

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village Council Meeting**  
**2/21/2023**

<b>SUBJECT:</b>	<b>SUBMITTED BY:</b>
Award of Contract - DBD Crosswalk, Accessibility and Traffic Signal Improvements (S-007/TR-034)	Andy Sikich Public Works Director

**SYNOPSIS**

A motion is requested to award a contract for the 2023 Downtown Business District (DBD) Crosswalk, Accessibility and Traffic Signal Improvements project to Alliance Contractors, Inc. of Woodstock, Illinois in the amount of \$1,576,939.65, which includes a 10% contingency.

**STRATEGIC PLAN ALIGNMENT**

The goals for 2021 to 2023 include *Top Quality Infrastructure*.

**FISCAL IMPACT**

The FY23 budget includes a total of \$1,625,000.00 in the Capital Improvements Fund for this project.

**RECOMMENDATION**

Approval on the March 7, 2023 consent agenda.

**BACKGROUND**

The majority of crosswalks and curb ramps within the Village's Downtown DBD have displayed various degrees of deterioration. Furthermore, several curb ramps and pedestrian traffic signals within the DBD require upgrades to meet current Americans with Disabilities Act (ADA) standards. The goal of the DBD Crosswalk and Accessibility Upgrade project is to bring the means of egress at all intersections and mid-block crossings within compliance with current ADA standards with enduring, cost-effective and low-maintenance materials. Completing the upgrades within the DBD will take multiple years.

This phase of the project includes the signalized Main Street intersections at Maple, Curtiss, Burlington, Warren, and Franklin. All existing crosswalk material within the street will be replaced with in-kind pavement material and topped with a highly visible and durable pavement striping material with a red brick pattern. All existing sidewalk materials will be replaced with colored concrete matching the DBD. Sidewalk ramps, approximately in the same locations as the existing brick paver sidewalks, will have a scored rectangular pattern on the surface, which will aesthetically connect the ramps to the crosswalks. The Village has previously completed similar crosswalk and accessibility upgrades at multiple locations on Forest Avenue, Curtiss Street, Mochel Avenue, Burlington Avenue, and Main Street.

The traffic signals at each intersection will be upgraded to include Accessible Pedestrian Signals, new traffic signal heads and uninterruptible power supplies.

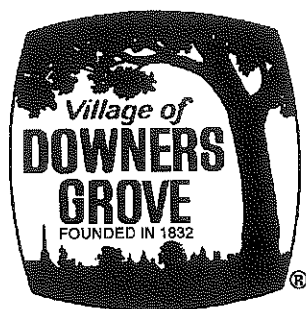
A Call for Bids was issued and published in accordance with the Village's Purchasing Policy. Three bids were received by the due date of February 8, 2023. Below is the synopsis of the bids received.

<b>Contractor</b>	<b>Total Bid</b>	
Alliance Contractors	\$1,433,581.50	Low Bid
MARTAM	\$1,494,419.33	
Landmark Construction	\$1,735,560.78	

Staff recommends award of this contract to Alliance Contractors, Inc., who satisfactorily completed the Village's 2016 and 2021 Right of Way Accessibility Improvements as well as the 2021 and 2022 DBD Crosswalk & Accessibility Upgrades. Staff is requesting a 10% contingency due to the nature of working underground in the DBD at the signalized intersections along Main Street, where various unforeseen utilities and potential obstacles may be encountered.

#### **ATTACHMENTS**

Contract  
Contractor Evaluation



## CALL FOR BIDS – FIXED WORKS PROJECT

- I. Name of Company Bidding: Alliance Contractors, Inc.
- II. Instructions and Specifications:
- |                                  |   |
|----------------------------------|---|
| A. Bid No.:                      | <u>S-007/TR-034</u>   |
| B. DemandStar Bid No:            | <u>CFB-9-1-2023/MS</u>  |
| C. For:                          | <u>2023 DBD Traffic Signal and Accessibility Improvements</u>           |
| D. Bid Opening Date/Time:        | <u>Wednesday, February 8, 2023 10:00 AM</u>                             |
| E. Pre-Bid Conference Date/Time: | <u>Wednesday, February 1, 2023 10:00 AM</u>                             |
| F. Pre-Bid Conference Location:  | <u>Public Works Building, 5101 Walnut Ave., Downers Grove, IL 60515</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, January 25, 2023

This document comprises 132 pages.

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

MATT STERN  
 VILLAGE OF DOWNERS GROVE  
 5101 WALNUT AVE.  
 DOWNERS GROVE, IL 60515  
 PHONE: 630/434-5463  
 FAX: 630/434-5495  
[www.downers.us](http://www.downers.us)

2023 DBD Traffic Signal and Accessibility Improvements

**CALL FOR BIDS – FIXED WORKS PROJECT**

**Bid No.:** S-007/TR-034

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.**

## 2023 DBD Traffic Signal and Accessibility Improvements

**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: MATT STERN, 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 they have 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.

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- 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 their 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

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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

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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 their Bid and according to the plans and specifications in case the contract shall be awarded to their.

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**

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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.

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**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 their 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 their Bid is accepted, and they fail to enter into a contract forthwith, they shall be liable to the Village for any damages the Village may

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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 they propose 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 they may submit their Bid on all such items. Detail specification sheets shall be provided by Bidder for all substituted items.

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**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.

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**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 they are 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

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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

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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.

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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](http://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.

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- 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

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Professional Errors & Omissions (pursuant to section 32.9 below)	\$2,000,000 \$2,000,000	Each Claim 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

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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 their obligation or change the terms of this Contract.

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

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**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: 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.

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**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

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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.

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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**

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](http://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.

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**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 and 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 two (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 their work in such a manner as to provide an

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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

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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 their work such that all improvements shall be complete by **October 16, 2023**. The completion date will remain binding throughout the duration of the Contract unless revised in writing by the Village. Sidewalk and underground traffic signal work cannot begin until **June 26, 2023**.
- 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 five (5) calendar days. The Contractor may use high-early strength concrete, meeting all specifications herein, **at their own expense** to help meet this requirement.
- 4.1.3 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, 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.
- 4.1.4 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:

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- 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.

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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.

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### **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.

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of 2022 DBD Crosswalk and Accessibility Improvements, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

### **LOCATION OF PROJECT**

The project is located on Main Street, at the intersections of Maple Avenue, Curtiss Street, Burlington Avenue, Warren Avenue, and Franklin Street, in the Village of Downers Grove, DuPage County, Illinois. A location map is shown on the cover of the Plans.

### **DESCRIPTION OF WORK**

The work consists of furnishing all labor, materials, equipment, and other incidentals necessary for the completion of curb and gutter and sidewalk removal and replacement; pavement marking, traffic signal improvements; parkway restoration; and other incidental and miscellaneous items of work in accordance with the Plans, Standard Specifications, and these Special Provisions.

### **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.

No more than three hundred linear feet (300 LF) of pavement may be open-cut and closed to use by the motoring public. Access to all individual drives within the current work zone must be restored at the end

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of each workday.

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.

Removal and installation of sidewalk shall be phased to maintain pedestrian access at all times, only 2 corners of intersection to be worked on at a time. Temporary stone will be required at all locations from time of removal to final pour.

### **PROTECTION OF WORK**

The Contractor shall be responsible to provide personnel to protect his work from third party damage. Should any of the new work be damaged, it shall be removed and replaced at the Contractor's expense. The Contractor shall schedule his work so that the concrete placed, takes its initial set during daylight hours. Claims of darkness shall not be reason to relieve the Contractor from responsibility.

### **STORAGE OF MATERIALS AND EQUIPMENT**

Unless stated otherwise by the Engineer, at no time shall the Contractor store materials and equipment in private or public right-of-ways. Parking or storing construction vehicles and equipment overnight is strictly prohibited including, but not limited to, box trucks, dump trucks, pavers, trailers, etc.

### **CLEANING UP**

The Contractor shall, at all times, keep the premises free from an accumulation of waste material or rubbish caused by his employees or work. At the end of the day, he shall remove all his rubbish from and about the streets and sidewalks. All his tools, form boards, and surplus materials shall be removed and relocated to any temporary on site storage location assigned by the Village or its Engineer, and shall leave his work "broom clean" or its equivalent, unless more precisely defined. Upon completion of the work called for by the contract, and upon final inspection and acceptance, the Contractor shall remove any of his remaining rubbish, tools, form boards, and surplus materials completely from the work site.

In case of dispute, the Village may remove the rubbish and any other materials and charge the cost to the Contractor.

### **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 concrete sidewalk and curb and gutter installation complying to Americans with Disabilities Act (ADA), Public Right-of-Way Accessibility Guidelines (PROWAG), the Illinois Accessibility Code (IAC). The Bidder must submit the following information for itself and for each Sub-Contractor:

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1. Similar Project Experience
  - a. Bidder must provide detailed information regarding three (3) past similar projects performed by the submitting firm within the past five (5) years.
  - b. 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.
2. Proposed Project Team – the Bidder must identify the project manager and full-time onsite construction supervisor (can be the same person) on the Certification of Qualifications form. Bidder must also provide qualifications of the project manager and full-time onsite construction supervisor. The individuals proposed must be utilized for the duration of this project unless an alternate is approved in writing by the Village.
3. Bidder must completely fill out and submit the Certification of Qualifications form with the Bid.

### **COORDINATION WITH RAILROAD**

The Contractor shall contact BNSF Railroad and Metra to coordinate construction activities, initiate any required railroad safety measures, and modify traffic control and work phasing to avoid conflict with trains and passengers. Coordination may involve regular meetings with Railroad Representatives, the Village, and the Engineer. If necessary, the Contractor shall execute all necessary permit forms, provide and pay for any fee and bond requirements, and execute and comply with all insurance and performance guarantee requirements. Work required to comply with any railroad permit requirements shall be included as part of the contract.

### **COORDINATION WITH DUPAGE COUNTY DIVISION OF TRANSPORTATION**

For the traffic signal interconnect at Main Street and 55th Street, the Contractor will be required to contact the DuPage County DOT, as listed below, to notify 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/](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

### **TREE ROOT PRUNING**

Description: All trees, public or private, affected by new sidewalk installation within its root protection

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zone, shall be root pruned prior to any excavation taking place. Root pruning shall be performed in accordance with the Tree Protection Zone detail of the Plans, and shall be done only to the depth of the excavation necessary for installing the new sidewalk. Root pruning shall start and proceed uninterrupted for the length of travel through the root protection zone. Root pruning shall be made no more than 10 inches from the tree-side edge of the proposed sidewalk.

Approval by the Village Forester of the equipment to be used for root pruning, as well as the proposed path of the root pruning work, is required prior to the work being performed. The Engineer or his representative shall permit no excavation until written approval is obtained by the Contractor from the Village Forester. No materials or equipment may be stored or kept in the Tree Protection Zone. Tree damage, as determined by the Village Forester, shall be assessed to the Contractor using the most recent edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture.

Basis of Payment: This work shall be paid for at the contract unit price per FOOT for TREE ROOT PRUNING, which price shall be payment in full for the work as specified herein and as measured in place.

### PARKWAY RESTORATION

Description: This item shall be done in accordance with the applicable portions of Sec. 252 of the Standard Specifications and the following provisions.

This work shall consist of the excavation, topsoiling and sodding from a minimum of one and one-half (1-1/2) feet to a maximum of three (3) feet behind or adjacent to all curbs, sidewalks and driveways removed and replaced during the course of construction or as directed by the Engineer. Restoration will also be performed on areas disturbed by storm sewer or culvert construction.

All topsoil to be used for parkway restoration shall be obtained from outside the limits of this improvement, transported to the site and placed at required locations to a minimum depth of 6". All materials shall meet the requirements of Art. 1081.05 of the Standard Specifications. All placement of topsoil shall meet the requirements of Sec. 211 of the Standard Specifications.

All sod shall be an approved grass that is native to the locality of work meeting the requirements of Art. 1081.03 of the Standard Specifications. All placement of sod shall meet the requirements of Sec. 252 of the Standard Specifications.

The Contractor shall properly backfill, compact and grade all disturbed areas adjacent to newly constructed curb and gutter, sidewalks and driveways within 5 calendar days of their completion. Backfill shall be compacted by mechanical and/or hand methods so future consolidation / settlement does not occur. Disturbed areas shall be left in a safe, clean and usable condition conducive to foot traffic and to the satisfaction of the Engineer.

Disturbed turf areas shall be permanently restored with topsoil and sod or, if sod placement falls outside specifications for sod placement, temporarily stabilized with GROWTH-INHIBITING EROSION CONTROL BLANKET within 14 calendar days of final disturbance of the turf area. If timing of

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restoration work falls outside of specifications for sod placement, topsoil and growth-inhibiting erosion control blanket shall be installed within the required restoration timeframe and sod shall be installed when specifications allow. The material specifications shall be submitted to the Village for approval prior to use. The blanket shall consist of a material which inhibits the growth of weeds, such that the area does not require additional tilling of topsoil prior to sod placement. The installation of the blanket shall follow manufacturer's specifications such that no soil or debris shall run off from the disturbed areas. Following the use of any blanket, the Contractor shall remove the product from the site.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for SOD RESTORATION and GROWTH-INHIBITING EROSION CONTROL BLANKET which price shall be payment in full for any excavation and grading necessary, the furnishing, transporting and placement of all topsoil and sod, and the full watering of sod. Unless otherwise directed by the Engineer, restoration of disturbed parkways more than three (3) feet behind the back of curb or more than three (3) feet adjacent to newly constructed driveway or sidewalk or more than six (6) feet either side of the newly placed storm sewer or pipe culvert, will not be paid for separately but shall be considered incidental to the contract. The installation of temporary growth-inhibiting erosion control blanket shall be paid for at the contract unit price per Square Yard for GROWTH-INHIBITING EROSION CONTROL BLANKET.

### SOIL AND MULCH LANDSCAPING BED

Description: This work includes installation of soil with a layer of mulch on top, in locations called out on the plans, or as directed by the Engineer. In locations identified for this work, the Contractor will excavate to a depth of two (2) feet from proposed grade of the surrounding sidewalk and/or curb and gutter, and will place 20" of topsoil material, followed by 4" of mulch, or as directed by the Engineer.

The topsoil to be used can be obtained from either within the project limits, or can originate from outside the project limits and transported to site. The mulch to be used shall be shredded tree wood material, and shall be dark brown in appearance. The topsoil shall be placed in a neat and professional manner to 2" below finished surface. The finished surface of the topsoil shall be level with all depressions filled and shall be placed to a density in accordance with standard practice for proper landscaping technique. The final product of the topsoil and mulch restoration shall have a neat and professional appearance. The slope of the work shall not exceed 10 percent in any direction. If, for any reason, the grading does not meet approval, it shall be cause for rejection of work and the Contractor will be required to correct the appearance prior to its acceptance for final payment.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE YARD for SOIL AND MULCH LANDSCAPING BED, which price shall be payment in full for the work as specified herein, including excavation of all material to the depth specified, and placing topsoil and mulch materials.

### EROSION AND SEDIMENTATION CONTROL

Description: Throughout each and every phase of the project, all downstream ditches and storm sewers shall be protected from the run-off of roadway surfaces, excavations, and other construction activities generating the movement of dirt, mud, dust and debris. This work shall consist of constructing temporary

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erosion and sedimentation control systems as shown on the plans or as directed by the Engineer. The work shall be placed by methods and with materials in accordance with Sections 280, 1080 and 1081 of the SSRBC, except as amended herein.

All downstream ditches shall be protected from erosion and sedimentation by the installation of an Engineer-approved compost filter sock. Piles of excavated material and/or trench backfill material, allowed to be in place in excess of three days, shall be protected against erosion and sedimentation runoff by use of a compost filter sock. Storm sewer inlet structures or manholes shall be protected by temporary placement of filter baskets or compost filter socks as authorized in the field by the Engineer. Dewatering and bypass pumping and all sediment control measures required, in addition to measures shown on plans, shall be incidental to the installation of storm sewer pipes and structures.

Erosion and sedimentation control measures as indicated in the Erosion Control Plan, or as directed by the Engineer shall be installed on the project site prior to beginning any construction activities which will potentially create conditions subject to erosion. Erosion control devices shall be in place and approved by the Engineer as to proper placement and installation prior to beginning other work. Erosion control protection for Contractor equipment storage sites, plant sites, and other sites shall be installed by the Contractor and approved by the Engineer prior to beginning construction activities at each site. Failure to properly install and maintain erosion control measures per the Erosion Control Plan, or as directed by the Engineer, shall result in a \$1000/day fine, which shall be deducted from the value of work completed, until deficiencies are rectified as approved by the Engineer.

Perimeter Erosion Barrier and Inlet Filters: Items include placement, maintenance, and removal of compost filter socks and filter baskets at areas designated by the Engineer.

Basis of Payment: This work will be paid for at the contract FOOT and EACH price, respectively, for PERIMETER EROSION BARRIER and INLET FILTERS, which price shall be payment in full for the work as specified herein

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**HOT-MIX ASPHALT BINDER AND SURFACE COURSE (D1)**

Effective: November 1, 2019

Revised: December 1, 2021

Revise Article 1004.03(c) to read:

“(c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.
Class A-1, A-2, & A-3	3/8 in. (10 mm) Seal	CA 16 or CA 20
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & A-3	Cover Coat	CA 14
HMA High ESAL	IL-19.0; Stabilized Subbase IL-19.0	CA 11 <sup>1/</sup>
	SMA 12.5 <sup>2/</sup>	CA 13 <sup>4/</sup> , CA 14, or CA 16
	SMA 9.5 <sup>2/</sup>	CA 13 <sup>3/4/</sup> or CA 16 <sup>3/</sup>
	IL-9.5	CA 16, CM 13 <sup>4/</sup>
	IL-9.5FG	CA 16
HMA Low ESAL	IL-19.0L	CA 11 <sup>1/</sup>
	IL-9.5L	CA 16

1/ CA 16 or CA 13 may be blended with the CA 11.

2/ The coarse aggregates used shall be capable of being combined with the fine aggregates and mineral filler to meet the approved mix design and the mix requirements noted herein.

3/ The specified coarse aggregate gradations may be blended.

4/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.”

Revise Article 1004.03(e) of the Supplemental Specifications to read:

“(e) Absorption. For SMA the coarse aggregate shall also have water absorption  $\leq 2.0$  percent.”

Revise the “High ESAL” portion of the table in Article 1030.01 to read:

“High ESAL	Binder Courses	IL-19.0, IL-9.5, IL-9.5FG, IL-4.75, SMA 12.5, Stabilized Subbase IL-19.0
	Surface Courses	IL-9.5, IL-9.5FG, SMA 12.5, SMA 9.5”

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Revise Note 2. and add Note 6 to Article 1030.02 of the Standard Specifications to read:

“Item	Article/Section
(g) Performance Graded Asphalt Binder (Note 6)	1032
(h) Fibers (Note 2)	

Note 2. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 6. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be a SBS PG 76-22 for IL-4.75, except where modified herein..”

Revise table in Article 1030.05(a) of the Standard Specifications to read:

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"MIXTURE COMPOSITION (% PASSING)" <sup>1/</sup>												
Sieve Size	IL-19.0 mm		SMA 12.5		SMA 9.5		IL-9.5mm		IL-9.5FG		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)												
1 in. (25 mm)		100										
3/4 in. (19 mm)	90	100		100								
1/2 in. (12.5 mm)	75	89	80	100		100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	60	75 <sup>6/</sup>	90	100
#8 (2.36 mm)	20	42	16	24 <sup>4/</sup>	16	32 <sup>4/</sup>	34 <sup>5/</sup>	52 <sup>2/</sup>	45	60 <sup>6/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	25	40	50	65
#30 (600 μm)			12	16	12	18			15	30		
#50 (300 μm)	6	15					4	15	8	15	15	30
#100 (150 μm)	4	9					3	10	6	10	10	18
#200 (75 μm)	3.0	6.0	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4.0	6.0	4.0	6.5	7.0	9.0 <sup>3/</sup>
#635 (20 μm)			≤ 3.0		≤ 3.0							
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0		1.0

1/ Based on percent of total aggregate weight.

2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.

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- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.
- 6/ When the mixture is used as a binder, the maximum shall be increased by 0.5 percent passing.”

Revise Article 1030.05(b) of the Standard Specifications to read:

(b) Volumetric Requirements. The target value for the air voids of the HMA shall be 4.0 percent, for IL-4.75 and SMA mixtures it shall be 3.5 percent and for Stabilized Subbase it shall be 3.0 percent at the design number of gyrations. The voids in the mineral aggregate (VMA) and voids filled with asphalt binder (VFA) of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the following requirements.

Mix Design	Voids in the Mineral Aggregate (VMA), % Minimum for Ndesign				
	30	50	70	80	90
IL-19.0		13.5	13.5		13.5
IL-9.5		15.0	15.0		
IL-9.5FG		15.0	15.0		
IL-4.75 <sup>1/</sup>		18.5			
SMA-12.5 <sup>1/2/5/</sup>				17.0 <sup>3/</sup> /16.0 <sup>4/</sup>	
SMA-9.5 <sup>1/2/5/</sup>				17.0 <sup>3/</sup> /16.0 <sup>4/</sup>	
IL-19.0L	13.5				
IL-9.5L	15.0				

- 1/ Maximum draindown shall be 0.3 percent according to Illinois Modified AASHTO T 305.
- 2/ The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30°F.
- 3/ Applies when specific gravity of coarse aggregate is  $\geq 2.760$ .
- 4/ Applies when specific gravity of coarse aggregate is  $< 2.760$ .
- 5/ For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone”

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

“IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steel slag sand, shall have minimum surge bin

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storage plus haul time of 1.5 hours.”

Add after third sentence of Article 1030.09(b) to read:

“If the Contractor and Engineer agree the nuclear density test method is not appropriate for the mixture, cores shall be taken at random locations determined according to the QC/QA document "Determination of Random Density Test Site Locations". Core densities shall be determined using the Illinois Modified AASHTO T 166 or T 275 procedure.”

Revise Table 1 and Note 4/ of Table 1 in Article 406.07(a) of the Standard Specifications to read:

	Breakdown/Intermediate Roller (one of the following)	Final Roller (one or more of the following)	Density Requirement
IL-9.5, IL-9.5FG, IL-19.0 <sup>1/</sup>	V <sub>D</sub> , P, T <sub>B</sub> , 3W, O <sub>T</sub> , O <sub>B</sub>	V <sub>S</sub> , T <sub>B</sub> , T <sub>F</sub> , O <sub>T</sub>	As specified in Section 1030
IL-4.75 and SMA <sup>3/ 4/</sup>	T <sub>B</sub> , 3W, O <sub>T</sub>	T <sub>F</sub> , 3W	As specified in Section 1030
Mixtures on Bridge Decks <sup>2/</sup>	T <sub>B</sub>	T <sub>F</sub>	As specified in Articles 582.05 and 582.06.

“4/ The Contractor shall provide a minimum of two steel-wheeled tandem rollers (T<sub>B</sub>), and/or three-wheel (3W) rollers for breakdown, except one of the (T<sub>B</sub>) or (3W) rollers shall be 84 inches (2.14 m) wide and a weight of 315 pound per linear inch (PLI) (5.63 kg/mm) and one of the (T<sub>B</sub>) or (3W) rollers can be substituted for an oscillatory roller (O<sub>T</sub>). T<sub>F</sub> rollers shall be a minimum of 280 lb/in. (50 N/mm). The 3W and T<sub>B</sub> rollers shall be operated at a uniform speed not to exceed 3 mph (5 km/h), with the drive roll for T<sub>B</sub> rollers nearest the paver and maintain an effective rolling distance of not more than 150 ft (45 m) behind the paver.”

Add the following after the fourth paragraph of Article 406.13 (b):

“The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design’s G<sub>mb</sub>.”

Revise first paragraph of Article 1030.10 of the Standard Specifications to read:

“A test strip of 300 ton (275 metric tons), except for SMA mixtures it will be 400 ton (363 metric ton), will be required for each mixture on each contract at the beginning of HMA production for each construction year according to the Manual of Test Procedures for Materials “Hot Mix Asphalt Test Strip Procedures”. At the request of the Producer, the Engineer may waive the test strip if previous construction during the current construction year has demonstrated the constructability of the mix using Department test results.”

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Revise third paragraph of Article 1030.10 of the Standard Specifications to read:

“When a test strip is constructed, the Contractor shall collect and split the mixture according to the document “Hot-Mix Asphalt Test Strip Procedures”. The Engineer, or a representative, shall deliver split sample to the District Laboratory for verification testing. The Contractor shall complete mixture tests stated in Article 1030.09(a). Mixture sampled shall include enough material for the Department to conduct mixture tests detailed in Article 1030.09(a) and in the document “Hot-Mix Asphalt Mixture Design Verification Procedure” Section 3.3. The mixture test results shall meet the requirements of Articles 1030.05(b) and 1030.05(d), except Hamburg wheel tests will only be conducted on High ESAL mixtures during production.”

### **PORTLAND CEMENT CONCRETE SIDEWALK**

Description: This work shall consist of installation of P.C.C. sidewalk as indicated by location or shown on the plans. All P.C.C. sidewalks shall be installed by methods and with materials in accordance with Articles 424 and 1020.04 of the SSRBC, except as amended herein.

Removal of existing sidewalk shall include saw cutting and disposal of existing concrete as directed by the Engineer, as well as bituminous paved sidewalks and/or bituminous overlayment of existing sidewalks and shall be paid for separately in accordance with the specification for SIDEWALK REMOVAL (SPECIAL).

Excavation for sidewalk shall be performed as to limit impacts to the parkway as much as possible.

The unit price for placement of sidewalk shall include the following:

- a. Excavation to proposed sub-grade and removal of existing material. Removal of existing concrete and brick/paver sidewalks shall be paid for separately.
- b. Furnishing, placement and compaction of four inches (4") of AGGREGATE BASE COURSE, TYPE B with the methods and with materials in accordance with Section 351 and of Article 1004.04 of the SSRBC, use of recycled materials shall not be allowed unless with a prior written permission by the Engineer;
- c. All work must comply with the latest requirements of the Americans with Disabilities Act (ADA), Public Right-of-Way Accessibility Guidelines (PROWAG), the Illinois Accessibility Code (IAC) and Manual on Uniform Traffic Control Devices (MUTCD). Specifically, the set up of form work such that the maximum running slope of the finished walk does not exceed 5 percent (1:20) or not to exceed the general grade established for the roadway, and the cross slope is not more than 2 percent (1:50). Sidewalks with running slope exceeding 5% shall meet all the ramp requirements. Except in areas noted on plans and approved by the Engineer.
- d. The placement of five inch (5") thick, Class SI Portland Cement Concrete, 5.65 cwt/cy mix, with 5-8% air entrainment, 2"-4" slump, and six inch (6") thickness through or in residential driveways or where subject to vehicular traffic, to the width specified on the plans or as directed by the

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Engineer;

- e. The tooling of contraction joints, 1/2-inch radius and 1 inch deep, 5 feet on center;
- f. The placement of 1/2 inch thick premoulded expansion joints at 50 foot intervals on center, or abutting existing concrete sidewalk, or at the end of a pour;
- g. For sidewalks passing over newly constructed utility trenches, three equally spaced epoxy coated No. 4 reinforcing bars shall be centered over all utility trenches. Bars shall extend continuously a minimum of 5 feet (1.5 m) beyond the walls of the utility trench. Reinforcement shall be incidental to the cost of the pay item.
- h. The proper curing of all concrete work utilizing methods and materials outlined in Articles 424 and 1022.01 of the SSRBC, (Type III membrane curing compound white pigmented), WORK THAT IS NOT PROPERLY CURED WILL NOT BE ACCEPTED OR PAID FOR;
- i. All other work labor, material, tools and equipment required to perform the work specified herein and as shown on the plans.

Except for damaged parkway areas due to rutting or not designated by the Engineer, restoration will be paid for in accordance with the specification SOD RESTORATION.

When sidewalks are closed to pedestrians the Contractor shall refer to the Sidewalk Phasing and Maintenance of Traffic plan and Highway Standard 701801.

A concrete washout shall be furnished by the Contractor, and shall be located on site in a location that does not interfere with traffic or access to businesses. Furnishing and disposing of the concrete washout(s) shall be included in the unit price for sidewalk.

Portland Cement Concrete Sidewalk Colored, California Finish

As above in addition to the following:

- a) Concrete colorant to be added to cement mix. Concrete colorant shall be "Harvest Wheat" (Product #U16) supplied by Butterfield Color (1-800-282-3388). Contractor shall provide a sample of their proposed cured colored concrete, which shall be approved by the Engineer prior to ordering or placing any material.
- b) California Finish. Sidewalk shall have a 4" Troweled smooth border with light broom finish perpendicular to direction of path.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, COLORED, CALIFORNIA FINISH which price shall be payment in full for the work as specified herein.

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### Portland Cement Concrete Sidewalk, Colored With Scored Pattern

As above (excluding California Finish) in addition to the following:

- a) Contractor shall saw cut sidewalk within 24 hours of placement, or as directed by the Engineer, to the pattern as shown on the plans or as directed by the Engineer. Contractor shall provide a sample of the proposed saw cut pattern along with the Contractor's method for saw cutting the pattern, which shall be approved by the Engineer prior to placement of any PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, COLORED WITH SCORED PATTERN.

**Basis of Payment:** This work shall be paid for at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, COLORED WITH SCORED PATTERN, which price shall be payment in full for the work as specified herein.

### **DETECTABLE WARNINGS**

**Description:** This work shall consist of the installation of new detectable warning material as shown in the plans. All detectable warnings shall be placed by methods and with materials in accordance with Article 424 and 424.09 of the SSRBC.

Detectable Warnings shall be brick red, cast-in-place composite panels with inline dome pattern. Panels shall be installed full width of the walk in accordance with the latest PROWAG guidelines and at the direction of the Engineer. Detectable Warnings installed radially directly along the back of curb, as shown on the plans, shall be manufactured to match the radius called out on the plans. The Contractor must install the proposed curb and gutter at the radius specified on the plans. Curb and gutter installed improperly resulting in a gap of ¼" inch or more must be removed and re-installed per the plans and these specifications at the Contractor's expense.

Detectable Warnings shall be (or approved equal):

- 1) TuffTile Inc. TuffTile Polymer Wet-Set Replaceable Tile and TuffTile Radii for radial applications, "Brick Red" color
- 2) TuffTile Inc. TuffTile Cast Iron Wet-Set Replaceable Tile and TuffTile Radii for radial applications, "Brick Red" color
- 3) ADA Solutions, Inc. Cast-In-Place Replaceable Tactile Panel and Radius Tactile for radial applications, "Brick Red" color
- 4) ADA Solutions, Inc. Cast-In-Place Cast Iron Replaceable Tactile Panel and Radius Tactile for radial applications, "Brick Red" color

The Contractor must provide the Village shop drawings and physical samples of the proposed material. Material must be approved by the Village prior to ordering any material.

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Basis for Payment: This work shall be paid for at the contract unit price per square foot for DETECTABLE WARNINGS, which price shall include all material, labor, and equipment necessary to complete this item.

### SIDEWALK REMOVAL (SPECIAL)

This work shall be done in accordance with Section 440 of the Standard Specifications except as modified herein.

Description. Revise this Article to read:

**“440.01 Description.** This work shall consist of removal and disposal of the entire existing sidewalk structure, including reinforcement regardless of the thickness of the existing sidewalk.

Basis of Payment. Revise this Article to read:

**“440.08 Basis of Payment.** This work will be paid for at the contract unit price per square foot for SIDEWALK REMOVAL (SPECIAL).”

### BRICK SIDEWALK REMOVAL

Description: This work includes the removal of bricks/pavers and any and all base material and transportation of bricks/pavers within the project limits. Bricks, pavers, and detectable warning pieces to be removed as indicated on the plans or as directed by the Engineer shall be carefully removed to minimize breaking, piled and secured in a neat and orderly fashion on pallets, skids, or equivalent, and transported to the Public Works building at 5101 Walnut Ave. Any metal edging found next to the bricks shall be removed and disposed of.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE FOOT for BRICK SIDEWALK REMOVAL, which price shall be payment in full for the work as specified herein.

### TEMPORARY BITUMINOUS PATCH

Description: This item shall be used at locations where water main, sanitary, or storm sewer installation is not complete, but the trench must be patched due to weather, high vehicular traffic concentrations, or the direction of the Engineer. In these locations, three (3) inches of ‘Bituminous Cold Patch’, placed and compacted in one lift, shall be placed on the compacted CA-6 sub-base. This pavement shall be placed against a prepared saw-cut pavement. The surface of the finished patch shall be even with the existing finished pavement. Areas of pavement to be opened after November 15<sup>th</sup> shall be done so only with the approval of the Engineer. The maximum width paid for this item, shall be the maximum pavement

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replacement width permitted by the Standard Specifications for Water and Sewer Construction in Illinois, or as otherwise directed by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per TON for TEMPORARY BITUMINOUS PATCH, which price shall include all labor, material, and equipment necessary for furnishing, placing, maintaining, removing and disposing of the bituminous patching material surface used in the construction of temporary road and drive approach surfaces. This item shall also include the maintenance of the temporary pavement.

### ACCELERATED PORTLAND CEMENT CONCRETE PAVEMENT PATCHING

Description: This work consists of furnishing durable, high-early strength Portland cement concrete for pavement patching and shall be in accordance with all applicable portions of Section 442 of the Standard Specifications for Road and Bridge Construction, except as modified herein and on the plans.

The patch shall be completed as shown on the plans, or as directed by the Engineer.

Materials: Portland cement, mixing water, fine and coarse aggregates, supplementary cementitious materials, and concrete admixtures shall conform to the requirements of Section 1000 of Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Current Edition.

Quality Management Plan: At least 14 days prior to the first concrete placement, the Contractor shall submit a Quality Management Plan (QMP), for materials and construction, which shall include:

1. Mix submittal
2. Guidelines for constituent material handling at the concrete production facility
3. Guidelines for production and delivery, including delivery ticket information
4. Guidelines for hot and cold weather concreting
5. Responsibility for jobsite acceptance & rejection of fresh concrete
6. Placement, consolidation, finishing, curing practices
7. Protocol for constituent material sample retention
8. Protocol for concrete sampling & testing
9. Protocol for handling non-conformant test results

This work shall include the removal of all materials in the locations shown on the plans or as directed by the Engineer. Any bricks shall be salvaged and transported to Public Works, as described in Special Provision BRICK SIDEWALK REMOVAL.

Each patch is to have a full depth saw cut and then be removed. Saw cutting of the patches and removal of the existing pavement regardless of the thickness, including sub-base is to be included in the cost of this item.

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Also included in this item is temporary 6" pavement markings at each location. The markings will consist of two 6" lines on both sides of the crosswalk until the proposed decorative markings can be installed.

Opening patches to traffic. No traffic will be permitted on a patch until the minimum curing time of 16 hours, and after the concrete has obtained a minimum compressive strength of 2,500 psi.

Method of Measurement. This work will be measured in place in square yards.

Basis of Payment. The work shall be paid for at the contract unit price per square yard for ACCELERATED PORTLAND CEMENT CONCRETE PAVEMENT PATCHING, CLASS B, 10 INCHES, which price shall include all tie bars, reinforcement, labor, materials, and equipment necessary to construct the pavement patch and any other items required to complete the work as specified on the plans and described herein. No additional payment will be made for the salvage of the bricks in the areas to be patched, and the salvage and transportation of the bricks shall be considered incidental to the patch work and pay item.

### CLASS D PATCHES, SPECIAL

Description: This work shall be in accordance with all applicable portions of Section 442 of the Standard Specifications for Road and Bridge Construction, except as modified herein and on the plans.

The patch shall be completed as shown on the plans, or as directed by the Engineer.

This work shall include the removal of all materials in the locations shown on the plans or as directed by the Engineer. Any bricks shall be salvaged and transported to Public Works, as described in Special Provision BRICK SIDEWALK REMOVAL.

Each patch is to have a full depth saw cut and then be removed. Saw cutting of the patches and removal of the existing pavement, including sub-base is to be included in the cost of this item.

Within local street pavements, the replacement patch material shall be 8" in depth and shall consist of the following:

2" HMA Surface Course Mix "D", N50

6" HMA Binder Course IL-19.0, N50

Bituminous Materials (Prime Coat) and Aggregate (Prime Coat) shall be provided in accordance with the Standard Specifications for Road and Bridge Construction. Prime coat materials shall be considered included in the cost of the contract unit price for CLASS D PATCHES, SPECIAL.

The CONTRACTOR shall provide density testing of patching in accordance with the hot-mix asphalt testing requirements of the Illinois Department of Transportation. This work shall be considered included in the cost of the contract unit price for CLASS D PATCHES, SPECIAL.

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Also included in this item is temporary 6" pavement markings at each location. The markings will consist of two 6" lines on both sides of the crosswalk until the proposed decorative markings can be installed.

Method of Measurement. This work will be measured in place in square yards.

Basis of Payment. The work shall be paid for at the contract unit price per SQUARE YARD for CLASS D PATCHES, SPECIAL, which price shall include all labor, materials, and equipment necessary to construct the pavement patch and any other items required to complete the work as specified on the plans and described herein. No additional payment will be made for the salvage of the bricks in the areas to be patched, and the salvage and transportation of the bricks shall be considered incidental to the patch work and pay item.

### **DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED**

Description: Where encountered, due to the alignment of the sidewalk, all water service access facilities (buffalo boxes, etc.) shall be adjusted to grade. If needed, the Contractor shall be responsible for installing sleeve extensions, which match the existing diameter and threading. The Engineer or representative thereof shall approve prior to work.

Contractor shall field verify the locations of buffalo boxes in need of adjustment. All buffalo boxes located within the limits of the new sidewalk or affected by changes in parkway grade shall be adjusted prior to proceeding with the sidewalk installation.

Basis of Payment: This item shall be paid for at the contract unit price per EACH for DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED, which price shall be payment in full for the work as specified herein.

### **UTILITY STRUCTURES TO BE ADJUSTED**

Although the cost of adjusting and/or reconstructing structures per this specification will be paid for under this contract, the contractor shall be aware that many of the structures are not the property of the Village of Downers Grove, and that such work may require inspections and/or permits from other governmental agencies.

#### A. DRAINAGE AND UTILITY STRUCTURES

This work shall consist of the removal and disposal of the existing frame and lid/grate; installation of the applicable new frame and lid/grate; all labor, equipment and material required to adjust or reconstruct manholes, catch basins and inlets, and valve vaults in accordance with Section 602 of the SSRBC. This item will include all excavation, concrete and trench backfill.

#### B. SANITARY MANHOLES

This method shall be used for all manholes which will have less than seven and one-half (7 ½") inches of

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adjustment between the top of the cone and the bottom of the frame when set at finished grade. To raise the frame, adjustment shall be made using precast reinforced concrete rings. Concrete blocks or bricks shall not be used. The spaces between the cone, rings, and frame shall be completed sealed with preformed bituminous mastic (Easy Stik or approved equal). Mortar shall not be used. To lower the frame, existing adjustments shall be removed and the space between the frame and the cone shall be removed and the space between the frame and the cone shall be completely sealed with preformed bituminous mastic gasket. If the manhole would have seven and one-half (7 ½") inches or more of adjustments when set at the finished grade or if the frame must be lowered by more than the amount of existing adjustment, the manhole shall be reconstructed. Refer to Downers Grove Sanitary District specifications for manhole reconstruction. The Downers Grove Sanitary District shall be notified of manholes to be adjusted prior to beginning construction. Once completed, no such adjustment shall be backfilled without inspection by the Downers Grove Sanitary District.

This work shall be paid for at the contract unit price per EACH for FRAMES AND LIDS TO BE ADJUSTED and FRAMES AND LIDS TO BE ADJUSTED, SANITARY which price shall be payment in full for the work as specified herein.

### **CONCRETE CURB TYPE B, 6", COLORED**

Description: This work shall consist of the furnishing of materials and installation of a CONCRETE CURB TYPE B, 6", COLORED. All Concrete Curb shall be placed by methods and materials as specified in Articles 606 and 1020 of the SSRBC, except as amended herein.

The curb shall be placed on a bed of six inches compacted CA-6 Aggregate. Concrete curb shall be placed monolithically with the sidewalk where possible. Curb shall be tapered over 2' where ends meet curb and gutter or flush surfaces.

Backfill shall consist of CA-6 aggregate and shall be incidental to Concrete Curb installation. Backfill shall be tamped in place with a mechanical tamper.

The topsoil and sod restoration shall be in accordance with provision for PARKWAY RESTORATION and shall be considered incidental within costs associated for the retaining wall installation.

Coloring: Concrete colorant to be added to cement mix. Concrete colorant shall be "Harvest Wheat" (Product #U16) supplied by Butterfield Color (1-800-282-3388). Contractor shall provide a sample of their proposed cured colored concrete, which shall be approved by the Engineer prior to ordering or placing any material.

Basis of Payment: This Work shall be paid for at the contract unit price per FOOT for CONCRETE CURB, TYPE B, 6", COLORED which price shall be payment in full for the work as specified herein.

### **COMBINATION CONCRETE CURB AND GUTTER**

Description: This work shall consist of the replacement of existing PCC Curb and Gutter in accordance with the applicable parts of Sec. 440 and 606 of the Standard Specifications, except as amended herein.

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A 4-inch thick CA-6 granular subbase shall be placed on compacted subgrade and compacted under the proposed curb and gutter.

Replacement of curb and gutter shall include the placement of three quarter inch (3/4") premolded expansion joint filler along the back of curb, for the full depth of the curb and gutter, where abutting existing concrete.

Transverse expansion joints with 3/4" joint filler shall be constructed at five feet (5') either side of utility structures, and at no more than ninety foot (90') intervals. All expansion joints shall include the placement of two (2) three-quarter inch (3/4") dowel bars with pinched stop caps as specified on detail sheet. Two (2) three quarter inch (3/4") dowel bars shall also be placed at all construction joints as specified on detail sheet and shall be drilled into existing curb and gutter a minimum of six inches (6").

New curb and gutter shall be backfilled with existing excavated earth.

Transverse contraction joints shall be constructed at no more than fifteen foot (15') intervals.

When new curb and gutter is placed adjacent to concrete pavement or base, it shall be tied along the longitudinal construction joint with No. 6 (3/4") bars at 24" centers in accordance with the applicable portions of Article 420.05 of the Standard Specifications.

If, during removal of curb and gutter, it's found that any existing curb and gutter contains rebar, then placement of curb and gutter shall also include the placement of two (2) No. 4 (1/2") epoxy coated deformed reinforcement bars meeting the applicable portions of Section 508 of the Standard Specifications, or as directed by the Engineer. Bars shall be placed at one-half depth of the body of the gutter running the entire length of newly placed sections, or as directed by the Engineer.

Curb and gutter placed as described in this section will be paid for as COMBINATION CONCRETE CURB AND GUTTER of the type specified.

At the direction of the Engineer, voids existing between newly placed curb and gutter and the adjacent asphalt roadway pavement, depending on size, may be filled with Class SI concrete to a point 1 1/2 inches below finish grade and shall be included in the cost of COMBINATION CONCRETE CURB AND GUTTER. The remaining 1 1/2 inches of hot-mix asphalt surface course shall be paid for as INCIDENTAL HOT-MIX ASPHALT SURFACING.

Placement of curb and gutter shall include the application of membrane curing compound, Type III, in accordance with Articles 1020.13 and 1022.01 of the Standard Specifications unless otherwise directed by the Engineer.

If placement of curb and gutter takes place prior to April 15, or after October 15, the curb and gutter shall be properly cured and that followed by the application of protective coat in accordance with Article 420.18 of the Standard Specifications. There will be no additional cost paid for the protective coat as described in this paragraph.

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Basis of Payment: This work will be paid for at the contract unit price per FOOT for COMBINATION CONCRETE CURB AND GUTTER of the type specified which price shall be payment in full for the work as specified herein.

### IEPA CLEAN CONSTRUCTION OR DEMOLITION DEBRIS

Construction Requirements: The Contractor shall be responsible for satisfactory removal and disposal of all waste material, asphalt, concrete, stone, dirt, and debris generated or discovered in the course of the work. Removal and disposal of excavation items being disposed of at a clean construction and demolition debris (CCDD) facility shall meet the requirements of Public Act 96-1416. This work shall be incidental and shall not be paid for separately, with the exception of the HAULING SURCHARGE, NON-HAZARDOUS SPECIAL WASTE as specified below.

The temporary storing of excavated materials within the public right-of-way or project limits shall not be allowed unless approved by the Engineer. It shall be the Contractor's responsibility to find an approved dumpsite for debris and any excavated materials. The Village will not provide one.

The Contractor shall employ a licensed testing firm, as approved by Engineer, to screen each truck-load of material on-site, using a PID or FID field screen or other acceptable method. The PID shall be calibrated on a daily basis. The Contractor shall enter all truck-loads leaving the site into an on-site screening log including, but not limited to, project name, date, time, weather conditions, name of screener, hauling company, truck number, screening method, background PID reading, calibrated PID reading, truck/bucket PID reading, and description of materials screened. Each day prior to the first truck leaving the site, Engineer and Contractor's testing consultant shall agree on the allowable PID reading in accordance with the receiving CCDD facility procedures (typically 0.0 or daily background levels). The receiving CCDD facility may be consulted daily, or periodically, as needed to verify that the appropriate value is being used. If said screen indicates levels that will be unacceptable for disposal at the CCDD facility, the material shall be quarantined on-site for further evaluation. If material is rejected at the CCDD facility, it shall be returned to the project site and quarantined for further evaluation.

No additional compensation shall be allowed for returning a rejected load back to the project site, or any other additional hauling, loading, unloading, etc., as may be required. Should it be determined by the Village or Village's agent that the material is not suitable for disposal in a CCDD facility, the Contractor shall be responsible for properly disposing of the material at an acceptable landfill, and providing the Village with all of the proper paperwork to document the material disposal with the IEPA. This work shall be paid for as specified below. If a truck-load is rejected by a CCDD facility after leaving the project site, and said truck-load is not identified in the on-site screening log, the Contractor shall still be required to properly dispose of the material and provide the Village with the necessary documentation, but shall not be additionally compensated as specified below.

All additional work to satisfy these requirements shall be the responsibility of the Contractor. All costs associated with meeting these requirements shall be paid for as specified herein. These costs shall include but are not limited to all required testing, lab analysis, and certification by a licensed professional engineer (PE) or licensed professional geologist (PG), if required, in addition to the cost of additional

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hauling, dump fees, etc. Payment for this work shall be in addition to payment for EARTH EXCAVATION per the contract unit price. No adjustment to the contract unit price will be allowed due to changes to quantities based on actual field conditions.

Basis of Payment: This work shall be paid for at the contract unit price per LOAD for HAULING SURCHARGE, NON-HAZARDOUS SPECIAL WASTE, which price shall be payment in full for the work as specified herein.

### TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC

This item shall include the furnishing, installing, maintaining, relocating and removing of all traffic control devices and personnel used for the purpose of regulating, warning, or directing traffic during the construction of this project. Placement and maintenance of all traffic control devices shall be in accordance with the applicable parts of Article 107.14 and Section 701 of the Standard Specifications and included Highway Standards. All traffic control devices used on this project shall conform to the Standard Specifications for Traffic Control Devices and the Illinois Manual on Uniform Traffic Control Devices and as indicated on the Traffic Control Plan.

The Contractor shall protect all workers engaged in the project, and shall provide for safe and convenient public travel by providing adequate traffic control under all circumstances. Such circumstances may include, but not be limited to work performed along the route under construction, road closures for construction operations of any type, or when any section of the road is opened to traffic prior to completion of all work. The Contractor shall ensure that work zone in question is properly signed, barricaded and otherwise marked.

HIGHWAY STANDARDS: 701501, 701701, 701801, 701901

The Contractor will be responsible for the proper location, installation, and arrangement of all traffic control devices during the period of construction. All open excavations shall be protected by Type I barricades equipped with working bi-directional flashing lights at each end of the excavation, as well as at 50-foot intervals between ends for excavations greater than 50 feet in length and weighted down by one sandbag per each barricade. All street closures shall be protected by Type III barricades equipped with working bi-directional flashing lights and weighted down by eight sandbags per each barricade.

The Contractor shall plan the work not to leave any open excavations during non-working hours and that all barricades not necessary have been removed from the pavement during non-working hours.

One through lane with a minimum driving width of 10 feet must be maintained at all times when concrete crossings or any other concrete on the driving surface is curing. Adequate traffic control signage shall be placed to direct traffic through the intersection. In the event that one direction of vehicular travel must be closed, with the approval of the Engineer, and when the Contractor is working, the Contractor shall use certified flaggers (minimum of two) to direct traffic around the work area. The Engineer shall approve proper signing and barricading of the lane closures, and shall issue written authorization prior to closure. Presence of certified flaggers shall be required anytime the contractor's activities may impede the designated flow of traffic.

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No street closure shall be permitted without the express written permission of the Engineer. No street closure may exceed 800 linear feet, nor be in effect from Friday at 3:30PM to Monday at 9:00AM.

The Contractor shall maintain their operations in a manner such that traffic flow shall not be substantially impeded during the construction of the proposed improvements. Where traffic must cross open trenches during a given work day, the Contractor shall provide steel plates at street intersections and driveways. Prior to the end of a given work day, the pavement surface shall be temporarily restored.

No open excavation may be left overnight or on the weekend without the express written permission of the Engineer.

As the condition and location of the work changes, the Contractor shall maintain all traffic control devices and personnel engaged in traffic control, in a manner that will accommodate the changing particulars of the work at any given time. Advance warnings, directional information and other controls or directions necessary for safe passage of traffic around or through the work site shall be reviewed and changed, if necessary, to meet the needs of the situation. Signage erected, but not necessary or proper for the situation ahead shall be covered or taken down. Barricading and signage shall be monitored by the Contractor on a daily basis to ensure that it meets the requirements for work zone safety for the conditions of the particular work being performed.

Unless approved in writing by the Village and as directed by the engineer, no more than two corners at each intersection may be closed to the pedestrian traffic at any time. Contractor shall provide SIDEWALK CLOSED AHEAD signs at the nearest intersection to each end of the closure. Additional SIDEWALK CLOSED AHEAD signs may be requested at various locations, such as mid-block or wherever necessary by ENGINEER. Where closure occurs at the corners, SIDEWALK CLOSED USE OTHER SIDE shall be placed for every point of egress leading up to the work area. Temporary stone will be required at all locations from time of removal to final pour. A sign with "CAUTION UNEVEN GRAVEL SURFACE" shall be placed on Type 1 barricade in advance of temporary stone.

Access to all properties shall remain open at all times unless work is taking place in the immediate vicinity, requiring that access be restricted on a temporary basis. Full access must be restored immediately upon the completion of any work blocking said access, and full access must be restored to all properties over weekends and legal holidays unless approved by the Engineer. Special consideration to hours and location of work near school shall be made to allow for full and safe access during normal business arrival and departure schedules. The Contractor is responsible for all traffic control and this item is incidental to the cost of the overall contract work.

The Contractor shall provide a name and phone number of a responsible party capable of providing emergency service, 24 hours per day, for the duration of the Project.

### DEFICIENCY CHARGE:

The primary concern of the Village is to maintain a safe travel way for the public and a safe environment for the work in the construction zone. The Contractor is expected to comply with the Standard

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Specifications, contract plans, the Special Provisions, and directions from the Engineer concerning traffic control and protection. The Contractor shall provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall immediately respond correcting traffic control deficiencies by dispatching workers, materials, and equipment to correct such deficiencies.

Failure to comply with directions from the Engineer for corrections or modifications to the traffic control and protection will result in a deduction of either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater, in accordance with Article 105.03. This charge is separate from the cost of any corrective work ordered. The Contractor shall not be relieved of any contractual responsibilities by the Village's actions.

Basis of Payment: This work shall be paid for at the contract Lump Sum price for TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC which price shall be payment in full for the installation and maintenance of proper traffic control to protect the work and public for the duration of the Project.

### PAVEMENT MARKINGS, SPECIAL

This work consists of construction of a Methyl Methacrylate based system in crosswalks areas. The material shall consist of applying a pattern that is imprinted with a stencil to create the appearance of hand laid decorative paving. This system may be applied to HMA and PCC Concrete surfaces.

This multiple step process involves the application of a base course (98:2) in the color specified followed by the application of a second course (1:1) in the specified color sprayed thru a stencil to achieve the desired print. Each lift of binder will receive a lift of broadcast aggregate per the parameters below.

Edge lines to be installed in White MMA (Sprayable 1:1) at the width specified (6"). Retroreflective beads at a rate of 12 pounds per 100 square foot with Swarco's Megalux glass beads with T-13 Coating. Do not use other beads as they are not designed to work with the specific curing properties of this MMA material.

#### System Recycled Material Composition

The total system is to be guaranteed to be 50% recycled material by weight.

#### Base Course Binder

Methyl Methacrylate (98:2) Area Marking Material. Color as specified below.

COLOR: White or as specified by Village.

VISCOSITY @ 77°F, Brookfield LV #4 Spindle 60 RPM: 90-100 KU's

WEIGHT PER GALLON @ 77°F, Lb.: 13.0 +/- 0.2

TOTAL SOLIDS, % By Weight: 99.0 Minimum

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PROPERTIES: (After combination at 98:2 Part "A" to Part "B" BPO Catalyst by weight and appropriately 18-lbs of stone aggregate) CATALYST, Part "B": Benzoyl Peroxide

GEL TIME, Minutes @ 77°F: 10 Maximum

SKID RESISTANCE (ASTM E 303) 60 Minimum

CURE TIME, Minutes @ 77°F: 30 Maximum

DAYTIME LUMINANCE FACTOR (Y): 7-35

CHEMICAL RESISTANCE: No effect after seven days immersion in antifreeze, motor oil, diesel fuel, gasoline, calcium chloride or transmission fluid

APPLICATION: Batch mixed and applied with squeegee and back rolled for more aggressive aggregate texture.

Print / Design Course Binder

Methyl Methacrylate (1:1 Sprayable) Area Marking Material. Color as specified below.

COLOR: Brick Red or as specified by Village

VISCOSITY @ 77°F, Brookfield LV #4 Spindle 60 RPM: 85-105 KU's

WEIGHT PER GALLON @ 77°F, Lb.: 13.2 +/- 0.2

TOTAL SOLIDS, % By Weight: 99.0 Minimum

PROPERTIES: (After combination at 1:1 Part "A" to Part "B" with 4 parts Benzoyl Peroxide added to Part "B")

GEL TIME, Minutes @ 77°F: 10 Maximum

CURE TIME, Minutes @ 77°F: 30 Maximum

DRY FILM REFLECTANCE, % of Magnesium Oxide: 85 Minimum

CHEMICAL RESISTANCE: No effect after seven days immersion in antifreeze, motor oil, diesel fuel, gasoline, calcium chloride or transmission fluid

APPLICATION: Sprayed with 1:1 Plural-Component Sprayer in multiple passes at a rate of approx. 25 ft<sup>2</sup>/gallon at 60 mils.

Broadcast Aggregate for Base Course and Print / Design Course

100% Recycled Color Coated Glass aggregate. The Aggregate is to be clean, dry, and free from

## 2023 DBD Traffic Signal and Accessibility Improvements

deleterious material. The aggregate must meet the following requirements and be certified to be 100% recycled and be warranted to be fade free for the duration of the installation warranty.

COLOR : Multiple color blend (2 Colors on base course and 4 Colors on Print / Design Course) matching the binder as chosen by Village

SPECIFIC GRAVITY : 2.5

BULK DENSITY : Avg 86lb/ft

VOLUME / TON : Avg 26.5/ft

SOFTENING POINT : 1350 Degrees Fahrenheit

SHAPE : Sub Angular, Non Porous

HARDNESS : 7.0 MOHS

PHYSICAL COMPOSITION : Amorphous Silica

CHEMICAL COMPOSITION : Sodium Oxide 12 – 15%

ALUMINUM / OTHER OXIDES : Oxide : 1 – 2 %

COLOR RETENTION : 100%

SIZE RANGE AVAILABLE : Multiple mesh ranges available between .4 to 3 MM

APPLICATION : To be broadcasted evenly into binder so as not to disturb / push binder. Broadcasted at 1.5 lb per sf before recovery of loose aggregate.

RECYCLED MATERIAL : 100%

COLOR SELECTION : Varied, customized

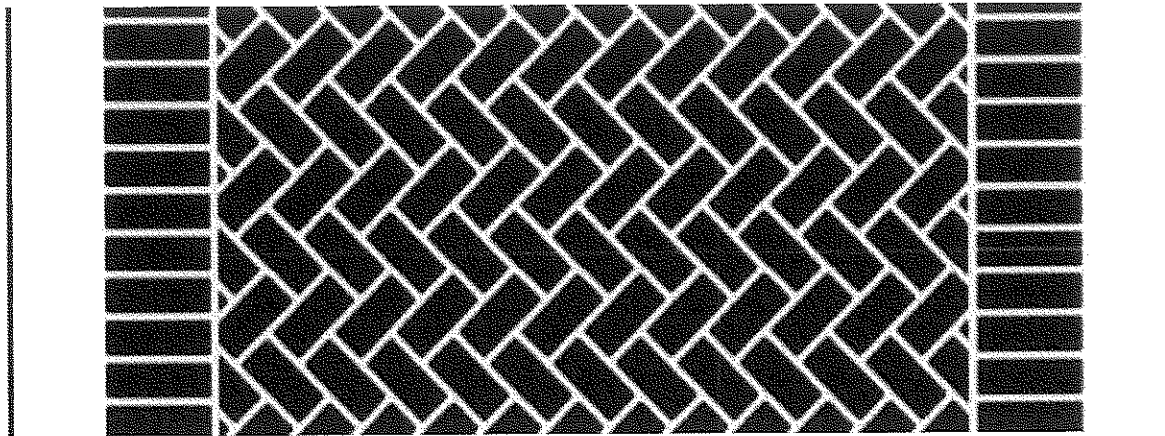
ENVIRONMENTALLY SOUND : 100 % Recycled Material

### Stencil

Stencils should be cut from 10' x 5' LDPE plastic in 1/8" thickness. Stencil to be designed to emulate the desired print or design per Village. Stencils to be designed to "lock" together to ensure continuity of print course.

Herringbone Pattern

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6" white edge, 6" soldier course, 8" herringbone pattern, 6" soldier course, 6" white edge

Surface Preparation / New pavement / Open to traffic / Loose Aggregate

The asphalt or concrete surface to be free of all contaminants. In such instance where contaminants are present, appropriate steps are to be taken for their removal. Scarification of the surface to be applied over, to take place previous to friction course application.

Temperature to be 20 degrees Fahrenheit (-7 C) and rising with moisture free substrate to facilitate installation.

New pavement must remain idle for 30 days before the application of this system to ensure adequate curing of either an asphalt or concrete substrate previous to application.

Binder is to be cured and loose aggregate is to be removed previous to opening back to traffic.

It is expected that there will be further loosening (shedding) of the balance of the aggregate for 1 to 2 days post installation. It is the responsibility of the contractor to capture and remove this aggregate.

Warranty / Approved Installation

A minimum 7 year warranty to be granted with additional year(s) potential based on the specific aspects of the installation / project. Installations over new HMA or Concrete Surface Course will carry a 10 year warranty. Warranty to cover all material and installation cost. Warranty is only valid when installation is completed by an approved installer with 10 years experience with Methyl Methacrylate Broadcast (Bonded) Aggregate systems. Warranty is to be agreed to and Warranty Documentation is to be submitted to project stakeholders previous to installation commencement.

Basis of Payment

This work shall be paid for by the square foot and shall include all labor, materials, equipment, and associated equipment to complete the application of the PAVEMENT MARKINGS, SPECIAL.

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**DUPAGE COUNTY DOT TRAFFIC SIGNAL GENERAL REQUIREMENTS**

All contact references in this special provision which refer to the County shall be changed to the Village of Downers Grove Transportation Manager at 630-434-6863. All work performed and equipment installed under this Contract shall be performed by an IDOT Prequalified Electrical Contractor governed by and shall comply with:

SPECIFICATION	ADOPTED/DATED
The State of Illinois "Standard Specifications for Road and Bridge Construction" <b>referred to as "Standard Specifications"</b>	January 1, 2022
The State of Illinois "Manual on Uniform Traffic Control Devices for Streets and Highways," <b>referred to as "MUTCD"</b>	January 2020
The National Electrical Code <b>referred to as "NEC"</b>	2011 Edition
The National Electrical Manufacturers Association (All publications for traffic control items) <b>referred to as "NEMA"</b>	All applicable current documents published prior to Contract Letting Date
The International Municipal Signal Association ("Official Wire & Cable Specifications Manual,") <b>referred to as "IMSA"</b>	All applicable current documents published prior to Contract Letting Date
The Institute of Transportation Engineers ATC 5.2b Standard	September 25, 2006
AASHTO "Standard Specifications" LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals	2015 Edition & 2017 Interim Revisions
Supplemental Specifications and Recurring Special Provisions	January 1, 2022

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

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

IDOT Illinois Department of Transportation  
 District 1 IDOT District 1  
 DUDOT The DuPage County Division of Transportation  
 Traffic Engineer The DUDOT Traffic Engineer or designee

## 2023 DBD Traffic Signal and Accessibility Improvements

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.

## 2023 DBD Traffic Signal and Accessibility Improvements

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

## 2023 DBD Traffic Signal and Accessibility Improvements

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.

## 2023 DBD Traffic Signal and Accessibility Improvements

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

## 2023 DBD Traffic Signal and Accessibility Improvements

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.

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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.

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**REPAIR TIMETABLE**

(non cumulative)

<u>ITEM</u>	<u>RESPONSE TIME</u>	<u>SERVICE RESTORATION</u>	<u>PERMANENT REPAIRS</u>
<b>KNOCKDOWNS/FAILURE/DAMAGE:</b>			
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
<b>COMPLAINTS/CALLS/ALARMS:</b>			
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

## 2023 DBD Traffic Signal and Accessibility Improvements

grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.

### MODIFICATION OF IDOT SPECIAL PROVISION REQUIREMENTS

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

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 DUDOT Traffic Engineer and the phone number shall be **630-407-6900**. Submittals, requests for reviews, scheduling of appointments, and requests for materials and information shall be directed to the DUDOT Traffic Engineer instead of IDOT, District 1, or the State's Maintenance Contractor.

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 Centrac software or if it is being added to Centrac 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

## 2023 DBD Traffic Signal and Accessibility Improvements

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 BLACK to match the existing poles and mast arms 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

## 2023 DBD Traffic Signal and Accessibility Improvements

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.

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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.

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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

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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.

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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

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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.

### 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

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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."

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### Cast-In-Place Handholes.

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

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

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

### Precast Round Handholes.

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

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

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

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

### Materials.

Add the following to Section 1042 of the Standard Specifications:

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

## MAINTENANCE OF EXISTING TRAFFIC SIGNAL 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:

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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

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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.

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**GROUNDING OF TRAFFIC SIGNAL SYSTEMS**

Effective: May 22, 2002

Revised: July 1, 2015

806.01TS

Revise Section 806 of the Standard Specifications to read:

**General.**

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

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations where measured resistance exceeds 25 ohms. Ground rods are included in the applicable concrete foundation or service installation pay item and will not be paid for separately.

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

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

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individual conductor heat shrinks.

- (c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, UL listed pressure connectors, and UL listed clamps.

### **GROUNDING EXISTING HANDHOLE FRAME AND COVER**

Effective: May 22, 2002

Revised: July 1, 2015

873.02TS

#### Description.

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

The equipment grounding conductor shall be bonded to the handhole frame and to the handhole cover. Two (2) ½-inch diameter x 1 ¼-inch long hex-head stainless steel bolts, spaced 1.75-inches apart center-to-center shall be fully welded to the frame and to the cover to accommodate a heavy duty UL listed grounding compression terminal. The grounding compression terminal shall be secured to the bolts with stainless steel split-lock washers and nylon-insert locknuts.

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

The grounding cable shall be paid for separately.

#### Method of Measurement.

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

#### Basis of Payment.

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

### **ELECTRIC CABLE**

Revised: January 1, 2021

DC873.01

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**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.

### **CONCRETE FOUNDATIONS**

Revised: November 1, 2021

DC878.01

**Description:** This work shall consist of constructing a concrete foundation for a traffic signal post, controller base, or mast arm at locations shown on the plans and/or as directed by the Traffic Engineer.

**General:** This work shall be performed according to Section 878 of the “Standard Specifications” and the following:

All anchor bolts shall be according to Article 1006.09 of the “Standard Specifications”, except all anchor bolts shall be hot dipped galvanized the full length of the anchor bolt including the hook.

No foundation is to be poured until the Engineer observes the depth of the excavation and the forms.

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Foundations shall be round in shape and constructed to a diameter stated herein and in the highway standards. No smaller diameter shall be allowed unless prior approval is granted by the Traffic Engineer.

Concrete Foundations, Type A for Traffic Signal Posts shall provide anchor bolts with the bolt pattern specified within the District I "Standard Traffic Signal Design Details" as shown on the plans. All Type A foundations shall be a minimum of 48 inches deep. Type A foundations for traffic signal posts and electrical service installations shall be constructed with 24 inch diameter, unless a different diameter is indicated in the plans.

Concrete Foundations, Type A, 12-inch diameter are to be installed for pedestrian signal posts when indicated in the plans, or as directed by the Engineer.

Concrete Foundations, Type C (Special) for Traffic Signal Cabinets with Uninterruptable Power Supply (UPS / Battery Back-Up) cabinet installations shall be constructed according to the latest version of IDOT Standard 878001, except as modified herein. The constructed foundation shall be a minimum of 48 inches long by 31 inches wide, and shall have a minimum depth of 48 inches. An integral concrete pad foundation for the UPS cabinet shall be constructed a minimum of 31 inches long by 20 inches wide by 10 inches deep. The UPS cabinet pad foundation shall be integral to the side of the signal cabinet foundation, and shall be constructed on the same side as the signal cabinet power panel. Anchor bolts shall be provided and spaced according to the cabinet manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of 30 inches. An L-Shaped concrete apron shall be constructed along the entire front of the signal cabinet foundation, the entire side of the UPS cabinet foundation, and the entire front of the UPS cabinet foundation. This concrete apron shall be a minimum of 36 inches wide by five inches deep. Perpendicular grooves shall be installed in each direction in the concrete apron according to Article 424.06 of the "Standard Specifications", beginning at the interior corner of the L shaped apron.

Concrete Foundations, Type D for Traffic Signal Cabinets shall be constructed according to the latest version of IDOT Standard 878001, except as modified herein. The constructed foundation shall be a minimum of 48 inches long by 31 inches wide, and shall have a minimum depth of 48 inches. Anchor bolts shall be provided and spaced according to the cabinet manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of 30 inches. The concrete apron at the signal cabinet shall be constructed a minimum of 36 inches wide by 48 inches long by five inches deep.

Concrete Foundations, Type E for Mast Arm and Combination Mast Arm Poles shall be constructed according to the latest version of IDOT Standard 878001. The foundation shall be 15 feet deep, except when deeper foundations are called for in IDOT Standard 878001 or in the plans. Shorter foundation depths, will not be accepted, even when indicated in the plans.

The Engineer shall approve the foundation excavation prior to placing any concrete.

Basis of Payment: This work will be paid for at the contract unit price per foot of depth for CONCRETE FOUNDATION, of the type specified.

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**LIGHT EMITTING DIODE (LED) SIGNAL HEAD AND OPTICALLY PROGRAMMED LED SIGNAL HEAD**

Effective: May 22, 2002

Revised: July 1, 2015

880.01TS

**Materials.**

Add the following to Section 1078 of the Standard Specifications:

1. LED modules proposed for use and not previously approved by IDOT District One will require independent testing for compliance to current VTCSH-ITE standards for the product and be Intertek ETL Verified. This would include modules from new vendors and new models from IDOT District One approved vendors.
2. The proposed independent testing facility shall be approved by IDOT District One. Independent testing must include a minimum of two (2) randomly selected modules of each type of module (i.e. ball, arrow, pedestrian, etc.) used in the District and include as a minimum Luminous Intensity and Chromaticity tests. However, complete module performance verification testing may be required by the Engineer to assure the accuracy of the vendor's published data and previous test results. An IDOT representative will select sample modules from the local warehouse and mark the modules for testing. Independent test results shall meet current ITE standards and vendor's published data. Any module failures shall require retesting of the module type. All costs associated with the selection of sample modules, testing, reporting, and retesting, if applicable, shall be the responsibility of the LED module vendor and not be a cost to this contract.
3. All signal heads shall provide 12" (300 mm) displays with glossy yellow or black polycarbonate housings. All head housings shall be the same color (yellow or black) at the intersection. For new signalized intersections and existing signalized intersections where all signal heads are being replaced, the proposed head housings shall be black. Where only selected heads are being replaced, the proposed head housing color (yellow or black) shall match existing head housings. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on. Post top mounting collars are required on all posts, and shall be constructed of the same material as the brackets.
4. The LED signal modules shall be replaced or repaired if an LED signal module fails to function as intended due to workmanship or material defects within the first 7 years from the date of traffic signal TURN-ON. LED signal modules which exhibit luminous intensities less than the minimum values specified in Table 1 of the ITE Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement (June 27, 2005) [VTSCH], or applicable successor ITE specifications, or show signs of entrance of moisture or contaminants within the first 7 years of the date of traffic signal TURN-ON shall be replaced or repaired. The vendor's

## 2023 DBD Traffic Signal and Accessibility Improvements

written warranty for the LED signal modules shall be dated, signed by a vendor's representative, and included in the product submittal to the State.

(a) Physical and Mechanical Requirements

1. Modules can be manufactured under this specification for the following faces:
  - a. 12-inch (300 mm) circular, multi-section
  - b. 12-inch (300 mm) arrow, multi-section
2. The maximum weight of a module shall be 4 lbs. (1.8 kg).
3. Each module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weatherproof after installation and connection.
5. The lens of the module shall be tinted with a wavelength-matched color to reduce sun phantom effect and enhance on/off contrast. The tinting shall be uniform across the lens face. Polymeric lens shall provide a surface coating or chemical surface treatment applied to provide abrasion resistance. The lens of the module shall be integral to the unit, convex with a smooth outer surface and made of plastic. The lens shall have a textured surface to reduce glare.
6. The use of tinting or other materials to enhance ON/OFF contrasts shall not affect chromaticity and shall be uniform across the face of the lens.
7. Each module shall have a symbol of the type of module (i.e., circle, arrow, etc.) in the color of the module. The symbol shall be 1 inch (25.4 mm) in diameter. Additionally, the color shall be written out in 1/2 inch (12.7mm) letters next to the symbol.

(b) Photometric Requirements

4. The LEDs utilized in the modules shall be AlInGaP technology for red and InGaN for green and amber indications, and shall be the ultra bright type rated for 100,000 hours of continuous operation from -40 °C to +74 °C.

(c) Electrical

1. Maximum power consumption for LED modules is per Table 2.
2. Operating voltage of the modules shall be 120 VAC. All parameters shall be measured at this voltage.
3. The modules shall be operationally compatible with currently used controller assemblies (solid state load switches, flashers, and conflict monitors).
4. When a current of 20 mA AC (or less) is applied to the unit, the voltage read across the two leads

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shall be 15 VAC or less.

5. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.

6. LED arrows shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

(d) Retrofit Traffic Signal Module

1. The following specification requirements apply to the Retrofit module only. All general specifications apply unless specifically superseded in this section.

2. Retrofit modules can be manufactured under this specification for the following faces:

- a. 12 inch (300 mm) circular, multi-section
- b. 12 inch (300 mm) arrow, multi-section

3. Each Retrofit module shall be designed to be installed in the doorframe of a standard traffic signal housing. The Retrofit module shall be sealed in the doorframe with a one-piece EPDM (ethylene propylene rubber) gasket.

4. The maximum weight of a Retrofit module shall be 4 lbs. (1.8 kg).

5. Each Retrofit module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weather proof after installation and connection.

6. Electrical conductors for modules, including Retrofit modules, shall be 39.4 inches (1m) in length, with quick disconnect terminals attached.

7. The lens of the Retrofit module shall be integral to the unit, shall be convex with a smooth outer surface and made of plastic or of glass.

(e) The following specification requirements apply to the 12 inch (300 mm) arrow module only. All general specifications apply unless specifically superseded in this section.

1. The arrow module shall meet specifications stated in Section 9.01 of the Equipment and Material Standards of the Institute of Transportation Engineers (November 1998) [ITE Standards], Chapter 2 (Vehicle Traffic Control Signal Heads) or applicable successor ITE specifications for arrow indications.

2. The LEDs arrow indication shall be a solid display with a minimum of three (3) outlining rows of LEDs and at least one (1) fill row of LEDs.

(f) The following specification requirement applies to the 12 inch (300 mm) programmed visibility

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(PV) module only. All general specifications apply unless specifically superseded in this section.

1. The LED module shall be a module designed and constructed to be installed in a programmed visibility (PV) signal housing without modification to the housing.

### Basis of Payment.

Add the following to the first paragraph of Article 880.04 of the Standard Specifications:

The price shall include furnishing the equipment described above, all mounting hardware and installing them in satisfactory operating condition.

Revise the second paragraph of Article 880.04 of the Standard Specifications to read:

If the work consists of retrofitting an existing polycarbonate traffic signal head with light emitting diodes (LEDs), it will be paid for as a SIGNAL HEAD, LED, RETROFIT, of the type specified, and of the particular kind of material, when specified. Price shall be payment in full for removal of the existing module, furnishing the equipment described above including LED modules, all mounting hardware, and installing them in satisfactory operating condition. The type specified will indicate the number of signal faces, the number of signal sections in each signal face and the method of mounting.

### **LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD**

Effective: May 22, 2002

Revised: July 1, 2015

881.01TS

Add the following to the third paragraph of Article 881.03 of the Standard Specifications:

No mixing of different types of pedestrian traffic signals or displays will be permitted.

Add the following to Article 881.03 of the Standard Specifications:

(a) Pedestrian Countdown Signal Heads.

(1) Pedestrian Countdown Signal Heads shall not be installed at signalized intersections where traffic signals and railroad warning devices are interconnected.

(2) Pedestrian Countdown Signal Heads shall be 16 inch (406mm) x 18 inch (457mm), for single units with glossy yellow or black polycarbonate housings. All pedestrian head housings shall be the same color (yellow or black) at the intersection. For new signalized intersections and existing signalized intersections where all pedestrian heads are being replaced, the proposed head housings shall be black. Where only selected heads are being replaced, the proposed head housing color (yellow or black) shall match existing head housings. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on.

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(3) Each pedestrian signal LED module shall be fully MUTCD compliant and shall consist of double overlay message combining full LED symbols of an Upraised Hand and a Walking Person. "Egg Crate" type sun shields are not permitted. Numerals shall measure 9 inches (229mm) in height and easily identified from a distance of 120 feet (36.6m).

Materials.

Add the following to Article 1078.02 of the Standard Specifications:

## General.

1. The module shall operate in one mode: Clearance Cycle Countdown Mode Only. The countdown module shall display actual controller programmed clearance cycle and shall start counting when the flashing clearance signal turns on and shall countdown to "0" and turn off when the steady Upraised Hand (symbolizing Don't Walk) signal turns on. Module shall not have user accessible switches or controls for modification of cycle.
2. At power on, the module shall enter a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark.
3. The module shall re-program itself if it detects any increase or decrease of Pedestrian Timing. The counting unit will go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.
4. If the controller preempts during the Walking Person (symbolizing Walk), the countdown will follow the controller's directions and will adjust from Walking Person to flashing Upraised Hand. It will start to count down during the flashing Upraised Hand.
5. If the controller preempts during the flashing Upraised Hand, the countdown will continue to count down without interruption.
6. The next cycle, following the preemption event, shall use the correct, initially programmed values.
7. If the controller output displays Upraised Hand steady condition and the unit has not arrived to zero or if both the Upraised Hand and Walking Person are dark for some reason, the unit suspends any timing and the digits will go dark.
8. The digits will go dark for one pedestrian cycle after loss of power of more than 1.5 seconds.
9. The countdown numerals shall be two (2) "7 segment" digits forming the time display utilizing two rows of LEDs.
10. The LED module shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules," or applicable successor ITE specifications, except as

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modified herein.

11. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
12. In the event of a power outage, light output from the LED modules shall cease instantaneously.
13. The LEDs utilized in the modules shall be AlInGaP technology for Portland Orange (Countdown Numerals and Upraised Hand) and GaN technology for Lunar White (Walking Person) indications.
14. The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

### Basis of Payment.

Add the following to the first paragraph of Article 881.04 of the Standard Specifications:

The price shall include furnishing the equipment described above, all mounting hardware and installing them in satisfactory operating condition.

Add the following to Article 881.04 of the Standard Specifications:

If the work consists of retrofitting an existing polycarbonate pedestrian signal head and pedestrian countdown signal head with light emitting diodes (LEDs), it will be paid for as a PEDESTRIAN SIGNAL HEAD, LED, RETROFIT, of the type specified, and of the particular kind of material, when specified. Price shall be payment in full for furnishing the equipment described above including LED modules, all mounting hardware, and installing them in satisfactory operating condition.

### TRAFFIC SIGNAL BACKPLATE

Effective: May 22, 2002

Revised: July 1, 2021

882.01TS

Delete 1<sup>st</sup> sentence of Article 1078.03 of the Standard Specifications and add “All backplates shall be louvered, formed ABS plastic or composite aluminum”.

Delete first sentence of the second paragraph of Article 1078.03 of the Standard Specifications and add “The backplate shall be composed of one or two piece.

Delete second sentence of the fourth paragraph of Article 1078.03 the Standard Specifications.

Add the following to the fourth paragraph of Article 1078.03 of the Standard Specifications:

When retro reflective sheeting is specified, it shall be Type ZZ sheeting according to Article 1091.03 and applied in preferred orientation for the maximum angularity according to the vendor’s recommendations.

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The retroreflective sheeting shall be installed under a controlled environment at the vendor/equipment supplier before shipment to the contractor. The formed plastic backplate shall be prepared and cleaned, following recommendations of the retroreflective sheeting manufacturer.

### **ILLUMINATED SIGN, LED**

Effective: May 22, 2002

Revised: July 1, 2015

891.01TS

Revise the second paragraph of Article 1084.01(a) to read:

The exterior surface of the housing shall be acid-etched and shop painted with one coat of zinc-chromate primer and two coats of exterior enamel. The housing shall be the same color (yellow or black) to match the existing or proposed signal heads. The painting shall be according to Section 851 of the Standard Specifications.

Add the following to Article 1084.01 (b) of the Standard Specifications:

The message shall be formed by rows of LEDs. The sign face shall be 24 inches (600 mm) by 24 inches (600 mm).

Revise Article 1084.01(d) to read:

Mounting hardware shall be black polycarbonate or galvanized steel and similar to mounting Signal Head hardware and bracket specified herein and shall provide tool free access to the interior.

### **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

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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.

### **REBUILD EXISTING HANDHOLE**

Effective: January 1, 2002

Revised: July 1, 2015

895.04TS

This item shall consist of rebuilding and bringing to grade a handhole at a location shown on the plans or as directed by the Engineer. The work shall consist of removing the handhole frame and cover and the walls of the handhole to a depth of eight (8) inches below the finished grade.

Upon completion of the above work, four (4) holes, four (4) inches in depth and one half (1/2) inch in diameter, shall be drilled into the remaining concrete; one hole centered on each of the four handhole walls. Four (4) #3 steel dowels, eight (8) inches in length, shall be furnished and shall be installed in the drilled holes with a masonry epoxy.

All concrete debris shall be disposed of outside the right-of-way.

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The area adjacent to each side of the handhole shall be excavated to allow forming. All steel hooks, handhole frame, cover, and concrete shall be provided to construct a rebuilt handhole according to applicable portions of Section 814 of the Standard Specification and as modified in 814.01TS HANDHOLES Special Provision. The existing frame and cover shall be replaced if it was damaged during removal or as determined by the Engineer.

### Basis of Payment.

This work shall be paid for at the contract unit price each for REBUILD EXISTING HANDHOLE, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above and as indicated on the drawings.

## CAMERA MOUNTING ASSEMBLY

Revised:  
DC801.10

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

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

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

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

Basis of Payment: This work shall be paid for at the contract unit price per each for CAMERA MOUNTING ASSEMBLY. The unit price shall include all equipment, materials, mounting hardware, shims, gromets, cable wrap, components, and labor required to securely fasten the assembly to an existing pole and place the camera into operation to the satisfaction of the Traffic Engineer. The camera, cables, connectors, and related equipment will be paid for separately as part of unit price for REMOTE CONTROLLED VIDEO SYSTEM or RELOCATE EXISTING REMOTE-CONTROLLED VIDEO SYSTEM.

## FIBER OPTIC CABLE

Revised:  
DC871.01

Description: This work shall consist of furnishing and installing all accessories required and fiber optic

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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.

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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) pigtails fusion spliced to bare fibers. The pre-fabricated pigtails shall have all of their fibers color coded to match the singlemode fibers in the fiber optic cable. Connector bulkheads shall be the proper type for the fiber enclosure at the location, and shall be properly secured to the enclosure.

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, pigtails, splice trays, connector bulkheads, testing and documentation, and the required number of fiber splices and terminations shown on the plans. Additional fiber terminations and/or splices required by the Traffic Engineer, (not included in this item), shall be paid for as TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

### **OUTDOOR RATED NETWORK CABLE**

Revised:  
DC873.02

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

Materials: The outdoor rated network cable shall be a black Category 5e cable, meeting the TIA/EIA 568-

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B.2 telecommunication standards. The cable shall be composed of 24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, inner LLPE jacket, overall shield (100% coverage), 24 AWG stranded TC drain wire, industrial grade sunlight- and oil-resistant LLPE jacket. The cable shall be capable of performing from -40 °F to 160 °F.

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

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

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

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

### SERVICE INSTALLATION (traffic signals)

Effective: May 22, 2002

Revised: June 15, 2016

805.01TS

Revise Section 805 of the Standard Specifications to read:

#### Description.

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

#### General.

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

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

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Materials.

- a. General. The completed control panel shall be constructed in accordance with UL Std. 508A, Industrial Control Panel, and carry the UL label. Wire terminations shall be UL listed.
- b. Enclosures.
  1. Pole Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 4X, unfinished single door design, fabricated from minimum 0.080-inch (2.03 mm) thick Type 5052 H-32 aluminum. Seams shall be continuous welded and ground smooth. Stainless steel screws and clamps shall secure the cover and assure a watertight seal. The cover shall be removable by pulling the continuous stainless steel hinge pin. The cabinet shall have an oil-resistant gasket and a lock kit shall be provided with an internal O-ring in the locking mechanism assuring a watertight and dust-tight seal. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 14-inches (350 mm) high, 9-inches (225 mm) wide and 8-inches (200 mm) in depth is required. The cabinet shall be channel mounted to a wooden utility pole using assemblies recommended by the vendor.
  2. Ground Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 3R unfinished single door design with back panel. The cabinet shall be fabricated from Type 5052 H-32 aluminum with the frame and door 0.125-inch (3.175 mm) thick, the top 0.250-inch (6.350 mm) thick and the bottom 0.500-inch (12.70 mm) thick. Seams shall be continuous welded and ground smooth. The door and door opening shall be double flanged. The door shall be approximately 80% of the front surface, with a full length tamperproof stainless steel .075-inch (1.91 mm) thick hinge bolted to the cabinet with stainless steel carriage bolts and nylocks nuts. The locking mechanism shall be slam-latch type with a keyhole cover. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 40-inches (1000 mm) high, 16-inches (400 mm) wide and 15-inches (375 mm) in depth is required. The cabinet shall be mounted upon a square Type A concrete foundation as indicated on the plans. The foundation is paid for separately.
  3. All enclosures shall include a green external power indicator LED light with circuitry as shown in the Electrical Service-Panel Diagram detail sheet. For pole mounted service enclosures, the power indicator light shall be mounted as shown in the detail. For ground mounted enclosures, the power indicator light shall be mounted on the side of the enclosure most visible from the major roadway.
- c. Electric Utility Meter Housing and Riser. The electric meter housing and meter socket shall be supplied and installed by the contractor. The contractor is to coordinate the work to be performed and the materials required with the utility company to make the final connection at the power source. Electric utility required risers, weather/service head and any other materials necessary for connection shall also be included in the pay item. Materials shall be in accordance with the electric utility's requirements. For ground-mounted service, the electric utility meter housing shall be mounted to the enclosure. The

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meter shall be supplied by the utility company. Metered service shall not be used unless specified in the plans.

- d. Surge Protector. Overvoltage protection, with LED indicator, shall be provided for the 120 volt load circuit by the means MOV and thermal fusing technology. The response time shall be <5n seconds and operate within a range of -40C to +85C. The surge protector shall be UL 1449 Listed.
- e. Circuit Breakers. Circuit breakers shall be standard UL listed molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating handles. 120 volt circuit breakers shall have an interrupting rating of not less than 65,000 rms symmetrical amperes. Unless otherwise indicated, the main disconnect circuit breaker for the traffic signal controller shall be rated 60 amperes, 120 V and the auxiliary circuit breakers shall be rated 10 amperes, 120 V.
- f. Fuses, Fuseholders and Power Indicating Light. Fuses shall be small-dimensional cylindrical fuses of the dual element time-delay type. The fuses shall be rated for 600 V AC and shall have a UL listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. The power indicating light shall be LED type with a green colored lens and shall be energized when electric utility power is present.
- g. Ground and Neutral Bus Bars. A single copper ground and neutral bus bar, mounted on the equipment panel shall be provided. Ground and neutral conductors shall be separated on the bus bar. Compression lugs, plus 2 spare lugs, shall be sized to accommodate the cables with the heads of the connector screws painted green for ground connections and white for neutral connections.
- h. Utility Services Connection. The Contractor shall notify the Utility Company marketing representative a minimum of 30 working days prior to the anticipated date of hook-up. This 30 day advance notification will begin only after the Utility Company marketing representative has received service charge payments from the Contractor. Prior to contacting the Utility Company marketing representative for service connection, the service installation controller cabinet and cable must be installed for inspection by the Utility Company.
- i. Ground Rod. Ground rods shall be copper-clad steel, a minimum of 10 feet (3.0m) in length, and 3/4 inch (20mm) in diameter. Ground rod resistance measurements to ground shall be 25 ohms or less. If necessary additional rods shall be installed to meet resistance requirements at no additional cost to the contract.

Installation.

- a. General. The Contractor shall confirm the orientation of the traffic service installation and its door side with the engineer, prior to installation. All conduit entrances into the service installation shall be sealed with a pliable waterproof material.

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- b. Pole Mounted. Brackets designed for pole mounting shall be used. All mounting hardware shall be stainless steel. Mounting height shall be as noted on the plans or as directed by the Engineer.
- c. Ground Mounted. The service installation shall be mounted plumb and level on the foundation and fastened to the anchor bolts with hot-dipped galvanized or stainless steel nuts and washers. The space between the bottom of the enclosure and the top of the foundation shall be caulked at the base with silicone.

### Basis of Payment.

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

### FIBER OPTIC SPLICE ENCLOSURE

Description: This work shall consist of furnishing and installing 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

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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.

### **REMOTE CONTROLLED VIDEO SYSTEM**

Revised: March 17, 2021  
DC801.02

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

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

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

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

The camera shall have an exterior dome.

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

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

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

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chafing of wires.

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

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

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

Basis of Payment: This item will be paid for at the contract unit price per each for REMOTE CONTROLLED VIDEO SYSTEM. The unit price shall include all associated equipment, hardware, cables, materials and labor required to install the complete system in place and in operation to the satisfaction of the Traffic Engineer. The OUTDOOR RATED NETWORK cable from the traffic signal cabinet will be paid for separately. If required, the LAYER II (DATALINK) SWITCH and/or the LAYER III (NETWORK) SWITCH will be paid for separately.

### 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.

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**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; pigtailed; 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.

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**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.

**CONDUIT SPLICE**

Description: This work shall consist of making the connection between an existing conduit and a new conduit and shall be done in accordance with applicable portions of Section 810 of the Standard Specifications. The existing conduit shall be prepared in accordance with Section 810.05(a). The Contractor shall locate the existing conduit and make any preparations to the existing conduit in order to connect the proposed conduit. The coupling shall be threaded and shall match the material and size of the existing conduit. The Contractor shall dispose of all waste and debris off the right-of-way premises at his own expense.

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A quantity of 5 EACH of CONDUIT SPLICE has been included in the contract for the purpose of establishing a contract unit price should the need for this pay item become apparent.

Basis of Payment: This work shall be paid for at the contract unit price each for CONDUIT SPLICE, which price shall be payment in full for furnishing the materials for the conduit splice, including all labor, locating, preparations, and equipment to splice the conduits.

### HANDHOLE TO BE ADJUSTED

Description. This item shall consist of rebuilding and bringing to grade a cast in place or preformed handhole at a location shown on the plans or as determined by the Engineer. The work shall consist of removing the handhole frame and cover and the walls of the handhole to a depth of eight (8) inches below the finished grade. Care shall be taken not to damage existing cables or conduit.

Upon completion of the above work, four (4) holes, four (4) inches in depth and, one half (1/2)-inch in diameter, shall be vertically drilled into the remaining concrete; one hole centered on each of the four handhole walls. Four (4) No. 3 steel dowels, eight (8) inches in length, shall be furnished and shall be installed in the drilled holes with a masonry epoxy.

All concrete debris shall be removed from the right-of-way to a location approved by the Engineer.

The area adjacent to each side of the handhole shall be excavated to allow forming. All steel hooks, handhole frame, cover, and concrete shall be provided to construct a rebuilt handhole according to applicable portions of Section 814 and Section 1088.06 of the Standard Specifications. (The existing frame and cover shall be replaced if it was damaged during removal or as determined by the Engineer). The frame and cover shall be installed at the proposed finish grade.

Basis of Payment. This work shall be paid for at the contract unit price each for HANDHOLE TO BE ADJUSTED.

### UNINTERRUPTABLE POWER SUPPLY, SPECIAL

Effective: January 1, 2013

Revised: May 19, 2016

862.01TS

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

The proposed UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UPS shall come painted to match the existing controller at each intersection.

Add the following to Article 862.01 of the Standard Specifications:

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

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Add the following to Article 862.02 of the Standard Specifications:

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

Add the following to Article 862.03 of the Standard Specifications:

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

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

Revise Article 862.04 of the Standard Specifications to read:

### Installation.

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

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

At locations where UPS is installed and an Emergency Vehicle Priority System is in use, any existing incandescent confirmation beacons shall be replaced with LED lamps in accordance with the District One Emergency Vehicle Priority System specification at no additional cost to the contract. A concrete apron shall be provided and be in accordance with Articles 424 and 202 of the Standard Specifications. The concrete apron shall also, follow the District 1 Standard Traffic Signal Design Detail, Type D for Ground Mounted Controller Cabinet and UPS Battery Cabinet.

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

### Materials.

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

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

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the published ratings for the UPS.

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

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

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

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

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

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

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

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

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

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

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

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

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

End of paragraph 1074.04(b)(2)e

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

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

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

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

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

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

(8) The UPS shall include a tip or kill switch installed in the battery cabinet, which shall completely disconnect power from the UPS when the switch is manually activated.

(9) The UPS shall include standard RS-232 and internal Ethernet interface.

(10) The UPS shall incorporate a flanged electric generator inlet for charging the batteries and operating the UPS. The generator connector shall be male type, twist-lock, rated as 15A, 125VAC with a NEMA L5-15P configuration and weatherproof lift cover plate. Access to the generator inlet shall be from a secured weatherproof lift cover plate or behind a locked battery cabinet police panel.

(11) The bypass switch shall include an internal power transfer relay that allows removal of the battery back-up unit, while the traffic signal is connected to utility power, without impacting normal traffic signal operation.

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

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

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

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

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

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

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(10) Battery Heater mats shall be provided, when gel cell type batteries are supplied.

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

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

Revise Article 862.05 of the Standard Specifications to read:

Basis of Payment.

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

**PEDESTRIAN PUSHBUTTON POST, TYPE A, SPECIAL**

Description.

This work shall consist of furnishing and installing a 5 ft. high metal pedestrian signal post. All installations shall meet the requirements of the "District One Standard Traffic Signal Design Details".

Materials.

- a. General. The pedestrian signal post shall be designed to support the traffic signal loading shown on the plans. The design and fabrication shall be according to the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO. All materials shall be reviewed by the Village prior to the Contractor ordering for installation.
- b. Post. The post shall be made of steel or aluminum, have an outside diameter of 4 1/2 in, a height off the ground of 5 ft. The post shall match and be similar to existing decorative posts in the downtown area and shall be the same series manufactured by Valmont. The post shall be threaded for assembly to the base. Aluminum posts shall be fluted and according to the specifications for Schedule 80 aluminum pipe. Steel posts shall be fluted and according to the specifications for Schedule 40 steel pipe.

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- c. **Base.** The base of a steel post shall be cast iron. The base of an aluminum post shall be aluminum. The base shall be threaded for the attachment to the threaded post. The base shall be approximately 10 in. high and 6 3/4 in. square at the bottom. The bottom of the base shall be designed to accept four 5/8 in. diameter anchor rods evenly spaced in a 6 in. diameter circle. The base shall be true to pattern, with sharp clean cutting ornamentation, and equipped with access doors for cable handling. The door shall be fastened to the base with stainless steel screws. A grounding lug shall be provided inside the base. The base shall match and be similar to existing decorative posts in the downtown area and shall be the same series manufactured by Valmont.
- d. **Anchor Rods.** The anchor rods shall be 5/8 in. in diameter and 16 in. long and shall be according to Article 1006.09. The anchor rods shall be threaded approximately 6 in. at one end and have a bend at the other end. The first 12 in. at the threaded end shall be galvanized. One each galvanized nut and trapezoidal washer shall be furnished with each anchor rod. The washer shall be properly sized to fully engage and sit flush on all sides of the slot of the base plate.

The aluminum post and base shall be drilled at the third points around the diameter and 1/4 in. by 2 in. stainless steel bolts shall be inserted to prevent the post from turning and wobbling.

- e. **Finish.** The steel post, steel post cap and the cast iron base shall be hot-dipped galvanized according to AASHTO M 111. The paint shall be Acrolon 218 HS two-part acrylic polyurethane by Sherwin Williams. The paint color shall match the existing paint in use at the location or as directed by the Engineer. If the post and the base are threaded after the galvanization, the bare exposed metal shall be immediately cleaned to remove all cutting solvents and oils, and then spray painted with two coats.

Installation.

The pedestrian signal post shall be erected plumb, securely bolted to a concrete foundation, and grounded to a ground rod according to the details shown on the plans. No more than 3/4 in. of the post threads shall protrude above the base.

A post cap shall be furnished and installed on the top of the post. The post cap shall match the material of the post. The Contractor shall apply an anti-seize paste compound on all nuts and bolts prior to assembly.

Prior to the assembly, the Contractor shall apply two additional coats of galvanized paint on the threads of the post and the base. The Contractor shall use a fabric post tightener to screw the post to the base.

Basis of Payment.

This work will be paid for at the contract unit price per each for PEDESTRIAN PUSHBUTTON POST, TYPE A, SPECIAL and shall include all labor, equipment, and materials, including paint, to install the post.

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**ACCESSIBLE PEDESTRIAN SIGNALS**

Revised:  
DC888.02

**Description:** This work shall consist of furnishing and installing pedestrian push button accessible pedestrian signals (APS) type. Each APS shall consist of an interactive vibrotactile pedestrian pushbutton with speaker, an informational sign, a light emitting diode (LED) indicator light, a solid state electronic control board, a power supply, wiring, and mounting hardware. The APS shall meet the requirements of the MUTCD and Sections 801 and 888 of the Standard Specifications, except as modified herein.

**Electrical Requirements:** The APS shall operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of -29 to +160 °F (-34 to +70 °C).

The APS shall contain a power protection circuit consisting of both fuse and transient protection.

**Audible Indications:** A pushbutton locator tone shall sound at each pushbutton with volume settings a maximum of 5 dBA louder than ambient sound.

Buttons shall be programmed to generate an audible walk indication with a speech walk message regardless of their placement. All buttons shall also be capable of producing a user-selectable audible percussive tone, repeating at 8 to 10 ticks per second with a dominant frequency of 880 Hz.

A clear, verbal message shall be used to communicate the pedestrian walk interval. This message shall sound throughout the WALK interval only. The verbal message shall be modeled after: "Street Name." Walk Sign is on to cross "Street Name." No other messages shall be used to denote the WALK interval.

Automatic volume adjustments in response to ambient traffic sound level shall be provided up to a maximum volume of 100 dBA. Locator tone and verbal messages shall be no more than 5 dB louder than ambient sound.

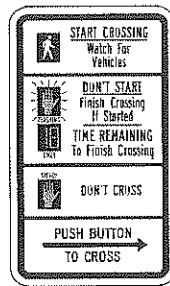
**Pedestrian Pushbutton Requirements:** Pedestrian pushbuttons shall be at least 2 in. (50 mm) in diameter or width. The force required to activate the pushbutton shall be no greater than 3.5 lb (15.5 N). Mounting shall be according to the MUTCD.

The pedestrian push button station shall be BLACK to match the existing poles and mast arms with rounded corners sized to accommodate the 9"x15" sign.

A red LED indicator shall be located on or near the pushbutton which, when activated, acknowledges the pedestrian's request to cross the street. The recorded messages and roadway designations shall be confirmed with the engineer and included with submitted product data.

**Signage.** The MUTCD sign R10-3e shall be located immediately above the pedestrian pushbutton and parallel to the crosswalk controlled by the pushbutton.

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R10-3e

Tactile Arrow. A tactile arrow, pointing in the direction of travel controlled by a pushbutton, shall be provided either on the pushbutton or its sign.

Vibrotactile Feature. The pushbutton shall pulse when depressed and shall vibrate continuously throughout the WALK interval.

Training. The Contractor shall provide APS onsite training for Agency personnel and person(s) or group that requested the installation of the APS. APS features and operation shall be demonstrated during the training. The training shall be presented by the APS equipment supplier. Time, date, and location of the training and demonstration shall be coordinated with the Engineer.

Basis of Payment: This work will be paid for at the contract unit price each for a pedestrian push button, ACCESSIBLE PEDESTRIAN SIGNALS type and shall include furnishing, installation, mounting hardware, message programming, and training.

### MODIFY EXISTING CONTROLLER AND CABINET, SPECIAL

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 existing controller cabinets are equipped with the following:

- Main Street at Maple Avenue: Econolite ASC3-1000 controller and EDI MMU Malfunction Management Unit
- Main Street at Curtiss Street: Econolite ASC3-1000 controller and EDI MMU Malfunction Management Unit

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- Main Street at Burlington Avenue/Warren Avenue: Econolite ASC3-1000 controller and Reno MMU Malfunction Management Unit
- Main Street at Franklin Street: Econolite ASC3-1000 controller and EDI MMU Malfunction Management Unit
- Main Street at Fire Station: Econolite ASC3-1000 controller and EDI MMU Malfunction Management Unit

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 DI 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, SPECIAL 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.

### **VIDEO DETECTION SYSTEM COMPLETE INTERSECTION**

Revised: March 17, 2021  
DC801.03

Description: This work shall consist of furnishing and installing a system that monitors vehicles on a roadway via the processing of video images and that provides detector outputs to a traffic signal controller. This work shall consist of furnishing and installing video camera(s), all mounting hardware, cables, video processors, a controller interface unit, and a remote communication module to operate the video vehicle detection system at one signalized intersection or on one approach of a signalized

## 2023 DBD Traffic Signal and Accessibility Improvements

intersection as indicated.

Materials: The Video Detection System Complete Intersection shall be one of the following systems:

- Autoscope Vision
- Iteris Vantage Next

All the cables from the detection camera(s) to the traffic signal cabinet and within the traffic signal cabinet itself shall be included in the cost of this item.

The Video Detection System shall also include a LCD monitor in the traffic signal cabinet with HDMI connector for video input. Surge protection and grounding shall be provided to protect the video detection cameras and components located in the traffic signal cabinet.

When camera mounting locations, cables, and quantities are shown in the plan, those are intended to be representative only, and they may not reflect the specific requirements of all the approved systems. The Contractor shall be solely responsible for confirming the exact distances based on the detection zones and the manufacturer's recommended mounting locations prior to procuring the materials.

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

**General:** The detection system shall be capable of detecting vehicles within the detection zones shown on the plans, including stopped vehicles, and vehicles entering from driveways, parking areas, or side streets adjacent to the detection zone. At the time catalog cuts are submitted, the Contractor shall provide an exhibit prepared by the vendor/equipment supplier showing the proposed location and mounting of the camera(s) to achieve the required detection, including the proposed cabling requirements of the particular detection system proposed.

The as-built plans shall indicate the type and location of the camera(s) and cables installed under this pay item.

**Installation:** The video detection camera(s) shall be installed at the highest available location that meets the manufacturer's recommendations. If a lower mounting is proposed, the Contractor shall provide a written explanation of the need for alternate mountings. The Contractor shall take care to ensure that the proposed mounting locations do not result in obstructed camera views due to overhead utility wires or other existing features at the intersection.

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

If the detection system is installed in a traffic signal cabinet with a network switch (Layer II or Layer III), it shall be capable of communicating over 10/100 Base T Ethernet and shall be connected to the switch with an Ethernet patch cable. The Contractor shall be responsible for programming the network settings and other parameters to establish operations within the County network. Except where indicated

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otherwise in the special provisions or plans, DUDOT will provide the IP address upon request.

Basis of Payment: This item will be paid for at the contract unit price per each for VIDEO DETECTION SYSTEM COMPLETE INTERSECTION or VIDEO DETECTION SYSTEM, SINGLE APPROACH. The unit price shall include all associated equipment, hardware, mounting equipment, cables, materials and labor required to install the system at one signalized intersection or one signalized approach as indicated and place it into operation to the satisfaction of the Traffic Engineer. If required, the cost of the J-hook(s) or riser(s) shall be included in the cost of VIDEO DETECTION SYSTEM COMPLETE INTERSECTION. If required, the LAYER II (DATALINK) SWITCH and/or the LAYER III (NETWORK) SWITCH will be paid for separately.

### 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.

### LED CONFIRMATION BEACONS

This item shall consist of furnishing and installing a Traffic Signal Emergency Confirmation Beacon (single channel or dual channel) at the locations specified on the plans and as described as follows for intersections which have existing emergency preemption systems previously installed.

LED Confirmation Beacon, Single Channel - Where the light detector is used to detect a single direction of traffic, one LED lamp for only that direction shall be provided. In cases where the detector covers opposing directions of traffic and has a single output, a separate lamp for each direction shall be provided but they shall have identical indications.

LED Confirmation Beacon, Dual Channel - A separate LED lamp with appropriate separate indications

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for each direction shall be provided.

It shall be the Contractor's responsibility to verify the existing brand of emergency vehicle equipment at the intersection and the confirmation beacons must be completely compatible with all existing components. The Confirmation Beacon shall consist of a 6-watt Par 38 LED flood lamp with a 30-degree light spread, or a 7 watt Par 30 LED flood lamp with a 15 degree or greater spread, maximum 7 watt energy consumption at 120V, and a 2,000 hour warranty for each direction of pre-emption. The lamp shall have an adjustable mount with a weatherproof enclosure for cable splicing. All hardware shall be cast aluminum or stainless steel. No new holes may be drilled into signal poles, mast arms, or posts. The LED Confirmation Beacon shall be mounted to the existing light detector hardware as shown on the mounting detail in the plans. In order to maintain uniformity between communities, the LED Confirmation Beacons shall indicate when the control equipment receives the pre-emption signal. The pre-emption movement shall be signaled by a flashing indication at the rate specified by Section 4L.01 of the "Manual on Uniform Traffic Control Devices," and other applicable sections of future editions. The stopped pre-empted movements shall be signaled by a continuous indication.

Any modification required to the existing light detector installation to meet the requirements of the mounting detail shown in the plans shall be included in this item.

Basis of Payment. This work will be paid for at the contract unit price per each for LED CONFIRMATION BEACONS and shall include furnishing, installation, and mounting hardware.

### 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

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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.

### SHROUD (SPECIAL)

Description: This item shall consist of furnishing and installing a SHROUD (SPECIAL) to existing mast arm assemblies. The locations specified in the plans indicate locations that the shroud is missing or damaged. The Contractor shall remove damaged shrouds, clean and prepare the mast arm base assemblies, and install the new SHROUD (SPECIAL).

Materials: The SHROUD (SPECIAL) shall be similar in kind as the existing shrouds in the downtown area and shall be manufactured by Valmont. The paint shall be Acrolon 218 HS two-part acrylic polyurethane by Sherwin Williams. The paint color shall match the existing paint in use at the location or as directed by the Engineer. All materials shall be reviewed by the Village prior to the Contractor ordering for installation.

Basis of Payment. This work will be paid for at the contract unit price per each for SHROUD (SPECIAL) and shall include furnishing, installation, and mounting hardware.

### 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,

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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.

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- 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.

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### 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.

### HYBRID POWER RELAY

Description: This work shall consist of furnishing and installing a Hybrid Power Relay to replace the existing mercury displacement relay in the existing traffic signal cabinet.

The Hybrid Power Relay shall be the following or approved equal:

- Struthers-Dunn 418 – 75 AMP Hybrid Power Relay

The Contractor shall properly dispose of the existing mercury displacement relay in accordance with all environmental regulations.

Basis of Payment: This item will be paid for at the contract unit price per each for HYBRID POWER RELAY. The unit price shall include all equipment, materials and labor required to furnish, install,

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configure, and place into operation the terminal server to the satisfaction of the Traffic Engineer.

### CONSTRUCTION LAYOUT

Description: The Contractor shall furnish and place all construction layout stakes for this project. Competent personnel with suitable equipment shall conduct this work, supervised by a licensed Illinois Land Surveyor. The Contractor shall be responsible for having the finished work conform substantially to the lines, grades, elevations and dimensions shown on the plans.

The Contractor shall provide adequate control points to construct the individual Project elements, and shall provide the Engineer with adequate control in close proximity to check the compliance of the elements constructed.

Basis of Payment: This work will be paid for at the contract LUMP SUM price for CONSTRUCTION LAYOUT, which price shall be payment in full for the work as specified herein.

### PRECONSTRUCTION VIDEO TAPING

Description: This work shall consist of furnishing all materials and labor required to perform a videotape survey of the construction limits, adjacent right-of-way, and adjacent structures bordering the work. This shall include, but not be limited to, existing buildings, garages, pavements, curb and gutter, sidewalks, fences, trees and landscaping. Two (2) copies of the videotape shall be furnished to the Village on a flash drive. Videotaping shall be performed by a reputable company meeting the approval of the Owner, in the presence of a representative of the Owner, and shall be performed prior to the commencement of construction. The videotape survey shall serve as a basis for establishing damage that has occurred as a result of construction operations.

Basis of Payment: This work will be paid for at the contract LUMP SUM price for PRECONSTRUCTION VIDEO TAPING, which price shall be payment in full for the work as specified herein.

### AGGREGATE FOR TEMPORARY ACCESS

Description: This work shall consist of construction and maintenance of an aggregate surface course for abutting properties as part of construction operations, per the applicable portions of Article 107.09 of the SSRBC except as amended herein.

Coarse aggregate shall meet the gradation for CA-6, and meet the requirements of Article 1004.04 of the SSRBC.

The temporary aggregate shall be used as ramping between the new aggregate base and all side streets, abutting properties, and crosswalks where vehicle and pedestrian traffic is to be maintained. Removal and disposal of the temporary aggregate shall be considered incidental to this item. The Engineer may require that some or all of the temporary aggregate be reused within the project limits.

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When temporary access is no longer required, the aggregate placed for its construction and maintenance shall be removed and utilized in the permanent construction or otherwise disposed of as specified in Article 202.03 of the SSRBC. The Engineer reserves the right to determine suitability for utilization of reclaimed asphalt pavement used in the construction of temporary access in the permanent construction.

This work will be measured in place in tons. The Contractor shall submit the load ticket to the Engineer at the work site when the truck arrives.

Basis of Payment. This work will be paid for at the contract unit price per cubic yard for AGGREGATE FOR TEMPORARY ACCESS, which price shall include all costs of furnishing, placing, maintaining, removing and reusing, and removing and disposing of aggregate used in the construction of temporary access.

### **EXPLORATION TRENCH, SPECIAL**

#### Description.

This work shall consist of excavating a trench for the purpose of verifying clearances and locations of existing private and public utilities and storm sewers prior to constructing proposed utilities. The exploration trench shall be constructed at the locations as determined by the Engineer and in accordance with Article 213.02 of the Standard Specifications, except as modified herein.

The depth of the trench shall be variable, but shall be deep enough to locate all potential conflicts. The width of the trench shall be sufficient to allow proper investigation of the entire trench. The exploration trench shall be backfilled with gradation CA 6 stone, the cost of which shall be included in the item of EXPLORATION TRENCH, SPECIAL.

Measurement. This work will be measured for payment per horizontal lineal foot of actual trench constructed.

Basis of Payment. This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH, SPECIAL, regardless of the depth required, and no extra compensation will be allowed for any delays, inconveniences or damages sustained by the Contractor performing the work.

### **STREET SWEEPING AND DUST CONTROL**

All roadway surfaces shall be kept free of dirt, mud, dust and debris of any kind throughout every phase of the project. Dirt, mud, dust and debris of any kind shall be removed from the roadway surface to the satisfaction of the Engineer by any one or combination of the following: approved mechanical sweeping equipment, manual labor, or other approved techniques.

Whenever ordered by the Engineer, especially for locations subject to a particularly high volume of traffic, the Contractor shall mechanically sweep the work site.

Basis of Payment: This work will be paid for at the contract unit price per hour for STREET SWEEPING AND DUST CONTROL, which price shall be payment in full for the work as specified herein.

2023 DBD Traffic Signal and Accessibility Improvements

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:**

Alliance Contractors, Inc.

2/8/2023

Company Name

Date

1166 Lake Ave.

estimating@alliancecontractors.com

Street Address of Company

E-mail Address

Woodstock, IL 60098

Scott A. Marquart

City, State, Zip

Contact Name (Print)

(815) 338-5900

(815) 338-5900

Business Phone

24-Hour Telephone

(815) 338-9109



Business Fax

Signature of Officer, Partner, or Sole Proprietor

ATTEST: if a Corporation

Scott A. Marquart, Vice President



Print Name & Title

Signature of Assistant Secretary

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.

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SCHEDULE OF PRICES:

PAY ITEM NUMBER	ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1	TEMPORARY FENCE	FOOT	395	10.00	3950.00
2	TREE ROOT PRUNING	FOOT	140	14.00	1960.00
3	EARTH EXCAVATION	CU YD	131	10.00	1310.00
4	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	25	10.00	250.00
5	GROWTH-INHIBITING EROSION CONTROL BLANKET	SQ YD	73	20.00	1460.00
6	SOD RESTORATION	SQ YD	73	83.00	6059.00
7	SOIL AND MULCH LANDSCAPING BED	SQ YD	88	95.00	8360.00
8	SUPPLEMENTAL WATERING	UNIT	2	100.00	200.00
9	PERIMETER EROSION BARRIER	FOOT	40	16.00	640.00
10	INLET FILTERS	EACH	12	150.00	1800.00
11	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	11	900.00	9900.00
12	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	630	16.50	10395.00
13	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, COLORED, CALIFORNIA FINISH	SQ FT	7,920	17.75	140580.00
14	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, COLORED WITH SCORED PATTERN	SQ FT	1,860	23.75	44175.00
15	DETECTABLE WARNINGS	SQ FT	556	40.00	22240.00
16	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	60	10.00	600.00
17	COMBINATION CURB AND GUTTER REMOVAL	FOOT	795	50.00	39750.00

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18	SIDEWALK REMOVAL (SPECIAL)	SQ FT	7,740	5.00	38700.00
19	BRICK SIDEWALK REMOVAL	SQ FT	3,240	5.00	16200.00
20	TEMPORARY BITUMINOUS PATCH	TON	30	100.00	3000.00
21	ACCELERATED PORTLAND CEMENT CONCRETE PATCHING, CLASS B, 10 INCHES	SQ YD	217	530.00	114930.00
22	CLASS D PATCHES, SPECIAL	SQ YD	414	300.00	124200.00
23	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	1	250.00	250.00
24	FRAMES AND LIDS TO BE ADJUSTED	EACH	4	250.00	1000.00
25	FRAMES AND LIDS TO BE ADJUSTED, SANITARY	EACH	1	750.00	750.00
26	TREE GRATE REMOVAL AND REPLACEMENT	EACH	3	2000.00	6000.00
27	CONCRETE CURB, TYPE B, 6", COLORED	FOOT	62	49.00	3038.00
28	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	795	65.00	51675.00
29	MOBILIZATION	L SUM	1	141220.00	141220.00
30	HAULING SURCHARGE, NON-HAZARDOUS SPECIAL WASTE	LOAD	10	500.00	5000.00
31	TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC	L SUM	1	12350.00	12350.00
32	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	259	20.00	5180.00
33	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	301	9.50	2859.50
34	PAVEMENT MARKINGS, SPECIAL	SQ FT	5,950	12.00	71400.00
35	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	60	37.10	2226.00
36	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	30	45.50	1365.00

## 2023 DBD Traffic Signal and Accessibility Improvements

37	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	4800.00	28800.00
38	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	19	298.00	5662.00
39	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	3,084	2.10	6476.40
40	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	257	2.50	642.50
41	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	178	2.80	498.40
42	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2,589	2.90	7508.10
43	CONCRETE FOUNDATION, TYPE A	FOOT	32	572.00	18304.00
44	DRILL EXISTING HANDHOLE	EACH	7	437.00	3059.00
45	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	34	985.00	33490.00
46	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	16	903.00	14448.00
47	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	1188.00	4752.00
48	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4	1284.00	5136.00
49	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	36	645.00	23220.00
50	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	38	258.00	9804.00
51	ILLUMINATED SIGN, LED	EACH	1	3542.00	3542.00
52	REMOVE EXISTING SERVICE INSTALLATION	EACH	2	1200.00	2400.00
53	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,347	0.50	1673.50

## 2023 DBD Traffic Signal and Accessibility Improvements

54	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4	1920.00	7680.00
55	REBUILD EXISTING HANDHOLE	EACH	2	2015.00	4030.00
56	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1	240.00	240.00
57	CAMERA MOUNTING ASSEMBLY	EACH	1	5229.00	5229.00
58	FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	269	15.70	4223.30
59	OUTDOOR RATED NETWORK CABLE	FOOT	169	9.20	1554.80
60	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	2	3328.00	6656.00
61	FIBER OPTIC SPLICE ENCLOSURE	EACH	3	2103.00	6309.00
62	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1	4698.00	4698.00
63	LAYER II (DATALINK) SWITCH	EACH	1	4896.00	4896.00
64	TERMINATE FIBER IN CABINET	EACH	12	287.00	3444.00
65	SPLICE FIBER IN CABINET	EACH	18	221.00	3978.00
66	CONDUIT SPLICE	EACH	5	572.00	2860.00
67	HANDHOLE TO BE ADJUSTED	EACH	11	2015.00	22165.00
68	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	4	6638.00	26552.00
69	PEDESTRIAN PUSH-BUTTON POST, TYPE A, SPECIAL	EACH	7	2763.00	19341.00
70	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	36	1466.00	52776.00
71	MODIFY EXISTING CONTROLLER AND CABINET, SPECIAL	EACH	4	1363.00	5452.00
72	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1	557.00	557.00

## 2023 DBD Traffic Signal and Accessibility Improvements

73	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	3	34609.00	103827.00
74	PROGRAM ITS EQUIPMENT	EACH	1	10160.00	10160.00
75	LED CONFIRMATION BEACONS	EACH	9	644.00	5796.00
76	FIBER OPTIC PATCH PANEL	EACH	2	1389.00	2778.00
77	SHROUD (SPECIAL)	EACH	2	7135.00	14270.00
78	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	6	1820.00	10920.00
79	TERMINAL SERVER	EACH	1	4906.00	4906.00
80	CONSTRUCTION LAYOUT	L SUM	1	5400.00	5400.00
81	PRECONSTRUCTION VIDEO TAPING	L SUM	1	2500.00	2500.00
82	AGGREGATE FOR TEMPORARY ACCESS	CU YD	200	1.00	200.00
83	EXPLORATION TRENCH, SPECIAL	FOOT	125	1.00	125.00
84	STREET SWEEPING AND DUST CONTROL	HOUR	26	150.00	3900.00
85	HYBRID POWER RELAY	EACH	5	3550.00	17750.00

BID TOTAL 1,433,581.50



### Local Public Agency Proposal Bid Bond



Local Public Agency <b>Village of Downers Grove</b>	County <b>DuPage</b>	Section Number
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WE, Alliance Contractors, Inc., 1188 Lake Avenue, Woodstock, IL 60098 as PRINCIPAL, and Travelers Casualty and Surety of America, 215 Shuman Blvd., Naperville, IL 60563 as SURETY, are held jointly, severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 8<sup>th</sup> of February, 2023  
Day Month and Year

#### Principal

Company Name <b>Alliance Contractors, Inc.</b>	
Signature <i>Scott A. Marquart</i>	Date <b>2/8/2023</b>
Title <b>Vice President</b>	

Company Name	
Signature	Date
Title	

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

#### Surety

Name of Surety <b>Travelers Casualty and Surety of America</b>
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Signature of Attorney-in-Fact <i>Kathleen Stewart</i>	Date <b>2/8/23</b>
--	-----------------------

STATE OF IL  
COUNTY OF

I, Dawn L. Thibadeau, a Notary Public in and for said county do hereby certify that  
Scott A. Marquart and Kathleen Stewart

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 8<sup>th</sup> day of February, 2023  
Day Month and Year



Notary Public Signature <i>D. Thibadeau</i>
Date commission expires <u>5/13/26</u>





Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Kathleen Stewart of Chicago / Naperville, Illinois, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

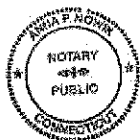
City of Hartford ss.

By: [Signature] Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026



[Signature] Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 21st day of February, 2021



[Signature] Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.



Karena Rios  
Account Manager, Construction Services, Travelers Bond  
215 Shuman Blvd., Naperville, IL 60563  
Telephone: (630) 961-7162  
Fax: (866)216-5979  
Email: krios4@travelers.com

February 8, 2023

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

**RE:** Alliance Contractors Inc.  
1166 Lake Avenue, Woodstock, IL 60098

**Project:** 2023 DBD Traffic Signal & Accessibility  
Downers Grove, IL

Ladies and Gentlemen:

We are pleased to share with you our experience as surety for ALLIANCE CONTRACTORS, INC. We consider ALLIANCE CONTRACTORS, INC. one of our outstanding and most valued clients in whom we have the highest confidence. Through the years this company has, in our opinion, remained properly financed, well equipped and capably managed.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA is prepared to give favorable consideration to the execution of contract performance and payment bonds running to the Owner, in association with the 2023 DBD Traffic Signal & Accessibility Project. We understand that ALLIANCE CONTRACTORS, INC.'s contract is in the \$7,000,000.00 Single to \$20,000,000.00 Aggregate range.

Our willingness to provide surety credit on this project is subject to ALLIANCE CONTRACTORS, INC.'S acceptance of an award of the contract, ALLIANCE CONTRACTORS, INC. applying to the TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA on or about the day work is scheduled to begin for bonding, and ALLIANCE CONTRACTORS, INC. and us, as surety, determining that the contract documents, contract specifications and bond forms are acceptable.

We are pleased to share with you our experience with this fine organization. If you require any additional information, please let us know.

Best regards,

TRAVELERS CASUALTY AND SURETY  
COMPANY OF AMERICA

Karena Rios  
Attorney-in-Fact





# Certificate of Eligibility

Contractor No 0103

Alliance Contractors, Inc.  
1166 Lake Avenue Woodstock, IL 60098

WHO HAS FILED WITH THE DEPARTMENT AN APPLICATION FOR PREQUALIFICATION STATEMENT OF EXPERIENCE, EQUIPMENT AND FINANCIAL CONDITION IS HEREBY QUALIFIED TO BID AT ANY OF DEPARTMENT OF TRANSPORTATION LETTINGS IN THE CLASSES OF WORK AND WITHIN THE AMOUNT AND OTHER LIMITATIONS OF EACH CLASSIFICATION, AS LISTED BELOW, FOR SUCH PERIOD AS THE UNCOMPLETED WORK FROM ALL SOURCES DOES NOT EXCEED \$101,597,000.00

001	EARTHWORK	\$5,775,000
002	PCC PAVING	\$21,350,000
005	HMA PAVING	\$625,000 B
012	DRAINAGE	\$3,525,000
014	ELECTRICAL	\$350,000
017	CONCRETE CONSTRUCTION	\$6,125,000
022	FENCING	\$100,000
023	GUARDRAIL	\$175,000
026	SIGNING	\$525,000
032	COLD MILL, PLAN. & ROTOMILL	\$450,000
034	DEMOLITION	\$400,000
08A	AGGREGATE BASES & SURF. (A)	\$2,750,000
09C	HWY., R.R. & WATERWAY STR.	\$5,650,000

THIS CERTIFICATE OF ELIGIBILITY IS VALID FROM 7/19/2022 TO 7/31/2023 INCLUSIVE, AND SUPERSEDES ANY CERTIFICATE PREVIOUSLY ISSUED, BUT IS SUBJECT TO REVISION OR REVOCATION, IF AND WHEN CHANGES IN THE FINANCIAL CONDITION OF THE CONTRACTING FIRM OR OTHER FACTS JUSTIFY SUCH REVISIONS OR REVOCATION. ISSUED AT SPRINGFIELD, ILLINOIS ON 7/19/2022.

B Restricted to 1200 tons in any 1 contract (Class I and/or B&M) or as specified by local agency

*[Signature]*  
Engineer of Construction

## 2023 DBD Traffic Signal and Accessibility Improvements

**BIDDER'S CERTIFICATION (page 1 of 3)**

With regard to 2023 DBD Traffic Signal & Accessibility Imp., Bidder Alliance Contractors, 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.

2023 DBD Traffic Signal and Accessibility Improvements

**BIDDER'S CERTIFICATION (page 2 of 3)**

BY: Scott A. Marquart  
Bidder's Authorized Agent



3 6 - 2 9 0 2 8 5 0

FEDERAL TAXPAYER IDENTIFICATION NUMBER

or \_\_\_\_\_  
Social Security Number



Subscribed and sworn to before me  
this 8th day of February, 2023.

Dawn L. Thibadeau  
Notary Public

(Fill Out Applicable Paragraph Below)

(a) **Corporation**

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

President: Michael J. Paulson

Secretary: Helen J. Ruth

Treasurer: \_\_\_\_\_

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: \_\_\_\_\_

2023 DBD Traffic Signal and Accessibility Improvements

**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: Cincinnati Insurance Company

AGENT: Arthur J. Gallagher Risk Management Services, Inc.

Street Address: 240 Commerce Dr.


City, State, Zip Code: Crystal Lake, IL 60014

Telephone Number: (815) 459-6300

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: Alliance Contractors, Inc.

Print Name and Title of Authorizing Signature: Scott A. Marquart, Vice President

Signature: 

Date: 2/8/2023

2023 DBD Traffic Signal and Accessibility Improvements

**MUNICIPAL REFERENCE LIST**

Municipality: Please see attached.

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Contract Value: \_\_\_\_\_ Date of Completion: \_\_\_\_\_

Municipality: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Contract Value: \_\_\_\_\_ Date of Completion: \_\_\_\_\_

Municipality: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Contract Value: \_\_\_\_\_ Date of Completion: \_\_\_\_\_

Municipality: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Contract Value: \_\_\_\_\_ Date of Completion: \_\_\_\_\_

Municipality: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Contract Value: \_\_\_\_\_ Date of Completion: \_\_\_\_\_

**ALLIANCE CONTRACTORS, INC.**

1166 LAKE AVENUE • WOODSTOCK, ILLINOIS 60098

OFFICE: 815/338-5900 FAX: 815/338-9109

[www.alliancecontractors.com](http://www.alliancecontractors.com)CONTRACTOR JOB REFERENCES

Job Name: Downtown Streetscape Improvements

Contact: Village of Huntley

Phone No.: 847-515-5200

Type of Work: Reconstruction of Downtown

Contract Amount \$ 2,928,890.58

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Job Name: Des Plaines River Road Construction

Contact: City of Des Plaines

Phone No.: 847-391-5300

Type of Work: Reconstruction

Contract Amount \$ 23,668,084.59

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Job Name: Oak Park Village Hall

Contact: Village of Oak Park

Phone No. 708-383-6400

Type of Work: Parking Lot Rehab

Contract Amount \$ 1,344,461.00

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Job Name: Pilot Gas Station/Rochelle

Contact: Curran Contracting Company

Phone No. 815-455-5100

Type of Work: Concrete Paving

Contract Amount \$ 1,071,742.60

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Job Name: DuPage Co. 2020 Bridge Repairs

Contact: DuPage County Div. of Transportation

Phone No.: 630-407-6900

Type of Work: Bridge Repairs

Contract Amount \$ 630-407-6900

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Job Name: Burlington @ Bolcum/Kane Co.

Contact: Kane Co. Div. of Transportation

Phone No.: 630-584-1170

Type of Work: Roundabout Construction

Contract Amount \$ 782,297.00

**ALLIANCE CONTRACTORS, INC.**

1166 LAKE AVENUE • WOODSTOCK, ILLINOIS 60098

OFFICE: 815/338-5900 FAX: 815/338-9109

[www.alliancecontractors.com](http://www.alliancecontractors.com)

In the past five (5) years, Alliance Contractors, Inc., has completed many projects for the Illinois Department of Transportation, including, but not limited to:

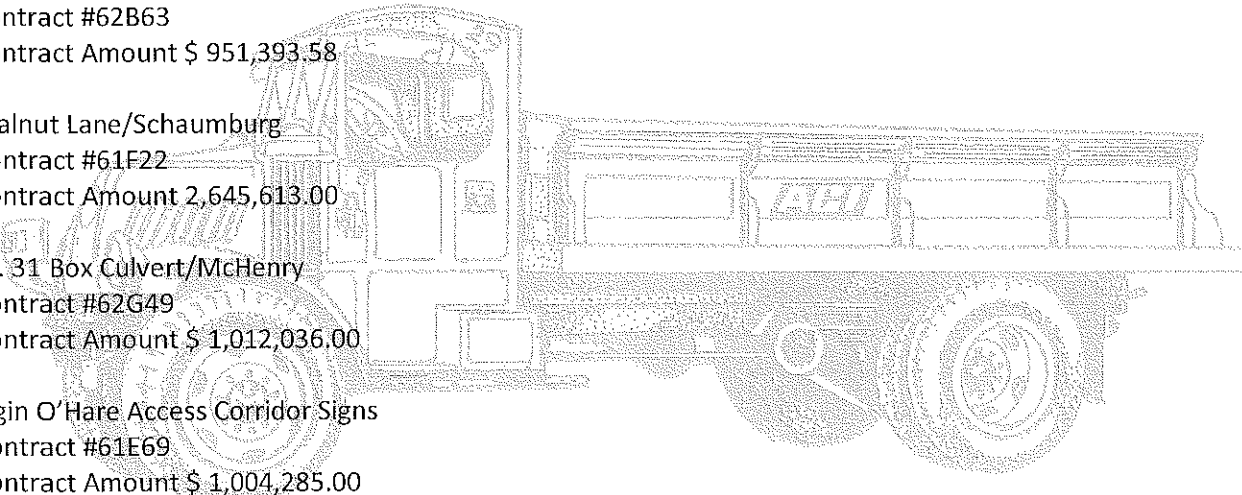
East Avenue/Streamwood  
Contract #61E72  
Contract Amount \$ 459,642.73

Willow Springs Road/Countryside  
Contract #62B63  
Contract Amount \$ 951,393.58

Walnut Lane/Schaumburg  
Contract #61F22  
Contract Amount 2,645,613.00

Rt. 31 Box Culvert/McHenry  
Contract #62G49  
Contract Amount \$ 1,012,036.00

Elgin O'Hare Access Corridor Signs  
Contract #61E69  
Contract Amount \$ 1,004,285.00



For information regarding performance, contact: Illinois Department of Transportation  
201 West Center Court  
Schaumburg, IL 60196-1096  
Phone: 847-705-4110

2023 DBD Traffic Signal and Accessibility Improvements

**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) Gallagher Asphalt Type of Work Pvt. Mkgs. Spl.  
Addr: 18100 Indiana Ave. City Thornton State IL Zip 60170

2) TCP, LLC Type of Work Traffic Control  
Addr: 285 Miles Parkway City Bartlett State IL Zip 60103

3) Hamilton Consulting Eng. Type of Work Layout  
Addr: 3230 Executive Dr. City Tollet State IL Zip 60431

4) Howe Tower Elec. Type of Work ELECTRICAL  
Addr: PO Box 863 City Lake Villa State IL Zip 60040

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: 282023 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

2023 DBD Traffic Signal and Accessibility Improvements

CERTIFICATION OF QUALIFICATIONS

Project Team

Project Manager: TBD - see attached Leadership Listing

Superintendent: \_\_\_\_\_

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: *Satt Arjant* (Corporate Seal)

Title: Vice President

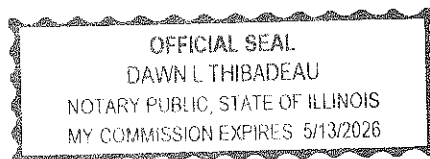
Name & Address: Alliance Contractors, Inc.

of Contractor 1166 Lake Ave.

or Vendor Woodstock, IL 60098

Subscribed and sworn to before me this 8th day of February, 2023

*D. Thibadeau*  
Notary Public



Individual's Name	Present Position	Years Experience	Type of Work	In What Capacity
Charles W. Ruth	CEO	55	Road Construction	Estimator
Michael J. Paulson	President	44	Road Construction	Estimator
Scott A. Marquart	Vice President	42	Road Construction	Estimator/ Quality Control
Rodney F. Hisel	Vice President	42	Road Construction	Superintendent
Thomas Michelsen	Foreman	39	Road Construction	Bridge Foreman
Russell Lovins	Foreman	39	Road Construction	General Foreman
Doug Hauri	Shop Foreman	35	Road Construction	Mechanic/Shop Foreman
James Meyer	Foreman	31	Road Construction	Concrete Foreman
Eric Diedrick	Quality Control	28	Road Construction	Quality Control
Brad Spiniolas	Superintendent	24	Road Construction	Superintendent
Scott Ruth	Vice President	21	Road Construction	Supt/Quality Control
Roger Bates	Quality Control	21	Road Construction	Quality Control
Rogelio Torres	Foreman	17	Road Construction	Foreman
Eric Ruth	Vice President	20	Road Construction	Estimator/Vice-President
Kurt Montanye	Superintendent	19	Road Construction	Superintendent
Daniel Privett	Quality Control	19	Road Construction	Quality Control
Nate Fruin	Foreman	15	Road Construction	General Foreman
Bill Kline	Foreman	15	Road Construction	Bridge Foreman
Keith Montanye	Foreman	12	Road Construction	General Foreman
Jorge Rico	Foreman	23	Road Construction	General Foreman

2023 DBD Traffic Signal and Accessibility Improvements



**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: Alliance Contractors, Inc.  
 ADDRESS: 1166 Lake Ave.  
 CITY: Woodstock  
 STATE: IL  
 ZIP: 60098  
 PHONE: (815) 338-5900 FAX: (815) 338-9109  
 TAX ID #(TIN): 36-2902850

(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: *[Signature]* DATE: 2/8/2023

## 2023 DBD Traffic Signal and Accessibility Improvements

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: Alliance Contractors, 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.**

---

Please see attached.

---

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: Scott A. Marquart

Signature: 

Date: 2/8/2023

K. Apprenticeship and Training Certification

1. DuPage County Cement Masons Local #803 Joint Apprenticeship Committee
2. Bureau of Apprenticeship and Training Operating Engineers Local #150
3. Chicagoland Laborers Training and Apprenticeship Program
4. Cement Masons Area Joint Apprenticeship and Cement Masons Union Local #502
5. Chicago and Northeast Illinois District Council of Carpenters Apprenticeship and Training Program

## 2023 DBD Traffic Signal and Accessibility Improvements

<b>BUY AMERICA CERTIFICATION</b>
----------------------------------

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

*Instructions:*

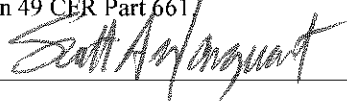
*Bidder to complete the Buy America Certification listed below. Bidder shall certify EITHER COMPLIANCE OR NON-COMPLIANCE (not both). This Certification MUST BE submitted with the Bidder's bid response.*

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

<b><i>Certificate of Compliance</i></b>
---

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 Alliance Contractors, Inc.Title Vice PresidentDate 2/8/2023

<b><i>Certificate of Non-Compliance</i></b>
---

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.

## 2023 DBD Traffic Signal and Accessibility Improvements

<b>Suspension or Debarment Certificate</b>
--

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: Alliance Contractors, Inc.

Address: 1166 Lake Ave.

City: Woodstock Zip Code: 60098

Telephone: ( 815 ) 338-5900 Fax Number: ( 815 ) 338-9109

E-mail Address: estimating@alliancecontractors.com

Authorized Company Signature: 

Print Signature Name: Scott A. Marquart Title of Official: Vice President

Date: 2/8/2023

2023 DBD Traffic Signal and Accessibility Improvements

**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.

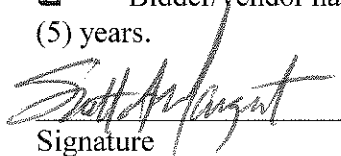
The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

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

Scott A. Marquart  
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

# Illinois Department of Transportation

## Affidavit of Availability

For the Letting of: Jan. 20, 2023

Bureau of Construction  
2300 South Dirksen Parkway/ Room 322  
Springfield, Illinois 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 21024	2 Cont.	3 22001	4 Cont.	Awards Pending	
Contract Number	62633		62K02			
Contract With	IDOT		IDOT			
Estimated Completion Date	5/1/2023		7/1/2023			Accumulated
Total Contract Price	\$4,496,491.00		\$2,935,409.00			Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	\$46,480.00		\$275,876.00			\$322,356.00
Uncompleted Dollar Value if Firm is the Subcontractor						\$0.00
						\$322,356.00

### 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**.

						Accumulated Totals
Earthwork			\$28,434.00			\$28,434.00
Portland Cement Concrete Paving						\$0.00
HMA Plant Mix						\$0.00
HMA Paving						\$0.00
Clean & Seal Cracks / Joints						\$0.00
Aggregate Bases & Surfaces			\$7,216.00			\$7,216.00
Highway, R.R. and Waterway Structures						\$0.00
Drainage						\$0.00
Electrical						\$0.00
Cover and Seal Coats						\$0.00
Concrete Construction	\$4,325.00		\$198,010.00			\$202,335.00
Landscaping						\$0.00
Fencing						\$0.00
Guardrail						\$0.00
Temp Soil Retention	8th					\$0.00
Sound Wall	February	\$2,023.00				\$2,023.00
Cold Milling, Planning & Rotomilling						\$0.00
Demolition						\$0.00
Pavement Markings (Paint)						\$0.00
Signing						\$0.00
Layout						\$0.00
<b>Totals</b>	\$4,325.00	\$2,023.00	\$233,660.00	\$0.00	\$0.00	\$240,008.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined 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 1, list all the work you have subcontracted to others.


	1	Cont.	3	Cont.	Awards Pending
Subcontractor	Resource Illinois	Clean Cut	Schroeder	Mackie	
Type of Work	Spl Waste	Tree Removal	Asphalt	Const. Layout	
Subcontract Price	\$87,700.00	\$5,970.00	\$638,575.00	\$15,900.00	
Amount Uncompleted	\$0.00	\$0.00	\$0.00	\$0.00	
Subcontractor	Galaxy	LPS	Elmund Nelson	Lands. By G. Weiss	
Type of Work	SS	Brick	Electrical	Landscaping	
Subcontract Price	\$52,165.00	\$39,744.00	\$724,624.00	\$38,268.00	
Amount Uncompleted	\$0.00	\$0.00	\$0.00	\$0.00	
Subcontractor	D2K	Mackie	Horvath		
Type of Work	Traffic Control	Const. Layout	Spl Waste		
Subcontract Price	\$381,096.00	\$34,900.00	\$88,400.00		
Amount Uncompleted	\$0.00	\$0.00	\$0.00		
Subcontractor	Peter Baker	Home Towne	D2K		
Type of Work	Asphalt	Electrical	Pvt Marking		
Subcontract Price	\$1,035,928.00	\$1,103,289.00	\$29,656.00		
Amount Uncompleted	\$0.00	\$42,155.00	\$29,656.00		
Subcontractor	Espinoza		Traffic Contr & Prot		
Type of Work	Landscaping		Traffic Control		
Subcontract Price	\$33,119.00		\$107,570.00		
Amount Uncompleted	\$0.00		\$12,560.00		
Total Uncompleted	\$0.00	\$42,155.00	\$42,216.00	\$0.00	\$0.00

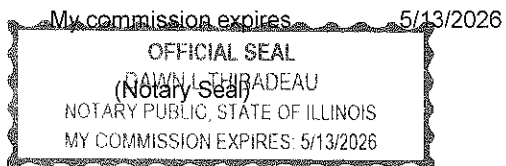
I, being duly sworn, do hereby declare that this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion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

Subscribed and sworn to before me  
 this 8th day of  
February 2023

  
 Notary Public

Type or Print Name Scott A. Marquart, Vice President  
 Officer or director Title

Signed 



Company Alliance Contractors, Inc.  
 Address 1166 Lake Avenue  
Woodstock, Illinois 60098

# Illinois Department of Transportation

## Affidavit of Availability

For the Letting of: Jan. 20, 2023

Bureau of Construction  
2300 South Dirksen Parkway/ Room 322  
Springfield, Illinois 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**.

	5 22009	6 Cont.	7 Cont.	8 22011	Cont.	
Contract Number	61H35			61E87		
Contract With	IDOT			IDOT		
Estimated Completion Date	6/1/2023			12/1/2023		Accumulated
Total Contract Price	\$1,093,662.00			\$4,371,729.00		Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	\$568,559.00			\$4,371,729.00		\$5,262,644.00
Uncompleted Dollar Value if Firm is the Subcontractor						\$0.00
						\$5,262,644.00

### 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**.

						Accumulated Totals
Earthwork	\$56,412.00			\$565,263.00		\$650,109.00
Portland Cement Concrete Paving	\$34,088.00			\$290,213.00		\$324,301.00
HMA Plant Mix						\$0.00
HMA Paving						\$0.00
Clean & Seal Cracks / Joints						\$0.00
Aggregate Bases & Surfaces	\$6,547.00			\$115,997.00		\$129,760.00
Highway, R.R. and Waterway Structures						\$0.00
Drainage						\$0.00
Electrical						\$0.00
Cover and Seal Coats						\$0.00
Concrete Construction	\$57,089.00			\$273,315.00		\$532,739.00
Landscaping						\$0.00
Fencing						\$0.00
Guardrail						\$0.00
Temp Soil Retention	8th					\$0.00
Sound Wall	February	\$2,023.00				\$4,046.00
Cold Milling, Planning & Rotomilling						\$0.00
Demolition						\$0.00
Pavement Markings (Paint)						\$0.00
Signing						\$0.00
Layout						\$0.00
<b>Totals</b>	\$154,136.00	\$2,023.00	\$0.00	\$1,244,788.00	\$0.00	\$1,640,955.00

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined 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.**

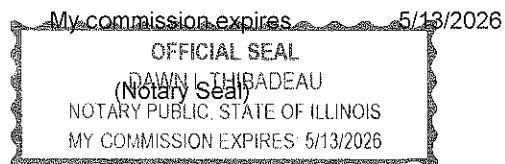
For each contract described in Part 1, list all the work you have subcontracted to others.

	5	Cont.	Cont.	8	Cont.
Subcontractor	Homer	Western Remac	Metromex	Resource Cons.	Traffic Contr & Prot
Type of Work	Tree Removal	Signage	Asphalt	Spl Waste	Traffic Control
Subcontract Price	\$8,453.00	\$24,408.00	\$111,580.00	\$24,625.00	\$133,163.00
Amount Uncompleted	\$0.00	\$24,408.00	\$111,580.00	\$24,625.00	\$133,163.00
Subcontractor	Resource Cons.	Utility Dynamics		Lands. By G Weiss	Ray Edwards
Type of Work	Spl Waste	Electrical		Landscaping	Underground
Subcontract Price	\$76,522.00	\$170,368.00		\$300,000.00	\$601,087.00
Amount Uncompleted	\$16,724.00	\$112,045.00		\$300,000.00	\$601,087.00
Subcontractor	Quigg Eng.	Work Zone Safety		Clean Cut	Home Towne
Type of Work	Const. Layout	Traffic Control		Tree Removal	Electrical
Subcontract Price	\$5,965.00	\$39,282.00		\$5,375.00	\$669,567.00
Amount Uncompleted	\$1,965.00	\$21,715.00		\$5,375.00	\$669,567.00
Subcontractor	A. Horn	Conin		Mackie Cons.	Northern
Type of Work	Masonry	Landscaping		Const. Layout	Railing
Subcontract Price	\$62,920.00	\$40,230.00		\$22,500.00	\$131,232.00
Amount Uncompleted	\$62,920.00	\$40,230.00		\$22,500.00	\$131,232.00
Subcontractor	Northern	Marking Spec.		Traffic Control Co.	Schroeder
Type of Work	Railing	Pvt Marking		Pvt Marking	Asphalt
Subcontract Price	\$8,000.00	\$14,836.00		\$24,392.00	\$1,215,000.00
Amount Uncompleted	\$8,000.00	\$14,836.00		\$24,392.00	\$1,215,000.00
Total Uncompleted	\$89,609.00	\$213,234.00	\$111,580.00	\$376,892.00	\$2,750,049.00

I, being duly sworn, do hereby declare that 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.

Subscribed and sworn to before me  
 this 8th day of  
February 2023

  
 Notary Public



Type or Print Name Scott A. Marquart, Vice President  
 Officer or director Title

Signed 

Company Alliance Contractors, Inc.  
 Address 1166 Lake Avenue  
Woodstock, Illinois 60098

# Illinois Department of Transportation

## Affidavit of Availability

For the Letting of: Jan. 20, 2023

Bureau of Construction  
2300 South Dirksen Parkway/ Room 322  
Springfield, Illinois 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**.

	9 22016	10 Cont.	11 22017	12 22018	Awards Pending	
Contract Number	62D30		61H61			
Contract With	IDOT		Home Towne	DuPage Co. Forest Preserve		
Estimated Completion Date	8/1/2023		6/1/2023	5/15/2023		Accumulated
Total Contract Price	\$6,228,576.00		\$14,391.00	\$1,264,628.00		Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	\$6,228,576.00		\$14,391.00	\$123,964.00		\$11,629,575.00
Uncompleted Dollar Value if Firm is the Subcontractor						\$0.00
Total Value of Work						\$11,629,575.00

### 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**.

						Accumulated Totals
Earthwork	\$636,486.00		\$5,632.00			\$1,292,227.00
Portland Cement Concrete Paving	\$1,690,967.00					\$2,015,268.00
HMA Plant Mix						\$0.00
HMA Paving						\$0.00
Clean & Seal Cracks / Joints						\$0.00
Aggregate Bases & Surfaces	\$204,949.00					\$334,709.00
Highway, R.R. and Waterway Structures	\$190,870.00			\$10,244.00		\$201,114.00
Drainage	\$142,290.00					\$142,290.00
Electrical						\$0.00
Cover and Seal Coats						\$0.00
Concrete Construction	\$275,886.00		\$8,759.00			\$817,384.00
Landscaping						\$0.00
Fencing						\$0.00
Guardrail						\$0.00
Temp Soil Retention	8th					\$0.00
Sound Wall	February	\$2,023.00				\$6,069.00
Cold Milling, Planning & Rotomilling						\$0.00
Demolition						\$0.00
Pavement Markings (Paint)						\$0.00
Signing						\$0.00
Layout						\$0.00
<b>Totals</b>	<b>\$3,141,448.00</b>	<b>\$2,023.00</b>	<b>\$14,391.00</b>	<b>\$10,244.00</b>	<b>\$0.00</b>	<b>\$4,809,061.00</b>

Disclosure of this information is **REQUIRED** to accomplish the statutory purpose as outlined 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 1, list all the work you have subcontracted to others.

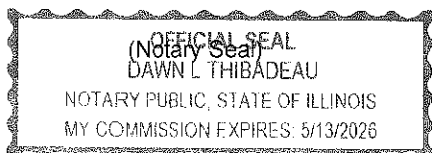
	9	Cont.	11	12	Awards Pending
Subcontractor	JA Johnson	Traf Contr & Prot		McGinty	
Type of Work	Asphalt	Traffic Control		Landscaping	
Subcontract Price	\$270,148.00	\$252,202.00		\$26,234.00	
Amount Uncompleted	<b>\$270,148.00</b>	<b>\$252,202.00</b>		<b>\$0.00</b>	
Subcontractor	Home Towne	Lands, by G Weiss		Bach Steel	
Type of Work	Electrical	Landscaping		Iron Work	
Subcontract Price	\$707,753.00	\$198,156.00		\$384,829.00	
Amount Uncompleted	<b>\$707,753.00</b>	<b>\$198,156.00</b>		<b>\$113,720.00</b>	
Subcontractor	Abitua	Geo Eng.		Mackie	
Type of Work	Underground	Spl Waste		Const. Layout	
Subcontract Price	\$1,483,904.00	\$32,350.00		\$5,800.00	
Amount Uncompleted	<b>\$1,483,904.00</b>	<b>\$32,350.00</b>		<b>\$0.00</b>	
Subcontractor	CES	Clean Cut			
Type of Work	Const. Layout	Tree Removal			
Subcontract Price	\$36,450.00	\$31,830.00			
Amount Uncompleted	<b>\$36,450.00</b>	<b>\$31,830.00</b>			
Subcontractor	Precision	Northern			
Type of Work	Pvt Marking	Railing			
Subcontract Price	\$40,899.00	\$33,436.00			
Amount Uncompleted	<b>\$40,899.00</b>	<b>\$33,436.00</b>			
<b>Total Uncompleted</b>	<b>\$2,539,154.00</b>	<b>\$547,974.00</b>	<b>\$0.00</b>	<b>\$113,720.00</b>	<b>\$0.00</b>

I, being duly sworn, do hereby declare that 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.

Subscribed and sworn to before me  
 this 8th day of  
February 2023

  
 Notary Public

My commission expires 5/13/2026



Type or Print Name Scott A. Marquart, Vice President  
 Officer or director Title

Signed 

Company Alliance Contractors, Inc.

Address 1166 Lake Avenue  
Woodstock, Illinois 60098

# Illinois Department of Transportation

## Affidavit of Availability

For the Letting of: Jan. 20, 2023

Bureau of Construction  
2300 South Dirksen Parkway/ Room 322  
Springfield, Illinois 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**.

	13 22023	14 Cont.	15 22036	16 Cont.	Awards Pending	
Contract Number	61H71		61H44			
Contract With	IDOT		IDOT			
Estimated Completion Date	10/1/2023		10/1/2023			Accumulated
Total Contract Price	\$5,262,614.00		\$8,264,103.00			Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	\$5,262,614.00		\$8,264,103.00			\$25,156,292.00
Uncompleted Dollar Value if Firm is the Subcontractor						\$0.00
						\$25,156,292.00

### 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**.

					Accumulated Totals	
Earthwork	\$470,195.00		\$774,279.00		\$2,536,701.00	
Portland Cement Concrete Paving	\$798,080.00		\$1,199,369.00		\$4,012,717.00	
HMA Plant Mix					\$0.00	
HMA Paving					\$0.00	
Clean & Seal Cracks / Joints					\$0.00	
Aggregate Bases & Surfaces	\$401,264.00		\$417,971.00		\$1,153,944.00	
Highway, R.R. and Waterway Structures			\$218,751.00		\$419,865.00	
Drainage	\$1,130,400.00		\$467,050.00		\$1,739,740.00	
Electrical					\$0.00	
Cover and Seal Coats					\$0.00	
Concrete Construction	\$413,438.00		\$617,461.00		\$1,848,283.00	
Landscaping					\$0.00	
Fencing					\$0.00	
Guardrail					\$0.00	
Temp Soil Retention	8th				\$0.00	
Sound Wall	February	\$2,023.00			\$8,092.00	
Cold Milling, Planning & Rotomilling					\$0.00	
Demolition					\$0.00	
Pavement Markings (Paint)					\$0.00	
Signing					\$0.00	
Layout					\$0.00	
<b>Totals</b>	<b>\$3,213,377.00</b>	<b>\$2,023.00</b>	<b>\$3,694,881.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$11,719,342.00</b>

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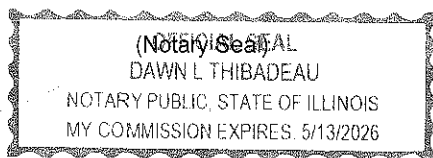
	13	Cont.	15	Cont.	Awards Pending
Subcontractor	JEM	Homer	Home Towne	Traffic Contr & Prot	
Type of Work	Traffic Control	Tree Removal	Electrical	Traffic Control	
Subcontract Price	\$175,172.00	\$16,493.00	\$3,061,118.00	\$147,394.00	
Amount Uncompleted	<b>\$175,172.00</b>	<b>\$16,493.00</b>	<b>\$3,061,118.00</b>	<b>\$147,394.00</b>	
Subcontractor	Metromex	Roadway Lines	McGinty	Maint Coatings	
Type of Work	Asphalt	Pvt Marking	Tree Rem	Pvt Marking	
Subcontract Price	\$559,715.00	\$21,595.00	\$9,792.00	\$60,976.00	
Amount Uncompleted	<b>\$559,715.00</b>	<b>\$21,595.00</b>	<b>\$9,792.00</b>	<b>\$60,976.00</b>	
Subcontractor	Berger	Arteaga	Arteaga	Schroeder	
Type of Work	Underground	Landscaping	Landscaping	Asphalt	
Subcontract Price	\$640,220.00	\$155,021.00	\$69,908.00	\$960,742.00	
Amount Uncompleted	<b>\$640,220.00</b>	<b>\$155,021.00</b>	<b>\$69,908.00</b>	<b>\$960,742.00</b>	
Subcontractor	Resource III.	Elmund Nelson	Brownfield	Surface Const.	
Type of Work	Spl Waste	Electrical	Spl Waste	Asphalt Stamping	
Subcontract Price	\$15,500.00	\$450,031.00	\$35,800.00	\$179,329.00	
Amount Uncompleted	<b>\$15,500.00</b>	<b>\$450,031.00</b>	<b>\$35,800.00</b>	<b>\$179,329.00</b>	
Subcontractor	Quigg		Mackie	LPS	
Type of Work	Const. Layout		Const. Layout	Brick	
Subcontract Price	\$15,490.00		\$29,500.00	\$14,663.00	
Amount Uncompleted	<b>\$15,490.00</b>		<b>\$29,500.00</b>	<b>\$14,663.00</b>	
Total Uncompleted	\$1,406,097.00	\$643,140.00	\$3,206,118.00	\$1,363,104.00	\$0.00

I, being duly sworn, do hereby declare that 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.


Subscribed and sworn to before me  
 this 8th day of  
February 2023

  
 Notary Public

My commission expires 5/13/2026



Type or Print Name Scott A. Marquart, Vice President  
 Officer or director Title

Signed 

Company Alliance Contractors, Inc.

Address 1166 Lake Avenue  
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	17 22052	18 Cont.	19 23002	20	Awards Pending 23001	
Contract Number						
Contract With	Carol Stream		Bolder		Campanella	
Estimated Completion Date	6/30/2023		8/1/2023		8/1/2023	Accumulated
Total Contract Price	\$452,315.00		\$32,300.00		\$190,440.00	Totals
Uncompleted Dollar Value if Firm is the Prime Contractor	\$452,315.00					\$25,608,607.00
Uncompleted Dollar Value if Firm is the Subcontractor			\$32,300.00		\$190,440.00	\$222,740.00
Total Value of Work						\$25,831,347.00

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						Accumulated Totals
Earthwork	\$44,816.00					\$2,581,517.00
Portland Cement Concrete Paving						\$4,012,717.00
HMA Plant Mix						\$0.00
HMA Paving						\$0.00
Clean & Seal Cracks / Joints						\$0.00
Aggregate Bases & Surfaces	\$17,087.00					\$1,171,031.00
Highway, R.R. and Waterway Structures	\$209,163.00					\$629,028.00
Drainage	\$72,120.00					\$1,811,860.00
Electrical						\$0.00
Cover and Seal Coats						\$0.00
Concrete Construction			\$32,300.00		\$190,440.00	\$2,071,023.00
Landscaping						\$0.00
Fencing						\$0.00
Guardrail						\$0.00
Temp Soil Retention	8th					\$0.00
Sound Wall	February	\$2,023.00				\$10,115.00
Cold Milling, Planning & Rotomilling						\$0.00
Demolition						\$0.00
Pavement Markings (Paint)						\$0.00
Signing						\$0.00
Layout						\$0.00
<b>Totals</b>	<b>\$343,186.00</b>	<b>\$2,023.00</b>	<b>\$32,300.00</b>	<b>\$0.00</b>	<b>\$190,440.00</b>	<b>\$12,287,291.00</b>

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**Part III. Work Subcontracted to Others.**

For each contract described in Part 1, list all the work you have subcontracted to others.

	17	Cont.	19	20	Awards Pending
Subcontractor	TAT	Work Zone Safety			
Type of Work	Asphalt	Traffic Control			
Subcontract Price	\$33,149.00	\$10,400.00			
Amount Uncompleted	<b>\$33,149.00</b>	<b>\$10,400.00</b>			
Subcontractor	Sincere	Hamilton			
Type of Work	Landscaping	Const. Layout			
Subcontract Price	\$10,685.00	\$4,180.00			
Amount Uncompleted	<b>\$10,685.00</b>	<b>\$4,180.00</b>			
Subcontractor	Clean Cut	MA Rebar			
Type of Work	Tree Removal	Rebar Setting			
Subcontract Price	\$3,120.00	\$17,000.00			
Amount Uncompleted	<b>\$3,120.00</b>	<b>\$17,000.00</b>			
Subcontractor	Northern				
Type of Work	Railing				
Subcontract Price	\$23,115.00				
Amount Uncompleted	<b>\$23,115.00</b>				
Subcontractor	AC				
Type of Work	Pavt Marking				
Subcontract Price	\$7,480.00				
Amount Uncompleted	<b>\$7,480.00</b>				
<b>Total Uncompleted</b>	<b>\$77,549.00</b>	<b>\$31,580.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

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 this 8th day of  
February 2023

  
 Notary Public

My commission expires 5/13/2026



Type or Print Name Scott A. Marquart, Vice President  
 Officer or director Title

Signed 

Company Alliance Contractors, Inc.

Address 1166 Lake Avenue  
Woodstock, Illinois 60098

## 2023 DBD Traffic Signal and Accessibility Improvements

**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.



# Village of Downers Grove

## Contractor Evaluation

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Contractor: Alliance Contractors, Inc.

Project: 2022 DBD Crosswalk Upgrades S-007

Primary Contact: Brad Spiniolas Phone: 815-338-5900

Time Period: March-May 2022

On Schedule (allowing for uncontrollable circumstances)  Yes  No

Provide details if early or late completion:

Change Orders (attach information if needed): CO to be processed for final quantity balancing. Project under original contract amount.

Difficulties / Positives: Performed satisfactory work, stayed on schedule. Cleanup was consistent throughout project and pedestrian access was maintained. Contractor maintained good traffic control. Contractor has excellent attention to detail, which is required for the type of work.

Interaction with public:

Excellent  Good  Average  Poor

(Attach information on any complaints or compliments)

General Level of Satisfaction with work:

Well Satisfied  Satisfied  Not Satisfied

Reviewers: Katherine Zirbel

Date: 9/14/22