the Occupation Safety and Health Administration (OSHA) and Standards of the Williams-Stelger Occupational Health Safety Act of 1970 (Revised). **SPECIAL ATTENTION SHALL BE PAID TO COMPLIANCE WITH OSHA'S SUBPART P – EXCAVATIONS STANDARD.**
- 3.1.1.3 The Contractor and Village shall each be responsible for their own respective agents and employees.
- 3.1.1.4 The Contractor shall, prior to performing any work, request information from the Village regarding any existing confined spaces owned by the Village that may be entered in the course of the work, and shall obtain all required confined space entry permits prior to entering any confined spaces. Contractor shall follow all current laws and regulations with regard to confined space entry. Contractor shall maintain and, upon request, provide full documentation of compliance with the appropriate confined space permits for each separate confined space entered on the project.
- 3.1.2 **BACKING PRECAUTIONS.** Pursuant to Sections 14-139(b) and 14-171.1 of the Downers Grove Municipal Code, any motor vehicle which has an obstructed view to the rear and is to be operated at any time in reverse gear on the public streets of the Village by the Contractor or any subcontractor shall either be equipped with a reverse signal alarm (backup alarm) audible above and distinguishable from the surrounding noise level, or shall provide an observer to signal that it is safe to back up.
- 3.1.3 **OVERWEIGHT, OVERWIDTH AND OVERHEIGHT PERMITS.** The Village has and supports an overweight truck enforcement program. Contractors are required to comply with weight requirements and safety requirements as established by Illinois Law or Village Ordinance, for vehicles, vehicle operators and specialty equipment. In some instances, specialty equipment for road repairs or construction projects requires the movement of overweight, overwidth, or overheight loads utilizing a Village roadway. Such movement will require obtaining a permit from the Village Police Department's Traffic Supervisor.
- 3.1.4 **BARRICADES AND WARNING SIGNS.** The Contractor shall provide the Village with a telephone number of a person or company who is available 24 hours per day, seven days per week, to erect additional barricades or signs. If the Village or its representative deems it necessary for the Public's safety to erect additional barricades or signs during normal working hours, the Contractor will furnish the necessary barricades or signs, and have them in place within 30 minutes. If, after normal working hours, the requested signs are not in place within three hours after the request is made, the Village reserves the right to have the barricades and signs erected. The cost of erecting the barricades and signs shall be deducted by the Village from any payments due the Contractor.

4. PROSECUTION AND PROGRESS

4.1 Section 108 of the SSRBC shall govern the prosecution and progress of the work, with the following additions:

4.1.1 The Contractor shall schedule his work such that all improvements shall be complete by **Thursday, November 30, 2023**. The completion date will remain binding throughout the duration of the Contract unless revised in writing by the Village.

4.1.2 The total duration of disturbance for work related to means of public egress through the project site or access to private property (e.g. removal and replacement of curb and gutters, sidewalks, driveway entrances, etc.) must not exceed ten (10) calendar days. The Contractor may use high-early strength concrete, meeting all specifications herein, **at his own expense** to help meet this requirement.

4.1.3 The Contractor shall also make special note of the following work schedule requirements:

4.1.3.1 No work shall occur when crossing guards are present at any intersection.

4.1.4 Should the Contractor fail to complete the work on or before the specified completion dates set forth in Sections 4.1.1, 4.1.2, 4.1.3, or within such extended time as may be allowed, the Contractor shall be liable for liquidated damages in accordance with the applicable sections of Article 108.09 of the SSRBC. In addition, the Contractor shall be liable for additional costs incurred by the Village due to the delay for construction engineering services, which shall be deducted from the value of work completed.

4.1.5 Upon substantial completion of the project, the Engineer will deliver to the Contractor a punch list as well as a due date for completion of the punch list. If the Contractor fails to complete the punch list by the stated punch list completion date, the Contractor shall be liable for liquidated damages in accordance with the applicable sections of Article 108.09 of the SSRBC.

4.1.5 Prior to commencing construction, a meeting will be held with the Contractor and the Village. Any questions concerning procedures, general conditions, special provisions, plans or specific items related to the project shall be answered and clarified. No Pre-Construction meeting shall be scheduled until submittals, performance bonds, and certificates of insurance are delivered to, and approved by, the Village.

4.1.6 Weekly progress meetings may be required by the Village. If required, the Contractor shall have a capable person, such as a site superintendent or project manager, attend such meetings and be prepared to report on the prosecution of the Work according to the progress schedule. The Village reserves the right to require adjustments to scheduling of work.

5. MEASUREMENT AND PAYMENT

5.1 Section 109 of the SSRBC shall govern measurement and payment, with the following additions:

- 5.1.1 Modifies Article 109.07 - Partial payments will be made per Section 36 of Part II of this document (Billing and Payment Procedures.)
- 5.1.2 The Village will require that partial and final affidavits for all labor, materials and equipment used on the Project and certified payroll records, be submitted with the partial and final payment requests. Such waivers shall indicate that charges for all labor, materials and equipment used on the project have been paid. Partial waivers from suppliers and subcontractors may be submitted after the first payment to the Contractor, and before the subsequent payment to that which they apply. However, partial waivers from the Contractor must accompany the invoice of the payment to which it applies. All final waivers, from all suppliers and subcontractors MUST accompany the Contractor's invoice upon submittal for final payment. A sworn statement by the Contractor shall accompany full waivers. Such requirement for full waivers is solely for the benefit of the Village and shall not be construed to benefit any other person. Partial payment for work done shall in no way imply acceptance of the work to that date.
- 5.1.3 For each progress payment made to the Contractor prior to acceptance of the Work by the Village, the Village shall have the right to retain ten percent (10%) of the amount due to the Contractor for each such payment. The Village may, in its sole discretion, reduce the amount to be retained at any time.

Typically, upon completion of 50% of the work, as determined by the Engineer, retainage may be reduced to 5%. Upon substantial completion, as determined by the Engineer, retainage may be reduced to 2%. Additionally, the Village has the right to withhold an amount of money equivalent to complete unfinished work and/or work that may need to be redone.

6. SCOPE OF WORK

- 6.1 In addition to the Special Provisions in the Detailed Specifications Section below, Section 104 of the SSRBC shall govern scope of work, with the following revisions:
- 6.1.1 Modify Article 104.02 as follows:

104.02 Alterations, Cancellations, Extensions, Deductions, and Extra Work.

The Department reserves the right to make, in writing, at any time during work, changes in quantities, alterations in work, and the performance of extra work to satisfactorily complete the project. Such changes in quantities, alterations, and extra work shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

If alterations or changes in quantities do not significantly change the character of the work to

be performed under contract, the altered work will be paid for as provided elsewhere in the contract. The term "significant change" shall be construed to apply only when the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or when a major item, defined as an item whose total original contract cost plus any additions exceeds ten percent of the total original contract amount, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity.

All alterations, cancellations, extensions, and deductions shall be authorized in writing by the Engineer before work is started. Such authorizations shall set up the items of work involved and the method of payment for each item. The Contractor shall accept payment for alterations which result in an increase or decrease in the quantities of work to be performed according to the following.

(a) All increases in work of the type which appear in the contract as pay items accompanied by unit prices will, except as provided under paragraph (d) herein, be paid for at the contract unit prices. Decreases in quantities included in the contract will be deducted from the contract at the unit bid prices. No allowance will be made for delays or anticipated profits.

(b) Major items of work for which the quantities are increased by not more than 125 percent or reduced to not less than 75 percent of the original contract quantities OR DECREASED will be paid for as specified in paragraph (a) above. Any adjustments for increased quantities for major items of work increased more than 125 percent shall only apply to that portion in excess of 125 percent of original contract quantities. Any adjustments made for major items of work which are decreased to less than 75 percent of the original contract quantities shall apply to the actual amount of work performed.

(c) Extra work which is not included in the contract as pay items at unit prices and is not included in other items of the contract will be paid for according to Article 109.04.

(d) Extra work for which there is a pay item at unit price in the contract which for any one or more of the following reasons materially increases or decreases the cost of the pay item as bid and which is not included in the prices bid for other items in the contract will be paid for according to Article 109.04. This includes:

- (1) Work involving a substantial change of location.
- (2) Work which differs in design.
- (3) Work requiring a change in the type of construction.

(e) In cases where the Department cancels or alters any portion of the contract items, items which are partially completed will be paid for as specified in Article 109.06.

Claims for extra work which have not been authorized in writing by the Engineer will be rejected.

IV. SPECIAL PROVISIONS

The following Special Provisions shall modify, supersede, or supplement the Standard Specifications referred to in Section III - General Provisions.

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *supplemented* by any of the following paragraphs, the provisions of such section, subsection, paragraph, or subparagraph shall remain in effect. The Special Provisions shall govern in addition to the particular Standard Specification so supplemented, and not in lieu thereof.

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *amended, voided, or superseded* by any of the following paragraphs, any provision of such section, subsection, paragraph, or subparagraph standing unaffected, shall remain in effect. The Special Provisions shall govern in lieu of any particular provision of the Standard Specification so amended, voided, or superseded, and not in addition to the portion changed.

SP-1: SCOPE OF WORK

This project shall consist of modernization at selected intersections to allow for network connections to the DuPage County Central Signal System of seven (7) village owned and maintained intersections as detailed in the following Schedule of Quantities:

SCHEDULE OF QUANTITIES				
Item	Unit	Interconnect	Fairview Ave & Lincoln Ave	Fairview Ave & Prairie Ave
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH		1	1
MODIFY EXISTING CONTROLLER AND CABINET	EACH		1	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH			
LAYER II (DATALINK) SWITCH	EACH			
TERMINAL SERVER	EACH			
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2"	FOOT	1275		
FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	1500		
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1500		
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH		1	1
DRILL EXISTING HANDHOLE	EACH			
HANDHOLE	EACH	1		
TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM			
TERMINATE FIBER IN CABINET	EACH			
PROGRAM ITS EQUIPMENT	EACH	2		
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH		1	1
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1		
FIBER OPTIC PATCH PANEL	EACH			
FIBER OPTIC SPLICE ENCLOSURE	EACH			
SPLICE FIBER IN CABINET	EACH			

SCHEDULE OF QUANTITIES				
Item	Unit	Fairview Ave & Maple Ave	Fairview Ave & 2nd Street	Fairview Ave & Hill Street
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	1
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1	1	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH		1	
LAYER II (DATALINK) SWITCH	EACH		1	
TERMINAL SERVER	EACH		1	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2"	FOOT			
FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT			
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT			
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1	1	1
DRILL EXISTING HANDHOLE	EACH			
HANDHOLE	EACH			
TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM			
TERMINATE FIBER IN CABINET	EACH		6	
PROGRAM ITS EQUIPMENT	EACH			
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1	1	1
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH			
FIBER OPTIC PATCH PANEL	EACH		1	
FIBER OPTIC SPLICE ENCLOSURE	EACH			1
SPLICE FIBER IN CABINET	EACH			6

SCHEDULE OF QUANTITIES					
Item	Unit	Fairview Ave & 59th Street	Woodward Ave & Prentiss Dr	63rd Street & Woodward Ave	55th Street & Fairview Ave
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	1	1
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1	1	1	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH				
LAYER II (DATALINK) SWITCH	EACH		1		
TERMINAL SERVER	EACH				
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2"	FOOT				
FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT				
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT				
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1	1		
DRILL EXISTING HANDHOLE	EACH		1	1	
HANDHOLE	EACH				
TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM				
TERMINATE FIBER IN CABINET	EACH	6	6	6	12
PROGRAM ITS EQUIPMENT	EACH				
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1	1		
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH				
FIBER OPTIC PATCH PANEL	EACH	1	1	1	1
FIBER OPTIC SPLICE ENCLOSURE	EACH				
SPLICE FIBER IN CABINET	EACH				

The Contractor shall make the required modifications at two (2) DuPage County owned and maintained intersections to facilitate the network connections of the village intersections. A permit for this work will be required by DuPage County.

SP-2: GENERAL CONSTRUCTION REQUIREMENTS

The following general requirements are intended to govern the overall priority for the performance of the work described in this contract. As general requirements, they are not intended to dictate to the Contractor the precise method by which these tasks shall be performed.

The awarded Contractor shall schedule his work such that all improvements shall be installed by **November 30, 2023**. Failure to complete the work on time will result in assessment of liquidated damages in accordance

with the applicable sections of Article 108.09 of the Standard Specifications.

The Contractor shall maintain traffic flow on ALL STREETS during the day in accordance with the applicable special provision. Adequate signing and flagging is of particular importance for safe travel of all residents.

SP-3: QUALIFICATIONS OF BIDDER

In addition to those requirements set forth in Section 10.1 above, in order to be considered a responsible bidder, the bidder must have particular expertise in having successfully constructed projects of a similar size and scope, specifically including traffic signal modernization and/or installation. The Bidder must submit the following information for itself and for each Sub-Contractor which is proposed for earthwork, paving or underground utility work:

- a. Similar Project Experience
 - i. Bidder must provide detailed information regarding three (3) past similar projects performed by the submitting firm within the past five (5) years.
 - ii. Bidder must submit a list of references of previous projects identifying the location of the work, the dollar value of the work, the owner or agency responsible for the work, and the name and phone number of the contact person.
- b. Proposed Project Team – the Bidder must identify the project manager and full-time onsite superintendent (can be the same person) on the Certification of Qualifications form. Bidder must also provide qualifications of the project manager and full-time onsite superintendent. The individuals proposed must be utilized for the duration of this project unless an alternate is approved in writing by the Village.
- c. Bidder must completely fill out and submit the Certification of Qualifications form with the Bid.

SP-4: MOBILIZATION

Article 671.02 Basis of Payment. Revise this article to read: “Basis of Payment. This work will not be paid for separately, but shall be included in the various items of work.”

SP-5: TRAFFIC CONTROL AND PROTECTION, SPECIAL

Description. The traffic control and protection for this project shall be performed in accordance with the project Traffic Control Plan and Section 701 of the Standard Specifications as amended by the Special Provision for Work Zone Traffic Control (Illinois Department of Transportation Check Sheet #LRS 3). The cost of supplying, erecting, and maintaining barricades, warning lights, signs, and in the event of a power outage (planned or unplanned) STOP signs and or police control will be included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, SPECIAL.

Method of Measurement. Traffic control will not be measured by location or per Standard.

Basis of Payment. The cost of Traffic Control and Protection provided under the Traffic Control Plan and Section 701 WORK ZONE TRAFFIC CONTROL will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, SPECIAL which price shall include all equipment, labor and materials necessary to complete the work as specified.

SP-6: TRAFFIC CONTROL PLAN

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, notes, 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 DuPage County Division of Transportation at least 72 hours in advance of beginning work.

STANDARDS:

701426 Lane Closure, Multilane, Intermittent or Moving Operation, For Speeds \geq 45mph
 701427 Lane Closure, Multilane, Intermittent or Moving Operation, For Speeds \leq 45mph
 701701 Urban Lane Closure, Multilane Intersection
 701801 Sidewalk, Corner or Crosswalk Closure
 701901 Traffic Control Devices

DETAILS:

TC 10 Traffic Control and Protection for side Roads, Intersections, and Driveways
 TC 14 Traffic Control and Protection at Turn Bays (To Remain Open)

SPECIAL PROVISIONS:

Traffic Control and Protection (SPECIAL)

WORK RESTRICTIONS

Work hours during the week (Monday to Friday) shall be limited to 8:30 am to 4:00 pm.

SP-7: COORDINATION WITH DUPAGE COUNTY DIVISION OF TRANSPORTATION

For the traffic signal interconnect at 63rd & Woodward Avenue, and at 55th Street & Fairview Avenue, the Contractor will be required to obtain a highway access permit from the DuPage County DOT, as listed below, prior to construction of any work on or adjacent to their right of way.

The Contractor is responsible for meeting all permit, insurance and bond requirements with the DuPage County DOT which can be found at https://www.dupagecounty.gov/DOT/Highway_Permitting/17368/

DuPage County DOT contact is:

Mr. Paul Wendt
421 North County Farm Road
Wheaton, IL 60187
(630) 407-6898

This work will not be paid for separately, but shall be included in the various items of work related to the proposed interconnect including the Maintenance of Existing Traffic Signal Installation pay item.

SP-8: TRAFFIC SIGNAL GENERAL REQUIREMENTS

All work shall be performed in accordance with the DuPage DOT Traffic Signal General Requirements by an IDOT Prequalified Electrical Contractor as listed below.

All contact references listed in this special provision which refer to the County or IDOT shall be changed to the Village of Downers Grove Transportation Manager at 630-434-6863 for the seven (7) Village owned and maintained locations.

All work performed and equipment provided and installed under this contract shall be governed by and shall comply with the following:

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"	January 2020
The National Electrical Code referred to as "NEC"	2011 Edition
The National Electrical Manufacturers Association (All publications for traffic control items)	All applicable current documents published prior to Contract

referred to as "NEMA"	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 DuPage County Division of Transportation
 Traffic Engineer DUDOT Traffic Engineer or designee
 Central Signal System DuPage County's ITS System
 Network Integration Consultant Currently Parsons Transportation Group

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 for all contract electrical questions or request is (630) 434-6863, 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 non-standard 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.
- l. 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 Village of Downers Grove Transportation Manager at (630) 434-6863 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 Village of Downers Grove Transportation Manager at (630) 434-6863, 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 Village 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 the Village, 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. Village personnel, the County's Traffic Signal Maintenance Contractor, and the County's Network Integration Consultant may inspect any signaling 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)

<u>ITEM</u>	<u>RESPONSE TIME</u>	<u>SERVICE RESTORATION</u>	<u>PERMANENT REPAIRS</u>
<u>KNOCKDOWNS/FAILURE/DAMAGE:</u>			
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
<u>COMPLAINTS/CALLS/ALARMS:</u>			
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 VoDG Contract or Permit project, the following modifications shall apply to the noted Special Provisions.

Contact Information: 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 VoDG Transportation Manager and the phone number shall be **630-434-6863**. Submittals, requests for reviews, scheduling of appointments, and requests for materials and information shall be directed to the VoDG Transportation Manager instead of IDOT, District 1, or the State's Maintenance Contractor.

Traffic Signal Timing Consultant Requirements: 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.

Pedestrian Pushbutton Station Requirements: 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.

Handhole Requirements: 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, the inspection may be canceled, 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 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.

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.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Revised: January 1, 2021
DC895.01

Add the following to Article 895.05(a) 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 Village shall be delivered by the Contractor to Village. The Contractor shall contact the Village 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 Village, 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. The Village reserves the right to reject equipment that is not returned according to these requirements. 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 the Village. The Contractor shall package the equipment and provide all necessary documentation as stated above.

Traffic signal equipment which is lost or not returned to Village 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.

It shall be the Contractor's responsibility to legally dispose of all existing traffic signal heads and mercury displacement relays outside of the limits of the right-of-way. It shall be the Contractor's responsibility to select the proper dump sites and obtain permission and all necessary permits to use such dump sites.

The Contractor shall remove and return to the Village the existing master controller.

MODIFY EXISTING CONTROLLER AND CABINET

Description. This work shall consist of modifying existing traffic signal controller programming and traffic signal cabinet to implement the proposed sequence of operation as shown on the Plans. This includes modifying proposed pedestrian phases, right turn overlaps, and making all necessary modifications to the controller and cabinet to achieve the proposed sequence.

General. The work shall be in accordance with Sections 857, 863, 873, and 895 of the Standard Specifications and shall include modifications in controller programming, MMU programming, cabinet and all necessary wiring, hardware, and modifications to the existing load switch bay to implement the proposed signal phasing at the intersection as shown on the Plans. All necessary materials, parts, firmware upgrades, and labor required for modifying the controller cabinet and replacement of any components to accommodate proposed signal phasing including load switches, MMU and field wiring, shall be considered included in this pay item.

The Contractor shall obtain an existing cabinet ("box") print for each intersection and forward these prints to the existing cabinet supplier/vendor. The supplier/vendor shall revise the prints for the proposed sequence of operations and return five copies of the update prints for each intersection. The Contractor shall leave one copy in the controller cabinet and deliver the remaining copies to the Village. An updated cable log shall also be produced by the Contractor and placed in the controller cabinet. The log shall document a comprehensive listing of existing and newly installed cables.

The controller sequence, emergency pre-emption, pedestrian interval timing, and change and clearance operation intervals shall conform to current MUTCD, IDOT D1 and Village requirements. Right turn overlap (arrow) indications shall not be displayed during emergency pre-emption. Proposed controller programming shall avoid the presence of "yellow trap" conflicts during normal and emergency pre-emption operations. Necessary modifications shall include the overhauling of a signal cabinet's back panel, or integration of an additional axillary load switch panel and associated wiring, to accommodate additional load switches as

required per proposed signal phasing. Should more than 16 channels be required to deliver the proposed signal phasing, the Contractor and supplier/vendor shall submit plans for local agency approval demonstrating their solution to safely meeting the operational requirements of the contract documents.

If necessary, modifications are needed for proposed signal phasing involving use of an axillary load switch panel, channel mapping shall follow Mode G (for NEMA TS2) cabinets unless otherwise approved by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price EACH for MODIFY EXISTING CONTROLLER AND CABINET which price shall be payment in full for furnishing all materials, hardware, wiring, controller software upgrades, and labor required to modify the existing traffic signal controller and cabinet, necessary for proper operation of the proposed sequence of operations, to the satisfaction of the Engineer.

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 of 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).”

ELECTRIC CABLE

Revised: January 1, 2021
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 1076.04 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 and grounding 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 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.

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.

Multimode: 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.

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

Singlemode Fiber Terminations: All singlemode fiber terminations shall utilize pre-fabricated, factory-terminated (SC compatible with ceramic ferrules) pigtailed fusion spliced to bare fibers. The pre-fabricated pigtailed 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.

Singlemode Fiber Splices: 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, pigtailed, 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.

FIBER OPTIC SPLICE ENCLOSURE

Description: This work shall consist of furnishing and installing splice enclosures in a traffic signal cabinet as indicated in the plans and/or as directed by the 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 fiber optic splice enclosure at the location in the traffic cabinet or as directed by the 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 Village.

Materials: Enclosure shall be suitable for outdoor applications with a temperature range of -22 to 140 degrees Fahrenheit, protect splices from moisture and damage, non-reactive and not support galvanic cell action, waterproof, re-enterable, sealed with a gasket, permit selective splicing to allow one or more fiber strands to be cut and spliced without disrupting other fibers, equipped with a basket to accommodate the slack from all fibers routed into the enclosure, capable of holding splice trays from various manufacturers, input/output capacity of four 18 mm cables, equipped with a termination block to terminate the central strength members of the fiber optic cables. The enclosure shall include SC connectors capable of accommodating the required number of single mode fibers.

Splice trays shall be aluminum and compatible with fiber splices and splice enclosure, equipped with polyethylene tubes to protect exposed individual fibers within the enclosure, and stackable within the splice enclosure. Vinyl markers shall be supplied to identify each fiber to be spliced. Each splice shall be individually mounted and mechanically protected on the splice tray. Loose tube buffers shall be secured with a tube guide or channel snap. Slack fiber shall be placed in an oval shape along an inside wall of the tray. 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 the enclosure, splice trays, jumpers, tubes, markers, tube guides, channel snaps, 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.

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.

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) pigtailed fusion spliced to bare fibers. The splicing of pigtailed for singlemode fibers is included in the cost of TERMINATE FIBER IN CABINET. The pre-fabricated pigtailed 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.

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.

PROGRAM ITS EQUIPMENT

DC801.11

Description: This work shall consist of configuring and programming the specified ITS component for installation and operation at a remote location to communicate to the DuPage DOT Traffic Center over the County's Ethernet-based system. The equipment to be programmed will be as indicated in the plans. Programming shall be completed by the County's Network Integration Consultant.

General: The ITS equipment shall be delivered by the Contractor to the Network Integration Consultant for programming at the consultant's office. The programming includes bench testing the device and confirming that it is configured to properly operate within the County's field network at the proposed location. The Contractor shall retrieve the programmed equipment. The cost of transporting the equipment to and from the Consultant's office will 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 PROGRAM ITS EQUIPMENT. The unit price shall include all equipment, materials, and labor required to transport the specified equipment to and from the Network Integration Consultant's office, program and configure the device, and test it for proper operations within the County's Ethernet-based network. Programming of a device that is procured through the County's Network Integration Consultant is paid for under the applicable pay item; this item does not apply to those devices

FIBER OPTIC PATCH PANEL

Description. This item shall consist of furnishing and installing a fiber optic patch panel for the proposed single mode fiber optic cable, as specified in the plans and described herein.

Materials. The Fiber Optic Patch Panel shall comply with the following requirements:

- The fiber patch panel shall terminate pigtail fibers as called out on the Plans.
- The fiber optic termination panel shall allow termination of a fiber patch cord to interconnect outside plant fibers to fiber optic communication equipment.
- The approved type optical connectors on the end of each pigtail shall connect to a coupler securely mounted to a patch panel within the controller cabinet. The maximum optical loss across the connection shall not exceed 0.25 dB.
- The fibers with the optical connectors on the pigtail cable shall be routed through and secured in the fiber optic termination panel as directed by and to the satisfaction of the Engineer.
- The bulkheads or single mode adapter types shall be single mode ST compatible, ceramic.

Installation Details:

The Fiber Optic Patch Panels shall be installed in an existing controller as specified in the plans. Patch Panels shall come with cable strain relief hardware and pull out label for administrative documentation. Pigtails shall be fusion spliced to the fiber optic cable and terminated in the fiber patch panel. All work shall be neat and in a workmanlike manner. Particular care shall be taken as to not crush or kink the 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 the

Contractor's expense.

The Contractor shall follow all accepted good industry practices while installing and terminating the fiber optic cable.

The Contractor shall supply each fiber optic patch panel with 4 single fiber cables, single mode patch cords with optical connectors at each end. The Engineer shall supply the Contractor with cable lengths and connector types to be used with the patch cord assemblies.

Basis of Payment. This work shall be paid for at the contract unit price each for FIBER OPTIC PATCH PANEL which price shall include furnishing and installing the fiber optic patch panel, patch cords and any other materials, hardware, and labor necessary to complete the installation.

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 re-optimization 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.

TERMINAL SERVER

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
- Control 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.

LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE

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-LH-SM.

General: The transceiver shall be installed in the Cisco Layer III switch as determined by the network consultant.

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, install, configure, and place into operation 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.

FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL

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

General: The 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 the "Centrac" 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 the NTCIP and ATC software compatible with "Centrac" installed, and be equipped with an Ethernet port and a removable data key or other storage media to save the controller database.

All controllers shall be the latest Econolite Cobalt 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, SPECIAL. The unit price shall include all equipment, materials and labor required to furnish, install, configure, and place into operation the controller, including all necessary connectors, cables, hardware, software, and other peripheral equipment required to place the controller in operation to the satisfaction of the Traffic Engineer.

SCHEDULE OF PRICES:**PAGE 1 of 2:****Provide BID TOTAL on next page**

PAY ITEM NUMBER	ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	9	316.00	2,844.00
2	MODIFY EXISTING CONTROLLER AND CABINET	EACH	9	891.00	8,019.00
3	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	632.00	632.00
4	LAYER II (DATALINK) SWITCH	EACH	2	6,497.00	12,994.00
5	TERMINAL SERVER	EACH	1	5,059.50	5,059.50
6	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2"	FOOT	1275	39.65	50,553.75
7	FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	1500	5.89	8,835.00
8	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1500	1.81	2,715.00
9	FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	7	5,887.75	41,214.25
10	DRILL EXISTING HANDHOLE	EACH	2	316.00	632.00
11	HANDHOLE	EACH	1	3,678.00	3,678.00
12	TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM	1	158.00	158.00

13	TERMINATE FIBER IN CABINET	EACH	36	136.50	4,914.00
14	PROGRAM ITS EQUIPMENT	EACH	2	575.00	1,150.00
15	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	7	1,417.50	9,922.50
16	LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1	1,538.00	1,538.00
17	FIBER OPTIC PATCH PANEL	EACH	5	1,552.00	7,760.00
18	FIBER OPTIC SPLICE ENCLOSURE	EACH	1	1,322.00	1,322.00
19	SPLICE FIBER IN CABINET	EACH	6	136.50	819.00

PAGE 2
of 2

BID TOTAL

\$164,760.00

V. BID and CONTRACT FORM

*****THIS BID WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE VILLAGE OF DOWNERS GROVE SHALL BECOME A CONTRACT BINDING UPON BOTH PARTIES.**

Entire Form Must Be Completed If a Submitted Bid Is To Be Considered For Award

BIDDER:

Meade Inc.

2/14/23

Company Name

Date

625 Willowbrook Center Parkway

mkk@meade100.com

Street Address of Company

E-mail Address

Willowbrook, IL 60527

Michael K Knutson

City, State, Zip

Contact Name (Print)

708-588-2500

773-287-7600

Business Phone

24-Hour Telephone

708-588-2501

Business Fax

Signature of Officer, Partner or Sole Proprietor

Michael K Knutson Vice President

ATTEST: if a Corporation

Print Name & Title

David A. Neal

Signature of Corporation Secretary
Assistant Corporate



We hereby agree to furnish the Village of Downers Grove all necessary materials, equipment, labor, etc. to complete the project within the timeframe specified herein and in accordance with the provisions, instructions and specifications for the unit prices shown on the Schedule of Prices.

VILLAGE OF DOWNERS GROVE:

ATTEST:

Authorized Signature

Village Clerk

Title

Date

Date

In compliance with the specifications, the above-signed offers and agrees, if this Bid is accepted within 90 calendar days from the date of opening, to furnish any or all of the services upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.

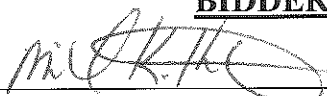
BIDDER'S CERTIFICATION (page 1 of 3)

With regard to Traffic Signal Modernization Network Conn., Bidder Meade Inc.
 (Name of Project) (Name of Bidder)

hereby certifies the following:

1. Bidder is not barred from bidding this Contract as a result of violations of Section 720 ILCS 5/33E-3 (Bid Rigging) or 720 ILCS 5/33E-4 (Bid-Rotating);
2. Bidder certifies that it has a written sexual harassment policy in place and full compliance with 775 ILCS 5/2-105(A)(4);
3. Bidder certifies that not less than the prevailing rate of wages as determined by the Village of Downers Grove, DuPage County or the Illinois Department of Labor shall be paid to all laborers, workers and mechanics performing work for the Village of Downers Grove. All bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause. Bidder agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq., for all work completed. Bidder agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this Contract or related subcontract. Bidder and each subcontractor shall keep or cause to be kept an accurate record of each worker's name, address, telephone number when available, the last four digits of the worker's social security number, gender, race, ethnicity, veteran's status, skill level, classification, hourly wage paid (including itemized hourly cash and fringe benefits paid in each pay period), number of hours worked each day, the starting and ending times of work each day, the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. This record shall be sent to the Illinois Department of Labor no later than the fifteenth (15th) day of each calendar month for the immediately preceding month in which construction on a public works project has occurred. Contractor shall then provide an IDOL certification and case number to the Village. The records must be preserved for five (5) years following completion of the contract. Bidder certifies that Bidder and any subcontractors working on the project are aware that filing false payroll records is a Class A misdemeanor and that the monetary penalties for violations are to be paid pursuant to law by the Bidder, contractor and subcontractor. The Village shall not be liable for any underpayments. If applicable: Since this is a contract for a fixed public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed;
4. Bidder certifies that it is in full compliance with the Federal Highway Administrative Rules on Controlled Substances and Alcohol Use and Testing, 49 C.F.R. Parts 40 and 382 and that all employee drivers are currently participating in a drug and alcohol testing program pursuant to the Rules;
5. Bidder further certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue, or that Bidder is contesting its liability for the tax delinquency or the amount of a tax delinquency in accordance with the procedures established by the appropriate Revenue Act. Bidder further certifies that if it owes any tax payment(s) to the Department of Revenue, Bidder has entered into an agreement with the Department of Revenue for the payment of all such taxes that are due, and Bidder is in compliance with the agreement.

BIDDER'S CERTIFICATION (page 2 of 3)


BY: 
Bidder's Authorized Agent Signature

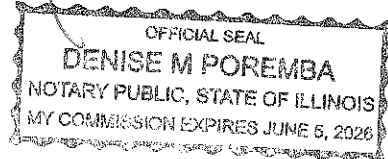
2	7	-	4	0	6	0	7	6	1
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FEDERAL TAXPAYER IDENTIFICATION NUMBER

OR _____
Social Security Number

Subscribed and sworn to before me
this 14th day of February, 2023.


Notary Public



(Fill Out Applicable Paragraph Below)

(a) Corporation

The Bidder is a corporation organized and existing under the laws of the State of Illinois, which operates under the Legal name of Meade Inc., and the full names of its Officers are as follows:

President: Frank A Lizzadro

Secretary: Maribel Garibay

Treasurer: John S Lizzadro Jr.

and it does have a corporate seal. (In the event that this bid is executed by other than the President, attach hereto a certified copy of that section of Corporate By-Laws or other authorization by the Corporation which permits the person to execute the offer for the corporation.)

(b) Limited Liability Company (LLC)

The Bidder is a LLC organized and existing under the laws of the State of _____, which operates under the legal name of _____, and the full names of its managers or members are as follows:

Manager or Member: _____

Manager or Member: _____

Manager or Member: _____

Manager or Member: _____

BIDDER'S CERTIFICATION (page 3 of 3)

(c) Partnership

The partnership does business under the legal name of: _____,
which name is registered with the office of _____ in the State of _____.

Names and Addresses of All Partners:

(d) Sole Proprietor

The Bidder is a Sole Proprietor whose full name is: _____; and if
operating under a trade name, said trade name is: _____, which name is
registered with the office of _____ in the State of _____.

6. Are you willing to comply with the Village's insurance requirements within 10 days of the award of the contract? YES NO (circle one)

INSURER'S NAME: Meade Inc.

AGENT: Assurance, a Marsh & McLennan Agency LLC Co.

Street Address: 20 N Martingale Road, Suite 100

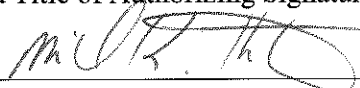
City, State, Zip Code: Schaumburg, IL 60173

Telephone Number: 847-463-7832

I/We hereby affirm that the above certifications are true and accurate and that I/we have read and understand them.

Print Name of Company: Meade Inc.

Print Name and Title of Authorizing Signature: Michael K Knutson Vice President

Signature: 

Date: 2/14/23

MUNICIPAL REFERENCE LIST

Municipality: City of Naperville
 Address: 400 S Eagle Street Naperville, IL 60540
 Contact Name: Karin Kietzman Phone #: 630-420-6062
 Name of Project: Traffic Signal and Street Light Maintenance
 Contract Value: \$748,946.60 Date of Completion: 12/21

Municipality: County of DuPage
 Address: 421 N County Farm Road Wheaton, IL 60167
 Contact Name: Maryanne Sioson Phone #: 630-407-6908
 Name of Project: Traffic Signal Maintenance
 Contract Value: \$3,221,423.76 Date of Completion: 12/21

Municipality: City of Crystal Lake
 Address: 100 W Woodstock Street Crystal Lake, IL 60014
 Contact Name: Mark Slonikas Phone #: 815-356-3605
 Name of Project: Traffic Signal Maintenance
 Contract Value: \$158,337.44 Date of Completion: 12/31/22

Municipality: Cook County Dept. of Highways
 Address: 69 W Washington Chicago, IL 60602
 Contact Name: Richard Jezinery Phone #: 312-603-1600
 Name of Project: Traffic Signal and Street Light Maintenance
 Contract Value: \$9,744,597.20 Date of Completion: 12/31/22

Municipality: Village of Lombard
 Address: 255 E Wilson Avenue Lombard, IL 60148
 Contact Name: Matthew Lew Phone #: 630-620-5740
 Name of Project: Traffic Signal Maintenance
 Contract Value: \$182,294.18 Date of Completion: 12/31/22

SUBCONTRACTORS LIST

The Bidder hereby states the following items of work will not be performed by its organization. (List items to be subcontracted as well as the names, addresses and phone numbers of the subcontractors.)

1) NA Type of Work _____

Addr: _____ City _____ State _____ Zip _____

2) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

3) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

4) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

5) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

6) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

7) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

8) _____ Type of Work _____

Addr: _____ City _____ State _____ Zip _____

CERTIFICATION OF QUALIFICATIONS

Project Team

Project Manager: Bryan Knutson

Superintendent: TBD upon contract execution

Team Member: _____

Team Member: _____

Team Member: _____

Team Member: _____

Team Member: _____

Team Member: _____

By checking this box, the bidder hereby certifies that it complies with all requirements of SP-3 including at least three (3) contracts of similar nature and scope within the last five (5) years, and can provide detailed supporting information upon request.

Signed by:  (Corporate Seal)

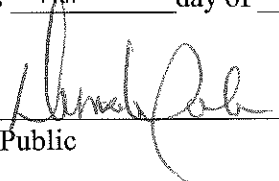
Title: Vice President

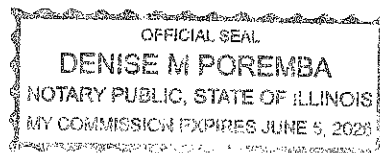
Name & Address: Michael K Knutson

of Contractor 625 Willowbrook Center Parkway

or Vendor Willowbrook, IL 60527

Subscribed and sworn to before me this 14th day of February, 2023


Notary Public





VENDOR W-9 REQUEST FORM

The law requires that we maintain accurate taxpayer identification numbers for all individuals and partnerships to whom we make payments, because we are required to report to the I.R.S all payments of \$600 or more annually. We also follow the I.R.S. recommendation that this information be maintained for all payees including corporations.

Please complete the following substitute W-9 letter to assist us in meeting our I.R.S. reporting requirements. The information below will be used to determine whether we are required to send you a Form 1099. Please respond as soon as possible, as failure to do so will delay our payments.

BUSINESS (PLEASE PRINT OR TYPE):

NAME: Meade Inc.

ADDRESS: 625 Willowbrook Center Parkway

CITY: Willowbrook

STATE: Illinois

ZIP: 60527

PHONE: 708-588-2500 **FAX:** 708-588-2501

TAX ID #(TIN): 27-4060761

(If you are supplying a social security number, please give your full name)

REMIT TO ADDRESS (IF DIFFERENT FROM ABOVE):

NAME: _____

ADDRESS: _____

CITY: _____

STATE: _____ **ZIP:** _____

TYPE OF ENTITY (CIRCLE ONE):

- Individual
- Sole Proprietor
- Partnership
- Charitable/Nonprofit
- Limited Liability Company – Member-Managed
- Limited Liability Company- Manager-Managed
- Medical
- Corporation
- Government Agency

SIGNATURE: **DATE:** 2/14/23

Michael K Knutson Vice President

Apprenticeship and Training Certification

(Does not apply to federal aid projects. Applicable only to maintenance and construction projects that use Motor Fuel Tax funds or state grant monies.)

Name of Bidder: Meade Inc.

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the Bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The Bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this Contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Illinois Department of Labor, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The Bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the Bidder is a participant and that will be performed with the Bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The Bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. Return this with the Bid.**

International Brotherhood of Electrical Workers

The requirements of this certification and disclosure are a material part of the Contract, and the Contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this Contract.

Print Name and Title of Authorizing Signature: Michael K Knutson Vice President

Signature: 

Date: 2/14/23

BUY AMERICA CERTIFICATION

Certification requirement for procurement of steel, iron, or manufactured products when Federal funds (Grant Agreement or Cooperative Agreement) are used.

Instructions:

Bidder to complete the Buy America Certification listed below. Bidder shall certify EITHER COMPLIANCE OR NON-COMPLIANCE (not both). This Certification MUST BE submitted with the Bidder's bid response.

Special Note: Make sure you have signed only one of the above statements – either Compliance OR Non-Compliance (not both).

Certificate of Compliance

The bidder or offeror hereby certifies that it **will meet** the requirements of 49 U.S.C. 5323(j)(1), as amended, and the applicable regulations in 49 CFR Part 661.

Signature _____



Company Name Meade Inc.

Title Vice President

Date 2/14/23

Certificate of Non-Compliance

The bidder or offeror hereby certifies that it **cannot comply** with the requirements of 49 U.S.C. 5323(j)(1), as amended, and 49 C.F.R. 661, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Signature _____

Company Name _____

Title _____

Date _____

AFTER THIS CERTIFICATE HAS BEEN EXECUTED, A BIDDER MAY NOT SEEK A WAIVER.

Note: The U.S./Canadian Free Trade Agreement does not supersede the Buy America requirement.

Suspension or Debarment Certificate

Non-Federal entities are prohibited from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$100,000.00. Contractors receiving individual awards for \$100,000.00 or more and all sub-recipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, the Bidder certifies to the best of its knowledge and belief, that the company and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal, state or local governmental entity, department or agency;
2. Have not within a three-year period preceding this Bid 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, or convicted of or had a civil judgment against them for a violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal/contract had one or more public transactions (Federal, State or local) terminated for cause or default.

If the Bidder is unable to certify to any of the statements in this certification, Bidder shall attach an explanation to this certification.

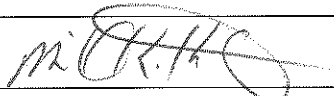
Company Name: Meade Inc.

Address: 625 Willowbrook Center Parkway

City: Willowbrook Zip Code: 60527

Telephone: (708) 588-2500 Fax Number: (708) 588-2501

E-mail Address: mkk@meade100.com

Authorized Company Signature: 

Print Signature Name: Michael K Knutson Title of Official: Vice President

Date: 2/14/23

CAMPAIGN DISCLOSURE CERTIFICATE

Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate.


The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under penalty of perjury, I declare:

Bidder/vendor has not contributed to any elected Village position within the last five (5) years.


Signature

Michael K Knutson
Print Name

Bidder/vendor has contributed a campaign contribution to a current member of the Village Council within the last five (5) years.

Print the following information:

Name of Contributor: _____
(company or individual)

To whom contribution was made: _____

Year contribution made: _____ Amount: \$ _____

Signature

Print Name

BID SUBMITTAL CHECKLIST

Each Bidder's Bid Package must be submitted with all requisite forms properly completed, and all documentation included. The following list is not all-inclusive, but is designed to facilitate a good, competitive bidding environment.

1. Instructions to Bidders read and understood. Any questions must be asked according to the instructions.
2. Cover sheet filled-in
3. Bid Form copies filled-in. All copies must have original signatures and seals on them.
4. Bid Bond or cashier's check enclosed with bid package.
5. Schedule of Prices completed. Check your math!
6. Bidder Certifications signed and sealed.
7. Letter from Surety ensuring issuance of Performance and Labor Bonds.
8. Letter from Insurance Agent or Carrier ensuring issuance of required job coverage.
9. Municipal Reference List completed.
10. Vendor request form W-9 completed.
11. Affidavit (IDOT Form BC-57, or similar).
12. Bid package properly sealed and labeled before delivery. If sending by mail or messenger, enclose in a second outer envelope or container. Project plan sheets do not have to be included with the bid package.



Affidavit of Availability
For the Letting of



Bureau of Construction
2300 South Dirksen Parkway/Room 322
Springfield, IL 62764

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show NONE.

	1	2	3	4	Awards Pending	Accumulated Totals
Contract Number	62M86	60Y00	60X94	1-17-4339		
Contract With	IDOT	IDOT	IDOT	ISTHA		
Estimated Completion Date	12/31/23	12/31/22	12/31/22	12/31/22		
Total Contract Price	39,292,732.10	2,709,902.86	2,135,740.26	4,843,779.39		
Uncompleted Dollar Value if Firm is the Prime Contractor	37,292,732.10	909,902.86				38,202,634.96
Uncompleted Dollar Value if Firm is the Subcontractor			1,091,870.88	2,941,235.48		4,033,106.36
Total Value of All Work						42,235,741.32

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show NONE.

Earthwork						
Portland Cement Concrete Paving						
HMA Plant Mix						
HMA Paving						
Clean & Seal Cracks/Joints						
Aggregate Bases, Surfaces						
Highway, R.R., Waterway Struc.						
Drainage						
Electrical	37,292,732.10	909,902.86	1,091,870.88	2,941,235.48		
Cover and Seal Coats						
Concrete Construction						
Landscaping						
Fencing						
Guardrail						
Painting						
Signing						
Cold Milling, Planning, Rotomilling						
Demolition						
Pavement Markings (Paint)						
Other Construction (List)						
Totals	37,292,732.10	909,902.86	1,091,870.88	2,941,235.48		42,235,741.32

Disclosure of this information is REQUIRED to accomplish the statutory purpose as fulfilled in the "Illinois Procurement Code." Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

Part III. Work Subcontracted to Others.

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

Notary

I, being duly sworn, do hereby declare this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates.

Officer or Director

Michael K Knutson

Title

Vice President

Signature



Date

2/14/23

Company

Meade Inc.

Address

625 Willowbrook Center Parkway

City

Willowbrook


State

IL

Zip Code

60527

Subscribed and sworn to before me
 this 14th day of February, 2023



(Signature of Notary Public)

My commission expires 6/5/26

OFFICIAL SEAL

DENISE M POREMBA

NOTARY PUBLIC, STATE OF ILLINOIS

MY COMMISSION EXPIRES JUNE 5, 2026

(Notary Seal)

Add pages for additional contracts

CNA SURETY

801 Warrenville Road, Suite 700
Lisle, IL 60532

February 13, 2023

Village of Downers Grove
5101 Walnut Avenue
Downers Grove, IL 60515

Contractor: Meade, Inc.
625 Willowbrook Center Parkway
Willowbrook, 60527

Project: Traffic Signal Modernization Network Connection

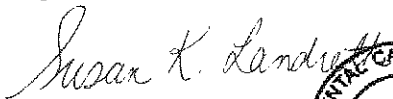
To Whom It May Concern:

Meade, Inc. is a highly valued client of CNA Surety Company since 2002. They are one of the pre-eminent electrical contractors in the Chicago area and have significant experience on a wide range of construction projects including commercial, industrial and governmental work. As such, we highly recommend them for your anticipated project.

Continental Casualty Company is the surety for Meade, Inc. They are licensed in all 50 states and carry an AM Best Policyholder's Rating of "A", with a Financial Rating of XV. We have provided surety support in the past for individual projects in excess of \$100,000,000 and a work program of \$200,000,000. Continental Casualty Company would consider a total aggregate program of \$300,000,000. Continental Casualty Company possesses a U.S. Treasury listing of \$786,901,000.

This letter is not to be construed as a commitment to provide surety bonds for a particular project, but as an indication of our past experience and confidence in Meade, Inc. Any specific request for bonds will be underwritten on its own merit.

Regards,



Susan K. Landreth
Attorney-In-Fact



POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Susan K Landreth, Mark V Baechle, Kimberly Bragg, Sarah E Green, Rebecca M Josephson, Individually

of Chicago, IL, their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 27th day of January, 2022.



Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Paul T. Bruflat

Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 27th day of January, 2022, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument, that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.



My Commission Expires March 2, 2026

M. Bent

M. Bent Notary Public

CERTIFICATE

I, D. Johnson, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 13th day of February, 2023



Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

D. Johnson

D. Johnson Assistant Secretary

Form F6853-4/2012

Go to www.cnasurety.com > Owner / Oblige Services > Validate Bond Coverage, if you want to verify bond authenticity.

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company at a meeting held on May 12, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of Continental Casualty Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of National Fire Insurance Company of Hartford.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of American Casualty Company of Reading, Pennsylvania.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “



February 13, 2023

The Village of Downers Grove
5101 Walnut Avenue
Downers Grove, IL 60515

RE: Meade Inc.

RE: Meade Inc.
Bid project - Traffic Signal Modernization Network Connection

To Whom it May Concern:

Assurance Agency, Ltd. is the binding agent for Meade Inc.. Upon review, their current policies are compliant with the specifications provided by our insured set forth for this job. If additional coverage is required it will be provided, upon request.

We have read the requirements set forth in the contract and attest to all provisions. The Certificate of Insurance and policy binders can be obtained upon award of any future request of services.

If you have any questions regarding the above, please do not hesitate to contact our office.

Sincerely,

Linda Luebking
Senior Client Service Representative
P: (847) 463-7832
Linda.Luebking@MarshMMA.com

Document A310™ – 2010

Conforms with The American Institute of Architects AIA Document 310

Bid Bond

CONTRACTOR:

(Name, legal status and address)

Meade, Inc.
625 Willowbrook Center Parkway
Willowbrook, IL 60527

SURETY:

(Name, legal status and principal place of business)

Continental Casualty Company
151 N. Franklin Street
Chicago, IL 60606

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

OWNER:

(Name, legal status and address)

Village of Downers Grove
5101 Walnut Avenue
Downers Grove, IL 60515

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

BOND AMOUNT: \$ 10%

Ten Percent of Amount Bid

PROJECT:

(Name, location or address, and Project number, if any)

Traffic Signal Modernization Network Connection

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 15th day of February, 2023

David A Leali
(Witness) David A Leali Asst. Corp Sec.

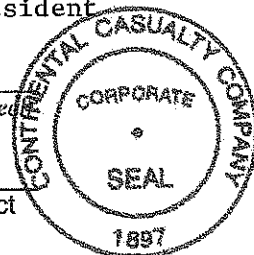
Meade, Inc.
Michael K Knutson
(Principal) *(Seal)*

By: Michael K Knutson
(Title) Michael K Knutson Vice President

Kimberly Bragg
(Witness) Kimberly Bragg

Continental Casualty Company
Susan K Landreth
(Surety) *(Seal)*

By: Susan K Landreth
(Title) Susan K. Landreth Attorney-in-Fact



POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Susan K. Landreth , Individually

of Chicago, IL , their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

Surety Bond No.: Bid Bond
 Principal: Meade, Inc.
 Obligee: Village of Downers Grove

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Vice President and their corporate seals to be hereto affixed on this 16th day of June, 2021.



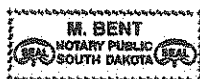
Continental Casualty Company
 National Fire Insurance Company of Hartford
 American Casualty Company of Reading, Pennsylvania

Paul T. Bruflat

Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 16th day of June, 2021, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that he knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.



My Commission Expires March 2, 2026

M. Bent

M. Bent Notary Public

CERTIFICATE

I, D. Johnson, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 15th day of February, 2023.



Continental Casualty Company
 National Fire Insurance Company of Hartford
 American Casualty Company of Reading, Pennsylvania

D. Johnson

D. Johnson Assistant Secretary

Form F6853-4/2012

Go to www.cnasurety.com > Owner / Obligee Services > Validate Bond Coverage, if you want to verify bond authenticity.

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF CONTINENTAL CASUALTY COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company at a meeting held on May 12, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of Continental Casualty Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “

ADOPTED BY THE BOARD OF DIRECTORS OF NATIONAL FIRE INSURANCE COMPANY OF HARTFORD:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of National Fire Insurance Company of Hartford.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “

ADOPTED BY THE BOARD OF DIRECTORS OF AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA:

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company by unanimous written consent dated May 10, 1995:

“RESOLVED: That any Senior or Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Senior or Group Vice President to the Secretary of the Company prior to such execution becoming effective.”

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execute power of attorneys on behalf of American Casualty Company of Reading, Pennsylvania.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012:

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”); Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company. “