



HURST-ROSCHE, INC.

PROJECT MANUAL FOR

PARKING LOT IMPROVEMENTS
W.J. ZAHNOW and ROGERS ELEMENTARY
SCHOOLS
WATERLOO C.U.S.D. NO. 5
WATERLOO, MONROE COUNTY, ILLINOIS

HR PROJECT No. 150-1999

PREPARED FOR

MR. BRIAN CHARRON, SUPERINTENDENT
WATERLOO C.U.S.D. NO. 5
302 BELLEFONTAINE DR.
WATERLOO, ILLINOIS 62298

DECEMBER 30, 2019

VOLUME 1 OF 1 – DIVISION 00-32

BID PACKAGE NO. _____

HURST-ROSCHE INC.

1400 E. Tremont Street

Hillsboro, Illinois 62049

(217) 532-3959

SECTION 00 01 10

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W.J. ZAHOW AND ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. #5
WATERLOO, MONROE COUNTY, ILLINOIS
HR #150-1999

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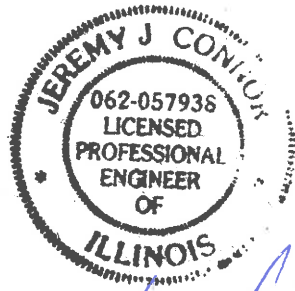
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Specifier:

CIVIL: Jeremy J. Connor, PE

Phone: 217-532-3959



[Handwritten Signature]
Exp: 11/30/21

END OF SECTION

INVITATION TO BID

PROJECT: PARKING LOT IMPROVEMENTS
W.J. ZAHNOW and ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. #5
WATERLOO, ILLINOIS
HR #150-1999

OWNER: WATERLOO C.U.S.D. # 5
302 BELLEFONTAINE DRIVE
WATERLOO, ILLINOIS 62298

ARCHITECT/ENGINEER: HURST-ROSCHÉ, INC.
1400 E. TREMONT STREET
HILLSBORO, ILLINOIS 62049

DATE: **December 30, 2019**

The Owner will receive Bids **until 2:00 PM local prevailing time on Thursday the 23rd day of January 2020, at Waterloo C.U.S.D. #5, 302 Bellefontaine Dr., Waterloo, Illinois 62298** for the following work:

PROJECT DESCRIPTION:

Work consists of repair and replacement of asphalt parking lots at W.J. Zahnow and Rogers Elementary Schools.

A Pre-bid Meeting will be held on **Thursday, January 9, 2020, at 10:00 AM**, prevailing time, at **Waterloo C.U.S.D. #5, 302 Bellefontaine Dr., Waterloo, Illinois 62298**.

Drawings and specifications may be obtained at the office of Hurst-Rosche, Inc., 1400 E. Tremont Street, Hillsboro, Illinois, **after December 30, 2019**, by paying a nonrefundable amount of \$60.00 (\$70.00 if mailed) for each set of drawings and specifications.

Bidding Documents, Drawings and Specifications, may be examined by prospective bidders and material suppliers at the offices of Hurst-Rosche, Inc., 1400 E. Tremont St., Hillsboro, Illinois and the following Plan Rooms:

Central Illinois Plan Room, 1620 S. 5th Street, Springfield, Illinois 62703
Southern Illinois Builders Association, 1468 Green Mount Road, O'Fallon, Illinois 62269
McGraw Hill Construction, www.dodgeprojects.construction.com
Greater Peoria Contractors & Suppliers Assoc., 1811 West Altorfer, Peoria, Illinois 61615

Drawings and specifications will be available for viewing on the internet at: www.hurst-rosche.com. The documents are being provided for reference purposes only. Bidders are encouraged to obtain a signed and sealed hard copy set of the bidding documents. At a minimum, bidders must obtain clean copies of bid forms from the offices of Hurst-Rosche Inc. by paying a non-refundable amount of \$10.00 to submit a bid for this project.

The Owner requires the project to be substantially complete by July 17, 2020.

Bidders will be required to provide Bid security of a sum no less than 10 percent of the Bid Sum. The bid security shall be either certified check, cashier's check, bank money order or bid bond issued by surety licensed to conduct business in the State of Illinois. Hereinafter this bid security shall be referred to as the bid bond.

Submit two copies of your Bid on the Bid Form provided. Bidders may supplement this form as appropriate.

Your Bid will be required to be submitted under a condition of irrevocability for a period of 30 days after submission.

The Owner reserves the right to accept or reject any or all Bids or any part thereof, to waive any informality in bidding, and to accept bids deemed most favorable to the Owner.

Waterloo C.U.S.D. #5

MR. BRIAN CHARRON, SUPERINTENDENT

END OF DOCUMENT

INSTRUCTIONS TO BIDDERS - AIA

1.1 SUMMARY

- A. Document Includes:
 - 1. Instructions to Bidders.
 - 2. Site examination.
 - 3. Prebid conference.
- B. Related Documents:
 - 1. Document 00 11 16 - Invitation To Bid.
 - 2. Document 00 41 13 - Bid Form - Stipulated Price.
 - 3. Document 00 43 00 - Bid Form Supplements: Appendix A.
 - 4. Document 00 72 14 - General Conditions – AIA Stipulated Sum.
 - 5. Document 00 73 13 - Supplementary Conditions – AIA.

1.2 INSTRUCTIONS TO BIDDERS

- A. These Instructions to Bidders amend or supplement AIA Document A701-1997 - Instructions to Bidders and other provisions of Bidding Documents and Contract Documents.
- B. To be considered all bids must in accordance with these Instructions to Bidders.
- C. Those interested parties may obtain sets of Drawings and Specifications from the Architects upon non-refundable deposit of \$60.00 (\$70.00 if mailed) per set. At a minimum, bidders must obtain clean copies of bid forms by paying a non-refundable amount of \$10.00 to submit a bid for this project.

1.3 SITE EXAMINATION

- A. Bidders shall carefully examine documents and construction site to obtain first-hand knowledge of existing conditions. Contractors will not be given extra payments for conditions which can be determined by examining site and these documents.
- B. Contact Mr. Jack Latchem at the following phone number to arrange date and time to visit Project site:
 - 1. Telephone: (618) 939-3453.

1.4 THE SCHEDULE FOR BIDDING THIS PROJECT IS AS FOLLOWS

- A. **Plans Available:** **December 30, 2019**
- B. **Pre-Bid Meeting:** **January 9, 2020**
10:00 AM
Waterloo C.U.S.D. #5
302 Bellefontaine Dr.
Waterloo, Illinois 62298
- C. **Latest Time to Submit Request for Interpretation:** **January 16, 2020 at 4:30 PM**

- D. Latest Time to Issue an Addendum:** January 17, 2020 at 4:30 PM
- E. Bid Opening:** January 23, 2020 at 2:00 PM
Waterloo C.U.S.D. #5
302 Bellefontaine Dr.
Waterloo, Illinois 62298
- F. All requests for interpretations shall be in writing via mail or e-mail addressed to the Architect/Engineer and must be received by the date and time identified in Article 1.4 of this section in order to be given consideration. All questions must be submitted on the "Request for Interpretation Pre-Bid Question and Comment Form" included at the end of this section, and questions not submitted in accordance with this form and specified time frame will not be accepted. Any and all interpretations and supplemental instructions will be made by addendum to the Drawings and Specifications and forwarded to all bidders either by certified mail or e-mail. All responses by the Architect/Engineer must be in writing to be binding. Any response general in nature or affecting these Instructions to Bidders shall be sent via addendum as previously described. All bidders are required to return the signature page of the addendum signed to the Architect within 24 hours after receipt. Failure of any bidder to receive any such addendum or interpretations shall not relieve such bidder from an obligation under the bid as submitted. All addenda so issued shall become part of the Contract Documents. No addendum will be issued later than the date and time identified in Article 1.4 of this section except one withdrawing the request for Bids or one postponing date for receiving Bids. Oral interpretations, changes or corrections will not be binding and Bidders shall not rely upon such interpretations, changes and corrections. Each Bidder shall ascertain prior to submitting Bid that all addenda issued have been received and shall acknowledge receipt in Bid.

Questions shall be directed to:
E-mail: tdownen@hurst-rosche.com

- G. Materials, products and equipment described in Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Each such request shall include name of material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other work that incorporation of the substitute would require shall be included. The burden of proof of the merit of proposed substitute is upon the proposer. Architect's decision of approval or disapproval of a proposed substitution shall be final. If the Architect approves any proposed substitution prior to receipt of Bids, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner. No substitutions will be considered after the contract award unless specifically provided in the Contract Documents.
- H. Bids shall be made on unaltered Bid Forms furnished by the Architect. Fill in all blank spaces and submit two (2) copies. Bids shall be signed with name typed below signature. Where bidder is a corporation, bids must be signed with legal name of corporation followed by name of state of incorporation and legal signature of an officer authorized to bind the corporation to a contract.
- I. Each bidder submitting a bid shall submit on form provided a list of any subcontractors and major suppliers he proposes to use with the bid. Failure to do so could disqualify the

bid.

- J. Each bidder shall designate on the attached bid form one person who shall serve as the bidder's contact person for all matters pertaining to the bid. In absence of such designation, the person who signs the bid shall be deemed the bidder contact.
- K. Each bid shall be accompanied by bid bond made payable to the Owner, in the amount of ten percent (10%) of the bid sum. Security shall be either certified check, cashier's check, bank money order or bid bond issued by surety licensed to conduct business in the State of Illinois. Successful bidder's security will be retained until he has signed the contract and furnished required payment and performance bonds. Owner reserves the right to retain security of the next two (2) lowest bidders until the lowest bidder enters into contract or until thirty (30) days after bid opening, whichever is shorter. All other bid security will be returned as soon as practicable. If any bidder refuses to enter into a contract, Owner will retain bid security as liquidated damages, but not as a penalty.
- L. All costs associated with the preparation and submission of a bid are the sole responsibility of the bidder. These costs shall not be chargeable to the Owner by any successful or unsuccessful bidder. All bids become the property of the Owner and shall not be returned except in the case of a late submission.
- M. Simultaneously, with delivery of the executed contract, the successful bidder, at its own expense, shall furnish surety in the form of a performance bond and a labor and material payment bond in the amount of one hundred percent (100%) of the contract amount. Surety for such bonds shall be a company duly authorized and licensed in the State of Illinois and acceptable to the Owner. The Attorney-In-Fact who signs bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.
- N. All copies of the bid, bid security and any other documents required to be submitted with bid shall be enclosed in a sealed opaque envelope. Envelope shall be addressed to Waterloo Community Unit School District # 5, Unit Office, 302 Bellefontaine Dr., Waterloo, Illinois 62298, and shall be identified with project name, bidder's name and address. Mailed bid envelopes shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof. Oral, telephonic or telegraphic Bids are invalid and will not receive consideration. Bids shall be deposited at the location designated in the Invitation to Bid prior to time and date designated for opening, or any extension thereof made by addendum. Bidder shall assume full responsibility for timely delivery at location designated for receipt of Bids. Bids received after time and date for receipt of bids will be returned unopened.
- O. A bid may not be modified, withdrawn or canceled during the thirty (30) days immediately following bid opening, and each bidder so agrees in submitting his Bid. Any bidder may withdraw, cancel or modify its bid, at any time prior to scheduled time for opening of bids, by letter or telegram actually received by Owner prior to bid time, or, with proper identification, by personally securing bid submitted; if by telegram, written confirmation over signature of bidder shall be mailed and postmarked on or before date and time of bid opening. Withdrawn bids may be resubmitted up to bid opening time provided that they are in full compliance with these Instructions to Bidders.
- P. Protests:
1. Any bidder who submitted a bid and believes the bid was improperly rejected or that the bid selected by the Owner is not in the best interest of the Owner may submit a written notice of intent to protest the bid to the Owner within seven (7) days. The Owner shall consider all protests before execution of a contract. Each

- protest must specify the reasons supporting the protest. The Owner may require that additional information be provided. Failure to supply such required information shall be cause for dismissal of the protest.
2. The Owner shall immediately investigate the allegations against the Owners actions and shall issue a written response to the protest.
 3. This provision allowing for the submission of protest shall not confer any right on any bidder but is intended solely to assist the Owner in determining the best responsible bid.
- Q. Any complaint or protest of the bidding procedure must be filed by the bidder to the Owner. Within 7 days of bid opening the bidder shall notify the Owner in writing of his intent to protest bidding. The bidder shall perfect this notice of intent within 7 days.
- R. Owner reserves right to disqualify bids and bidders, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon part of bidder, lack of responsibility as evidenced by poor workmanship and progress of past work, incomplete work which, in judgment of Owner, might hinder or prevent prompt completion of additional work if awarded, for being in arrears on existing contracts, in litigation with the Owner, or having defaulted on a previous contract.
- S. Bidder's attention is directed to the fact that all Federal and Illinois State Laws, municipal ordinances and regulations of any and all authority having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full. Successful Bidders shall be required to comply with 775 ILCS 10 concerning equal employment opportunities; comply with 30 ILCS 570 concerning the employment of citizens of the State of Illinois; comply with 820 ILCS 265 concerning substance abuse prevention on public works projects; and comply with 820 ILCS 130 concerning prevailing wages.
- T. Any successful bidder that is a corporation organized in a state other than Illinois shall furnish to the Owner, upon request, a properly certified copy of its current Certificate of Authority to do business in the State of Illinois, such certificate is to remain on file with the Owner.
- U. Any successful bidder that is a corporation organized in the State of Illinois shall furnish at its own cost to the Owner, if requested, a Certificate of Good Standing issued by the Secretary of State, such certificate is to remain on file with the Owner.
- V. Owner is exempt from payment of Illinois Department of Revenue's Use and Sales Tax on material entering permanently into structure.
- W. Bids will be opened as announced in Advertisement for Bids.
- X. Owner reserves the right to reject any or all bids or any part thereof, to waive any informalities in bidding and to accept bids deemed most favorable to the Owner.
- Y. Notwithstanding any delay in preparation and execution of the formal Contract Agreement, each bidder shall be prepared, upon written notice of bid acceptance, to commence work within ten (10) days following receipt of official written Notice to Proceed, or on date stipulated in such notice.
- Z. Any work in providing or preparing to provide the services specified herein that is commenced by the successful bidder prior to execution of a written contract agreement shall be at the bidder's expense.

- AA. Accepted bidder shall assist and cooperate with the Owner in preparing the formal Contract Agreement, and, within fifteen (15) days following its presentation, shall execute same and return it to Owner.
- BB. Contract Time: Time of Substantial Completion for the project shall not be later than July 17, 2020.

1.5 REQUIRED CONTRACTOR/SUBCONTRACTOR BACKGROUND SCREENING

- A. Waterloo C.U.S.D. #5 requires background screening to be completed on all contractor/subcontractor employees. All employees must have documentation that a background screening has been completed on them prior to working on any district projects. All costs associated with the background screening are to be the responsibility of the contractor. The background screening must be conducted by a company acceptable to the Waterloo C.U.S.D. #5.
- B. All contractor/subcontractor employees working on the school grounds of Waterloo C.U.S.D. #5 are required to submit to Background Screening. Each employee must complete, sign, and date the Consent and Waiver Release form. These forms will be submitted and the applicant cleared before the applicant may work on any part of the school grounds.
- C. The Contractor is responsible for submitting the forms to a company acceptable to the Waterloo C.U.S.D. #5, and for any costs involved in the screening. All information received as a result of a background check will be strictly confidential. A notice of automatic disqualification will be sent to the hiring or using entity. After the screenings, the Contractor is also responsible for sending Waterloo C.U.S.D. #5 copies of approved background checks for their records.

END OF DOCUMENT

REQUEST FOR INTERPRETATION PRE-BID QUESTION AND COMMENT FORM

(All information entered shall be typed in black).

PROJECT NAME: Parking Lot Improvements, W.J. Zahnow and Rogers Elementary Schools, Waterloo C.U.S.D. #5, Waterloo, Monroe County, Illinois _____

BIDDER: _____ SUBMITTED BY (Name): _____ Date: _____

ADDRESS: _____ CITY: _____ STATE: _____ PHONE: _____ Sheet _____ of _____

Question No.	Page (or Drawing Sheet) Number	Drawing No. or Spec. Section Article & Paragraph Number	Question by Bidder

NOTE: ANY AND ALL QUESTIONS PERTAINING TO THIS BID MUST BE TYPED AND SUBMITTED ON THIS FORM AND MAILED OR FAXED TO BE RECEIVE A RESPONSE.

BID FORM - STIPULATED PRICE

TO: WATERLOO C.U.S.D. #5
302 BELLEFONTAINE DR.
WATERLOO, ILLINIOS 62298

PROJECT: PARKING LOT IMPROVEMENTS
W.J. ZAHNOW and ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. #5
WATERLOO, ILLINOIS
HR # 150-1999

DATE: _____

Submitted by: _____
(full name)

(full address) _____

Contact Name: _____

1. OFFER

Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Hurst-Rosche, Inc. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of: \$ _____ dollars, in lawful money of the United States of America.

We have included, the security Bid Bond as required by the Instruction to Bidders.

All applicable federal taxes are excluded and State of Illinois and City of Waterloo taxes are excluded from the Bid Sum.

2. REVIEW OF BID DOCUMENTS

The bidder represents that he is skilled and experienced in the use and interpretation of drawings and specifications such as those included in the bid documents for this contract. He has carefully reviewed the drawings, specifications and other bid documents, and has found them free of ambiguities and sufficient for bid purposes. Further, the Bidder has carefully examined the site of the work and, from his own observations, has satisfied himself as to the nature and location of the work; the character, quality and quantity of materials; the difficulties likely to be encountered; and any other items which may affect the performance of the Work. He has based his bid solely on these documents and observations and has not relied in any way on any explanation or interpretation, oral or written, from any other source.

3. CONTRACTOR'S FEE FOR CHANGES IN WORK

Undersigned herein indicates a single percentage, not to exceed 12% for own forces and not to exceed 8% for subcontractors, for overhead and profit to be added to net extra job cost for changes in the work required to be performed by:

- a) Own Forces ___% b) Subcontractors ___%

Undersigned herein indicates a single percentage, not less than 10% for own forces and not less than 5% for subcontractors, for overhead and profit to be added to net credit for job costs for changes in the work required to be performed by:

- a) Own Forces ___% b) Subcontractors ___%

Percentages named above shall not include any items of insurance, bond or taxes since these are considered job cost items in contractor's quotations for changes in the work.

Any percentages indicated which are higher or lower than the maximum or minimum in the typewritten language herewith, shall be disregarded and typewritten figure used.

4. CONTRACT TIME

Undersigned agrees that, if awarded the Contract for Work bid upon herein, work will start on date designated in a written Notice to Proceed order issued by the Architect and will be completed in accordance with the contract documents, with all phases of work completed and operational and ready for acceptance by the Owner no later than as required by the Contract Agreement.

5. ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

Addendum # _____ Dated _____; Addendum # _____ Dated _____
Addendum # _____ Dated _____; Addendum # _____ Dated _____

6. APPENDICES

The following documents are attached to and made a condition of the Bid:

- Bid Bond in form of
- Bidder's qualifications statement and supporting data.
- Document 00 43 00 – Procurement Form Supplements
- Appendix A - List of Subcontractors.

7. EQUAL EMPLOYMENT OPPORTUNITY

During performance of this contract, Contractor agrees as follows:

- a. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to

employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

- b. The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- c. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, notice advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and by the rules, regulations, and relevant orders of the Secretary of Labor.
- e. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and order of the Secretary of Labor pursuant thereto, and will permit access to his books, records and accounts by the Department of the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- f. In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any such rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies involved as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- g. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with the subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

8. NOT BARRED

The contractor by submitting its bid certifies that the Contractor is not barred from bidding on the contract as a result of a conviction for either bid-rigging or bid-rotating. 720 ILCS 5/33/E-11.

9. DRUG FREE WORKPLACE

The Contractor by submitting its bid certifies that it will provide a drug free workplace and that it is in compliance with the requirements of the Drug Free Workplace Act 30 ILCS 580.1 et. seq., and the Substance Abuse Prevention on Public Works Projects Act PA095-0635.

10. SEXUAL HARASSMENT POLICY

The Contractor by submitting its bid certifies that it has a written sexual harassment, (ii) a description of sexual harassment, utilizing examples; (iv) an internal complaint process including penalties (v) the legal resource, investigative and compliant process through the Illinois Department of Human Rights; (vi) directions on how to contact the Department and Commission; and (vii) protection against retaliation for exercising rights under the policy in accordance with 775 ILCS 5/2-105(A)(4).

11. CRIMINAL RECORDS CHECKS

The Contractor by submitting its bid certifies that it will submit to background screening those employees, including subcontract employees, which will be working on any district project. This information is to be provided in accordance with the requirements of 105 ILCS 5/10-21.9. The Contractor by submitting its bid understands that employees found to be in violation of the Illinois School Code will not be permitted to work on school grounds.

12. BID FORM SIGNATURES

The Corporate Seal of

(Bidder - print the full name of your firm)
was hereunto affixed in the presence of:

(Authorized signing officer Title)

(Seal)

(Authorized signing officer Title)

(Seal)

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF DOCUMENT

PROCUREMENT FORM SUPPLEMENTS

TO: WATERLOO C.U.S.D. #5
302 BELLEFONTAINE DR.
WATERLOO, ILLINIOS 62298

PROJECT: PARKING LOT IMPROVEMENTS
W.J. ZAHNOW and ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. #5
WATERLOO, ILLINOIS
HR #150-1999

DATE: _____

Submitted by: _____
(full name)
(full address) _____

In accordance with Document 00 21 14 - Instructions to Bidders - AIA and Document 00 41 13 - Bid Form - Stipulated Price, we include the Appendices to Bid Form Supplements listed below. The information provided shall be considered an integral part of the Bid Form.

The following Appendices are attached to this document:

Appendix A - List of Subcontractors: Include names of all Subcontractors and portions of the Work each Subcontractor will perform.

BID FORM SUPPLEMENTS SIGNATURES

The Corporate Seal of

(Bidder - print the full name of your firm)

was hereunto affixed in the presence of:

(Authorized signing officer Title)

(Seal)

(Authorized signing officer Title)

(Seal)

APPENDIX A - LIST OF SUBCONTRACTORS

Herewith is the list of subcontractors referenced in the bid submitted by:

(Bidder) _____

To (Owner) WATERLOO C.U.S.D. #5

Dated _____ and which is an integral part of the Bid Form.

The following work will be performed (or provided) by subcontractors and coordinated by us:

WORK SUBJECT	NAME
_____	_____
_____	_____
_____	_____
_____	_____

END OF DOCUMENT

AGREEMENT FORMS – AIA STIPULATED SUM

1.1 SUMMARY

- A. Document Includes:
 - 1. Contract Agreement.
- B. Related Documents:
 - 1. Document 00 72 14 – General Conditions – AIA Stipulated Sum.
 - 2. Document 00 73 13 – Supplementary Conditions – AIA.

1.2 CONTRACT AGREEMENT BETWEEN OWNER AND CONTRACTOR

- A. THIS AGREEMENT, made and entered into as of the _____ day of _____ in the year of Two Thousand and _____ by and between _____ hereinafter and in the Contract Documents called "Contractor" and the WATERLOO CUSD #5, hereinafter and in the Contract Documents called "Owner."
- B. WITNESSETH: That for and in consideration of the mutual covenants and agreements, hereinafter stated, Contractor and Owner covenant and agree as follows:
- C. THE CONTRACT WORK:
 - 1. Contractor covenants and agrees to furnish all labor, materials, equipment, transportation, construction plant and facilities necessary to perform all Work required by the Contract Documents, for the Project entitled:
 - a. PARKING LOT IMPROVEMENTS
W.J. ZAHNOW and ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. # 5
WATERLOO, ILLINOIS 62298
H-R #150-1999

as shown on Drawings and described in Specifications prepared by Hurst-Rosche, Inc., 1400 E. Tremont Street, Hillsboro, Illinois, acting as, and in these Contract Documents referred to as Architect/Engineer and covenants and agrees to do and perform all acts and things required of Contractor by this Contract and the Contract Documents.
- D. TIME OF COMPLETION:
 - 1. Work performed under this Contract shall be commenced on date stipulated in written Notice to Proceed and, subject to authorized adjustments; Substantial Completion shall be achieved no later than July 17, 2020.
- E. CONTRACT SUM AND TERMS OF PAYMENT:

- 1. Contract Sum: The Owner, if Contractor shall faithfully fulfill and perform this

Contract, covenants and agrees to pay Contractor in current funds, subject to additions and deductions by Change Order as provided in the Contract Documents, the sum of _____ Dollars (\$ _____), which sum shall constitute the Contract Sum, said Contract Sum being derived from Contractor's Bid dated _____. It is understood and agreed that should there be any increase in wage rates, or in cost of materials or equipment, or in any other of Contractor's costs or should Contractor be compelled to pay premium wages, or for overtime work, during the life of this Contract and/or prior to completion of Contractor's work thereunder, Contractor shall absorb all such increased costs, without addition to the Contract Sum except when otherwise expressly provided in Contract Documents.

2. Payments: Owner shall make payments for work performed under the Contract as provided in Article Nine of the General Conditions and in accordance with other applicable articles of the Supplementary Conditions and Contract Documents.
3. Contractor's Fees for Changes in Work: In accordance with Contractor's bid, it is agreed that the following percentages for overhead and profit shall be applied on work added to or omitted from the Contract by written Change Order approved by Architect and Owner in advance of performance of the work.

Additional Work performed by:

- | | |
|--------------------|------------------------|
| 1. Own Forces ___% | 2. Subcontractors ___% |
|--------------------|------------------------|

Omitted Work originally required by:

- | | |
|--------------------|------------------------|
| 1. Own Forces ___% | 2. Subcontractors ___% |
|--------------------|------------------------|

F. CONTRACT DOCUMENTS:

1. Contract Documents include the Contract Agreement, Contractor's Bid as accepted by Owner, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract Agreement.

G. ILLINOIS LABOR:

Contractor shall comply with all Illinois statutory requirements regarding labor, including, but not limited to, the following:

1. Illinois Public Act 77-1552 and Chapter 48, Sections 39S-1 through 39S-12 of the Illinois Revised Statutes regulating wages of laborers, mechanics and other workers employed in any public works and known as the "Prevailing Wage Act," which provides in part that all laborers, mechanics and workers performing work under the Contract shall be paid not less than the prevailing rate of wages as determined by the Illinois Department of Labor (820 ILCS 130).
2. Illinois Public Act 83-1472, Article 2 and Chapter 48, Sections 2201 through 2207, 1984 of the Illinois Revised Statutes pertaining to hiring of Illinois labor and known as the "Illinois Preference Act (30 ILCS 570)."
3. "Illinois Human Rights Act of 1980," Chapter 68, Illinois Revised Statutes, and the Rules and Regulations, Title 44, Section 750 of the Illinois Administrative

Code, Illinois Department of Human Rights; pertaining to equal employment opportunity (777 ILCS 10).

H. PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND:

1. Within fifteen (15) days immediately following date of his receipt of this contract, Contractor shall furnish Owner the signed Contract and Performance Bond and Labor and Material Payment Bond as required by and in accordance with the terms of Contract Documents in a penal sum of one hundred percent (100%) of the Contract sum.
2. In the event Contractor fails to furnish Owner such Contract and Bonds within said period, this Contract shall thereupon become null and void at Owner's option, exercised by written registered notice and mailed to Contractor by said Owner within five (5) days thereafter. Owner may then retain and enforce as liquidated damages, bid guarantee heretofore deposited with it in connection with Contractor's proposal for this Contract or the difference between his bid and a subsequent awarded bid, whichever is lesser.

I. IN WITNESS HEREOF, the parties hereto have executed this agreement as of the day and year first written above.

OWNER:

WATERLOO C.U.S.D. #5

BY _____

TITLE _____

CONTRACTOR:

Attest: _____

BY _____

Secretary

BY _____

TITLE _____

END OF DOCUMENT

SECTION 00 64 00

CONTRACTOR'S AFFIDAVIT FOR FINAL COMPLETION

(To be filed with final request for payment)

STATE OF _____)

COUNTY OF _____)

_____, being
first duly sworn upon oath deposes and says:

That he/she is _____ of _____

hereinafter termed "The Contractor" for all work upon the hereinafter termed "Said Project," work for the WATERLOO C.U.S.D. #5, under that certain contract between said Contractor and said Owner, bearing date of _____ pertaining to said work.

Affiant further states, of his/her own knowledge, that all bills incurred by the Contractor, for services, labor and material furnished, for work done by the Contractor under said Contract, or in connection with said project have been paid and all subcontractors who have furnished services, labor or materials have no claim or demand against Owner for any services, labor and/or materials furnished and/or work done by them upon said Project.

Affiant further states that this affidavit is made on behalf of the Contractor for the purpose of obtaining payment of the sum of

_____ (\$ _____) dollars, which affiant states, upon his/her own knowledge, constitutes the full balance due the Contractor for all services, labor and materials furnished and work done to and upon Said Project by the Contractor whether under and pursuant to provisions of said Contract and all subsequent modifications thereof and changes therein or otherwise; and that payment of the sum to the Contractor will constitute payment in full on everything due for such services, labor, materials and work, and will fully satisfy any and all claims or demands which Contractor may have or assert against said Owner, arising out of anything done or furnished by the Contractor or occurring in connection with said Project and/or Contract.

CONTRACTOR

Subscribed and Sworn to before me the _____ day of _____, 20____.

NOTARY PUBLIC

END OF SECTION

SECTION 00 64 50

CONTRACTOR'S RELEASE AND WAIVER OF LIEN
(To be filed with final request for payment)

TO WHOM IT MAY CONCERN:

For good and valuable consideration, the receipt and sufficiency of which is

hereby acknowledged, the undersigned _____

_____ hereinafter termed "Contractor," hereby waives and releases any and all liens, and any and all claims and rights to liens against the **PARKING LOT IMPROVEMENTS at W.J. ZAHNOW and ROGERS ELEMENTARY SCHOOLS** hereinafter termed "Said Project," and any and all other property owned by or the title to which is in the name of the WATERLOO C.U.S.D. #5 hereinafter termed "Owner" and upon construction and/or equipping of Said Project, any and all warrants drawn upon or issued against any such funds or monies which Contractor may have acquired or possessed or may hereafter acquire or possess, as a result or on account of, the furnishing by the Contractor of services, labor and material used in connection with the construction under and pursuant to the certain Contract between it and said Owner, bearing date of _____ and pertaining to Said Project, or otherwise; and which said liens or claims or rights to lien may exist under and by virtue of an act of the General Assembly of the State of Illinois entitled "An Act to Revise the Law in Relation to Mechanic's Liens," approved May 18, 1903, as amended and in accordance with Chapter 82, Illinois Revised Statutes, 1976 or subsequent amendments thereto.

The undersigned further hereby acknowledges that the sum of _____

_____ Dollars, constitutes the entire balance due the Contractor from said Owner, for all services, labor and materials furnished and work done by it, upon or for Said Project and/or under said Contract, and that the payment in full to the undersigned for everything furnished and/or done by the Contractor in connection with Said Project, whether under the Contract or otherwise, and will satisfy in full, and will operate to fully and completely release said Owner from any and all claims or demands, of whatever nature, which the undersigned may have or assert against it, arising out of the construction and equipping of Said Project, said Contract, and any and all things done or furnished by the undersigned in connection therewith.

CONTRACTOR

BY _____

TITLE _____

Subscribed and Sworn to before me this _____ day of _____, 20____.

NOTARY PUBLIC

END OF SECTION

SECTION 00 65 00

AFFIDAVIT OF PAYMENT TO MATERIAL SUPPLIERS AND SUBCONTRACTORS

STATE OF _____

COUNTY OF _____

_____, being first duly sworn upon oath
deposes and says, that he/she entered into a Contract with the WATERLOO C.U.S.D. #5, known as the
Owner, for furnishing of labor, work services, materials, fixtures, and supplies for construction of
PARKING LOT IMPROVEMENTS at the following described real estate: **W.J. ZAHNOW and
ROGERS ELEMENTARY SCHOOLS.**

That for the purpose of said Contract, the following persons, firms or corporations have been contracted
with to furnish, have furnished or prepared, or will furnish or prepare labor, services, materials, fixtures,
apparatus, machinery or supplies, or are furnishing and preparing material for said construction; that
there are due or to become due to them respectively, the amounts set opposite their names for said labor,
services, materials, fixtures, apparatus, machinery and supplies as stated; that there are no other
contractors outstanding and there is nothing due or to become due any person, firm, or corporation, for
labor, services, materials, fixtures, machinery, apparatus, or supplies, other than as stated herewith.

MATERIAL SUPPLIER AND/OR SUBCONTRACTOR	CONTRACT ITEM	CONTRACT AMOUNT	AMOUNT PAID TO DATE	AMOUNT DUE OR TO BECOME DUE
--	------------------	--------------------	---------------------------	-----------------------------------

CONTRACTOR

Subscribed and sworn to before me, a Notary Public, this _____ day of _____; A.D.
20_____.

NOTARY PUBLIC

END OF SECTION

SECTION 00 65 50

CONSENT OF SURETY COMPANY TO FINAL PAYMENT
(To be filed with final request for payment)

PROJECT: PARKING LOT IMPROVEMENTS
(Name, address) W.J. ZAHNOW AND ROGERS ELEMENTARY SCHOOLS
WATERLOO C.U.S.D. #5
HR #150-1999

TO (Owner): WATERLOO C.U.S.D. #5
(Name, address) 302 BELLEFONTAINE DR.
WATERLOO, ILLINOIS 62298

CONTRACTOR:
(Name, address)

CONTRACT DATE:

BOND NO.:

In accordance with the provisions between Owner and Contractor indicated above, _____

_____ SURETY COMPANY, hereby
approves of final payment to Contractor, and agrees that final payment to Contractor shall not relieve
Surety Company of any of its obligations to Owner, as set forth in Surety Company's bond.

IN WITNESS WHEREOF, Surety Company has hereunto set its hand this _____ day of
_____, 20____.

Attest:

Surety Company

(Seal):

Signature of Authorized Representative

Title

GENERAL CONDITIONS – AIA STIPULATED SUM

1.1 SUMMARY

- A. Document Includes:
 - 1. General Conditions.
- B. Related Documents:
 - 1. Document 00 52 14 – Agreement Form – AIA Stipulated Sum.
 - 2. Document 00 73 13 – Supplementary Conditions - AIA.

1.2 GENERAL CONDITIONS

- A. AIA Document A201-2007, General Conditions of the Contract for Construction, is the General Conditions of the Contract.

1.3 SUPPLEMENTARY CONDITIONS

- A. Refer to Document 00 73 13 for modifications to General Conditions.

END OF DOCUMENT

SUPPLEMENTARY CONDITIONS - AIA

1.1 SUMMARY

- A. Document Includes:
 - 1. General Conditions.
 - 2. Supplementary Conditions.
- B. Related Documents:
 - 1. Document 00 41 13 – Bid Form – Stipulated Sum
 - 2. Document 00 52 14 – Agreement Form - AIA

1.2 GENERAL CONDITIONS

- A. The General Conditions of the Contract for Construction, AIA Document A201, Sixteenth Edition, 2007, Articles 1 through 15, is a part of this Contract and is incorporated herein as fully as if here set forth. Copies of the General Conditions are on file and may be reviewed at the offices of the Architect, or may be obtained from the American Institute of Architects, St. Louis Chapter, 911 Washington St., #225, St. Louis, Missouri 63101-1203.

1.3 SUPPLEMENTARY CONDITIONS

- A. The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction," AIA Document A201, Sixteenth Edition, 2007. Where any Article of the General Conditions is modified or changed or any Paragraph, Subparagraph or Clause thereof is modified, changed or deleted by these supplements, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

1.4 REFERENCE TO DIVISION 01

- A. Where provisions of General Conditions relate to project administrative or work-related requirements of the Contract, and those provisions differ from those specified in Division 01, provisions outlined in Division 01 shall prevail.

1.5 ARTICLE 1: GENERAL PROVISIONS

- A. 1.5.1 In the second line following the word "Specifications" insert the words "and Project Manual,".

- B. 1.6 TRANSMISSION OF DATA IN DIGITAL FORM: Add new subparagraph 1.6.1:

1.6.1 Electronic drawings provided by the Owner or Architect are for informational purposes only and are not intended for any other use. The paper copies provided are a true representation of the completed design and if discrepancies should exist between the paper copy and the electronic copy, the paper copy shall govern.

- C. Delete Subparagraph 1.1.8 its entirety and substitute the following:

1.1.8 INITIAL DECISION MAKER

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2 and certify termination of the Agreement under Section 14.2.2. If the Initial Decision Maker is not specifically identified in the Agreement, the responsibilities of the Initial Decision Maker shall default to the Architect.

D. DEFINITIONS: Add Paragraph 1.1.9

1.1.9 PROJECT MANUAL

The Project Manual is the collection of documents which includes the bidding requirements, sample forms and, certain Contract Documents such as the Conditions of the Contract and the Specifications.

1.6 ARTICLE 2: OWNER

A. 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER:

B. Delete Subparagraphs 2.2.3 and 2.2.5 in their entireties and substitute the following:

2.2.3 The Owner shall, at the request of the Contractor, furnish to Contractor any survey or other similar descriptive information of project site that Owner has in his possession. Upon demonstration of need by Contractor for specific additional survey information, Owner shall obtain and furnish such information to Contractor.

2.2.5 Contractor will be furnished, free of charge, 4 copies of Drawings, Specifications, and Project Manual as set forth in Division 1 of the Specifications. Additional copies will be furnished to Contractor at cost of reproduction, postage and handling.

1.7 ARTICLE 3: CONTRACTOR

3.2. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR: Add Subparagraphs 3.2.5 and 3.2.6:

3.2.5 The Contractor by executing the Contract represents that he has carefully examined the Site of the Work at each location and that he has full knowledge of and fully understands the facilities, site conditions, difficulties and restrictions attending performance of the Work. Contractor further represents that he has taken all required measurements and carefully inspected existing constructions, irregularities and interferences which may affect the Work. No additional compensation will be allowed for conditions increasing Contractor's cost which were not known to or appreciated by him prior to executing the Contract if they could have been discovered by him following the foregoing procedures and thoroughly informing himself of all existing conditions affecting the Work.

3.2.6 Contractor will not, however, be required to excavate, penetrate or demolish any constructions or other work and conditions prior to executing the Contract in order to uncover and/or expose concealed conditions that affect the Work. If, during course of construction, Contractor uncovers conditions that affect the work that could not have been known and understood by the above described careful examination of conditions affecting the Work, he shall promptly notify the Architect, in writing, who will determine if claims for additional costs or

extensions of time are justified. If such claims are found to be justified, Contract will be modified in accordance with Article 7 of the General Conditions.

1.8 ARTICLE 4: ARCHITECT

- A. 4.1 GENERAL: Delete Subparagraph 4.1.1 in its entirety and substitute the following:

4.1.1 The Owner shall retain an architect or engineer lawfully licensed to practice architecture or engineering or an entity lawfully practicing architecture or engineering in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

1.9 ARTICLE 5: SUBCONTRACTORS

- A. 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK: Add new Subparagraph 5.2.1.1.:

5.2.1.1. Within ten (10) days of notification of acceptance of his proposal, Contractor shall submit the names of those to whom he intends to award a Subcontract.

1.10 ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

- A. 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS: Delete Subparagraph 6.1.3 in its entirety and substitute the following:

6.1.3 General Contractor shall have responsibility of coordinating efforts of all contractors and to maintain overall direction of job progress. Each Contractor shall coordinate operational methods with other contractors and encourage communications among all trades. All Contractors shall make other contractors aware of any problems, delays in materials shipments or lack of work force, and assist other contractors in maintaining job momentum and direction of overall project.

1.11 ARTICLE 9: PAYMENTS AND COMPLETION

- A. 9.3 APPLICATIONS FOR PAYMENT: Add new Subparagraph 9.3.1.3

9.3.1.3.: Until Substantial Completion, the Owner will pay 90 percent of the amount due Contractor on account of approved progress payments.

1.12 ARTICLE 11: INSURANCE AND BONDS

- A. 11.1.1 In the first line following the word "maintain," insert the words "in a company or companies licensed to do business in the state in which the project is located."

- B. Add new Subparagraph 11.1.1.9:

11.1.1.9 General Liability Insurance shall be comprehensive, on occurrence, and shall include:

- Premises and Operations.

- Independent Contractors.
- Products and Completed Operations.
- Broad Form Property Damage.
- Personal Injury.
- Explosion, Collapse and Underground damage where the hazard exists.
- Contractual liability.

C. Add the following Sub-Subparagraphs to Subparagraph 11.1.2:

11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be written for not less than the following, or greater if required by law:

1. Worker's Compensation:
 - a. State: Statutory
 - b. Applicable Federal: Statutory
 - c. Employer's Liability: \$500,000

2. Comprehensive General Liability:
 - a. Bodily Injury:

\$ 500,000	Each Person
\$1,000,000	Aggregate

 - b. Property Damage:

\$ 500,000	Each Occurrence
\$1,000,000	Aggregate

 - c. \$1,000,000 Combined Single

Limit Coverage for bodily injury and property damage per occurrence and in the same aggregate limit will be accepted in lieu of the separate limits specified above.

3. Personal Injury:

\$ 1,000,000	Combined single limit including owned non-owned, and hired motor vehicle.
--------------	---

4. Comprehensive Automobile Liability:
 - a. Bodily Injury:

\$1,000,000	Each Person
\$1,000,000	Each Occurrence

 - b. Property Damage:

\$ 500,000	Each Occurrence
\$1,000,000	Aggregate

c. \$1,000,000 Combined Single

Limit coverage for bodily injury and property damage per occurrence and in the same aggregate limit will be accepted in lieu of the separate limits specified above.

11.1.2.2 Umbrella Form Liability Coverage:

An Umbrella Form Liability coverage to not less than \$2,000,000 for any one occurrence and subject to the same aggregate over the Employer's Liability, Comprehensive General Liability, and Comprehensive Automobile Liability coverage is required.

D. Add the following Subparagraph 11.1.3.1:

11.1.3.1 Contractor shall furnish one copy each of Certificates of Insurance herein required for each copy of the Agreement which shall specifically set forth evidence of all coverage required by Paragraph 11.1. The form of the Certificate shall be AIA Document G705, Certificate of Insurance. Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits. The Contractor shall furnish to the Owner notice of any policy cancellation at least 30 days prior to the effective date of cancellation. The Contractor shall submit copies of subcontractor's Certificates of Insurance prior to the beginning of work.

E. Add the following Subparagraph 11.1.4.1:

11.1.4.1 The Owner and Architect shall be named as additional insureds by endorsement for the purpose of coverage only with no liability for premium payments.

F. 11.3. PROPERTY INSURANCE: Delete Subparagraph 11.3.1 in its entirety and substitute the following:

11.3.1: The General Contractor shall be responsible to maintain property (builder's risk) insurance upon the completed value of all work at the site under this contract to the full insurable value thereof. This insurance shall include the interests of the Owner, the General Contractor, Subcontractors, and Sub-subcontractors in the work and as their interests may appear in the work, and shall be an all-risk type policy, including theft, subject to the exclusions generally accepted in the insurance industry. This coverage is not intended to, and shall not, provide coverage for tools, equipment, scaffolding, forms, or other devices used by the Contractors or Subcontractors in performing work under this contract.

11.3.1.2 Delete this Paragraph in its entirety.

G. Delete Subparagraphs 11.3.1.3 in its entirety and substitute the following:

11.3.1.3 If the property insurance requires deductibles, the Contractor shall pay costs not covered because of such deductibles.

1.13 ARTICLE 13: MISCELLANEOUS PROVISIONS

A. Add new paragraph 13.8 as follows:

13.8 REFERENCED STANDARDS

13.8.1 No provision of any referenced standard specification, manual or code; whether or not specifically incorporated by reference in the Contract Documents; shall be effective to change the duties and responsibilities of Owner, Contractor or Architect, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Architect, or any of Architect's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Articles 1 through 15.

END OF SECTION

ARTICLE 25: PREVAILING RATE OF WAGES

25.1 Pursuant to Illinois Compiled Statutes 820 ILCS 130/0.01 et seq., these specifications list on the following pages, the Illinois Department of Labor prevailing rate of wages for the county where the contract is being performed and for each craft or type of worker needed to execute the contract.

Monroe County Prevailing Wage Rates posted on 12/16/2019

Trade Title	Rg	Type	C	Base	Foreman	M-F	H/W	Pension	Vac	Trng
ASBESTOS ABT-GEN	All	ALL		28.88	29.38	1.5	7.53	19.26	0.00	0.80
ASBESTOS ABT-MEC	All	BLD		31.75	32.75	1.5	8.00	6.25	2.00	0.55
BOILERMAKER	All	BLD		36.54	39.04	1.5	7.07	24.08	1.50	1.05
BRICK MASON	All	BLD		33.38	35.38	1.5	9.10	12.82	0.00	0.87
CARPENTER	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
CEMENT MASON	All	ALL		35.25	36.25	1.5	10.00	14.75	0.00	0.45
CERAMIC TILE FINISHER	All	BLD		28.29	28.29	1.5	7.45	6.86	0.00	0.81
ELECTRIC PWR EQMT OP	All	ALL		45.57	54.94	1.5	6.95	12.76	0.00	0.46
ELECTRIC PWR GRNDMAN	All	ALL		34.02	54.94	1.5	5.19	9.54	0.00	0.34
ELECTRIC PWR LINEMAN	All	ALL		52.41	54.94	1.5	7.99	14.69	0.00	0.52
ELECTRIC PWR TRK DRV	All	ALL		37.20	54.94	1.5	5.68	10.42	0.00	0.37
ELECTRICIAN	All	ALL		41.83	44.34	1.5	7.99	12.40	0.00	1.15
ELECTRONIC SYSTEM TECH	All	BLD		35.28	37.28	1.5	4.00	9.87	0.00	0.40
ELEVATOR CONSTRUCTOR	All	BLD		50.09	56.35	2.0	15.57	17.51	4.50	0.62
FLOOR LAYER	All	BLD		34.21	34.96	1.5	7.42	9.25	0.00	0.50
GLAZIER	All	BLD		35.91	37.91	1.5	6.25	11.23	0.00	0.68
HEAT/FROST INSULATOR	All	BLD		38.86	39.96	1.5	10.50	12.86	0.00	0.75
IRON WORKER	All	ALL		34.50	36.50	1.5	10.46	17.00	0.00	0.42
LABORER	All	ALL		28.38	28.88	1.5	7.53	19.26	0.00	0.80
MACHINIST	All	BLD		48.93	51.43	1.5	7.68	8.95	1.85	1.32
MARBLE FINISHER	All	BLD		27.48	0.00	1.5	6.45	5.70	0.00	0.58
MARBLE MASON	All	BLD		33.38	35.38	1.5	9.10	12.82	0.00	0.87
MILLWRIGHT	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
OPERATING ENGINEER	All	BLD	1	38.80	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	2	37.67	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	3	33.19	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	4	33.25	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	5	32.92	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	6	41.35	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	7	41.65	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	8	41.93	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	BLD	9	39.80	41.80	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	1	37.30	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	2	36.17	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	3	31.69	40.30	1.5	13.35	18.65	0.00	1.05

OPERATING ENGINEER	All	HWY	4	31.75	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	5	31.42	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	6	39.85	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	7	40.15	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	8	40.43	40.30	1.5	13.35	18.65	0.00	1.05
OPERATING ENGINEER	All	HWY	9	38.30	40.30	1.5	13.35	18.65	0.00	1.05
PAINTER	All	BLD		31.55	33.05	1.5	6.20	12.02	0.00	0.70
PAINTER	All	HWY		32.75	34.25	1.5	6.20	12.02	0.00	0.70
PAINTER OVER 30 FT.	All	BLD		32.55	34.05	1.5	6.20	12.02	0.00	0.70
PAINTER PWR EQMT	All	BLD		32.55	34.05	1.5	6.20	12.02	0.00	0.70
PAINTER PWR EQMT	All	HWY		33.75	35.25	1.5	6.20	12.02	0.00	0.70
PILEDRIVER	All	ALL		39.58	41.08	1.5	7.42	9.25	0.00	0.50
PIPEFITTER	All	BLD		40.25	44.25	1.5	8.04	9.80	0.00	1.55
PLASTERER	All	BLD		33.75	35.25	1.5	10.00	9.90	0.00	0.50
PLUMBER	All	BLD		39.35	41.85	1.5	7.70	8.00	0.00	1.25
ROOFER	All	BLD		33.30	35.30	1.5	9.10	8.90	0.00	0.41
SHEETMETAL WORKER	All	ALL		34.94	36.44	1.5	9.65	8.94	2.10	0.54
SPRINKLER FITTER	All	BLD		42.31	45.31	1.5	8.72	12.95	0.00	1.10
TERRAZZO FINISHER	All	BLD		31.24	0.00	1.5	6.45	4.37	0.00	0.42
TERRAZZO MASON	All	BLD		32.53	32.83	1.5	6.45	5.87	0.00	0.45
TRUCK DRIVER	All	ALL	1	38.17	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	2	38.71	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	3	39.01	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	4	39.34	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	ALL	5	40.39	42.29	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	1	30.54	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	2	30.97	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	3	31.21	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	4	31.47	33.83	1.5	13.00	6.60	0.00	0.25
TRUCK DRIVER	All	O&C	5	32.31	33.83	1.5	13.00	6.60	0.00	0.25

END OF SECTION

BIDDING & CONTRACT REQUIREMENTS

Document 00 86 00 - Drawings, Schedules and Details

<u>DRAWING NO.</u>	<u>TITLE</u>
<u>GENERAL</u>	
G-101	COVER SHEET
G-102	GENERAL NOTES
G-103	EROSION CONTROL NOTES – PAGE 1 OF 2
G-104	EROSION CONTROL NOTES – PAGE 2 OF 2
<u>CIVIL</u>	
C-101	DEMOLITION PLAN – W.J. ZAHNOW
C-102	DEMOLITION PLAN – ROGERS
C-201	GRADING PLAN – W.J. ZAHNOW
C-202	GRADING PLAN – ROGERS
C-301	PAVING PLAN – W.J. ZAHNOW
C-302	PAVING PLAN – ROGERS
C-401	PAVEMENT MARKINGS PLAN – W.J. ZAHNOW
C-401	PAVEMENT MARKINGS PLAN – ROGERS
C-501	EROSION CONTROLS PLAN – W.J. ZAHNOW
C-502	EROSION CONTROLS PLAN – ROGERS
C-601	DETAILS
C-602	SECTIONS

All drawings dated December 30, 2019.

END 00 86 00.

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Contract description.
- B. Contractor's use of site and premises.
- C. Owner occupancy.
- D. Specification Conventions.
- E. Contractor's Duties.

1.2 CONTRACT DESCRIPTION

- A. Work of the Project includes:
 - 1. Work consists of repair and replacement of asphalt parking lots at W.J. Zahnow and Rogers Elementary Schools.
- B. Perform Work of the Contract under fixed cost contract with Owner in accordance with Conditions of Contract.

1.3 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limit use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Work by Owner.
 - 3. Use of site and premises by the public.

1.4 OWNER OCCUPANCY

- A. The Owner will occupy the premises during construction for the conduct of normal operations.
- B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.5 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

1.6 CONTRACTOR'S DUTIES

- A. Except as specifically noted, Contractor shall provide and pay for:

1. All labor, materials, and equipment used for construction of and/or incorporated into the project.
 2. All tools, construction equipment and machinery.
 3. Required building permits, and all inspection fees by governmental authorities.
 4. Other facilities and services necessary for proper execution and complete of work.
- B. Owner is exempt from sales tax on product permanently incorporated in work.
1. Obtain sales tax exemption certificate number from Owner.
 2. Place exemption certificate number on invoices for materials incorporated in work.
 3. Upon completion of work, file with Owner a notarized statement that all purchases made under exemption certificate were entitled to be exempt and furnish copies of invoice to Owner.
 4. Pay legally assessed penalties for improper use of exemption certificate number.
- C. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of work.
- D. Promptly submit written notice to Architect/Engineer of observed variance of contract documents from legal requirements.
1. It is not the Contractor's responsibility to make certain that drawings and specifications comply with codes and regulations.
 - a. Appropriate modifications to contract documents will account for/reflect necessary changes.
 - b. Assume responsibility for work known to be contrary to such requirements if written notice is not provided by the Contractor to the Engineer.
- E. Enforce strict discipline and good order among employees.
- F. Do not unreasonably encumber site with materials or equipment.
- G. Do not load structure with weight that will endanger structure.
- H. Assume full responsibility for protection and safe-keeping of products stored on premises.
- I. Move any stored products which interfere with operations of Owner or other Contractors.
- J. Obtain and pay for use of additional storage or work areas needed for operations.
- K. **The School Board shall prohibit the use of tobacco on school property when the property is being used for any school purposes. Tobacco shall mean cigarette, cigar, pipe or tobacco in any other form including smokeless tobacco which is any loose, cut, shredded, ground, powdered, compressed or leaf tobacco that is intended to be placed in the mouth without being smoked. All members of work crews must remain fully clothed and refrain from using obscene or profane language during these same time parameters. School purposes include, but are not limited to, all interscholastic or extracurricular athletic, academic, or other events sponsored by the School Board or in which students of the District participate.**
- L. All site visits shall be coordinated through Mr. Jack Latchem, telephone # 618/939-3453.

- M. Contractor shall maintain building free from entrance of water at all times during construction.
- N. Contractor shall furnish, erect and maintain temporary ladders, ramps, or hoists as may be required for performance of his work.
 - 1. All such equipment shall be substantially designed, constructed, and maintained in accordance with applicable federal, state, and local laws, ordinances, and regulations, and shall be promptly removed when no longer needed.
- O. Contractor shall design, furnish, erect, maintain, and move all ladders and scaffolding required for this work.
 - 1. All ladders and scaffolding shall be designed, constructed, and maintained in accordance with applicable federal, state, and local law, ordinances, and regulations, and shall be promptly removed when no longer needed.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Schedule of values.
- B. Applications for payment.
- C. Change procedures.
- D. Defect assessment.

1.2 SCHEDULE OF VALUES

- A. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702. Contractor's standard form or electronic media printout will be considered, if it is similar in format to AIA Form G703.
- B. Submit Schedule of Values in duplicate within 15 days after date established in Notice to Proceed.
- C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify bonds and insurance.
- D. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- E. Revise schedule to list approved Change Orders, with each Application For Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement or as established at the Pre-construction meeting.
- E. Submit with transmittal letter as specified for Submittals in Section 01 33 00.
- F. Submit lien waivers.
- G. Substantiating Data: When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Partial release of liens from major subcontractors and vendors.
 - 2. Record documents for review by Owner which will be returned to Contractor.

3. Affidavits attesting to off-site stored products.
 4. Construction progress schedules, revised and current.
- H. Application for Progress Payment No. 1 shall be accompanied by a notarized statement on Contractor's letterhead as follows:
1. I certify that the funds requested for the accompanying Pay Request No. 1 will be used to pay all just and lawful bills against the undersigned and his subcontractors for labor, material and equipment employed in the performance of the work. I further certify that such bills will be paid no later than ten (10) calendar days from date of receipt of the Owner's disbursement.
 2. Execute statement with signature of a responsible officer of contracting firm.
- I. Each subsequent application for progress payment shall be accompanied by the following supporting documents:
1. Partial or final waivers of lien in monetary amount from Contractor, each material supplier and/or subcontractor reflecting amounts incorporated into preceding request for progress payment.
 2. A notarized Affidavit of Payment to Material Suppliers and Subcontractors.
 - a. Affidavit shall be submitted in exact text as exhibit furnished by Architect/Engineers, signed by Contractor or Subcontractor.
 - b. Include unit item, actual amount of contract without overhead or profit, amount paid to date, and amount to become due (balance of account).
- J. Progress payments will be made for materials and equipment not incorporated in the work provided that:
1. Such materials and equipment have been delivered to and suitable stored at site or some other location approved in writing by Owner and Architect/Engineer. All such materials stored off-site shall be marked or tagged with identification of project to which they are assigned.
 2. Contractor submits evidence of title to such materials and equipment.
 3. Care and custody of such materials and equipment and all costs incurred for movement and storage shall be responsibility of Contractor.
 4. Such materials and equipment are suitably insured by Contractor. Contractor shall submit a certificate of insurance showing the Owner as an additional insured and showing amount of insurance coverage of suitable proof that material and equipment are stored in a bonded warehouse.
- K. Refer to Section 01 70 00 for submittal requirements for application for final payment and related closeout procedures.

1.4 CHANGE PROCEDURES

- A. Submittals: Submit name of individual authorized to receive change documents and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. The Architect/Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions in writing.
- C. The Architect/Engineer may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with stipulation of overtime work required and/or the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within a reasonable time period.

- D. Contractor may propose changes by submitting a request for change to Architect/Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors. Document requested substitutions in accordance with Section 01 60 00.
- E. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.
- F. Architect/Engineer may issue directive, on H-R Change Order form signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- G. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Architect/Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- H. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
- I. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation.
- J. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- K. Correlation Of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect/Engineer, it is not practical to remove and replace the Work, the Architect/Engineer will direct appropriate remedy or adjust payment.
- C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of Architect/Engineer.
- D. Defective Work will be partially repaired to instructions of Architect/Engineer and unit sum/price will be adjusted to new sum/price at discretion of Architect/Engineer.

- E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. Authority of Architect/Engineer to assess defects and identify payment adjustments is final.
- G. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Preconstruction meeting.
- C. Progress meetings.
- D. Cutting and patching.
- E. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule meeting after Notice of Award.
- B. Attendance Required: Owner, Architect/Engineer, and Contractor.
- C. Agenda:
 - 1. Submission of executed bonds and insurance certificates.

2. Distribution of Contract Documents.
3. Submission of list of products, schedule of values, and progress schedule.
4. Designation of personnel representing parties in Contract, and Architect/Engineer.
5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
6. Scheduling.
7. Use of premises by Owner and Contractor.
8. Owner's requirements and occupancy.
9. Construction facilities and controls provided by Owner.
10. Temporary utilities provided by Owner.
11. Security and housekeeping procedures.
12. Schedules.
13. Application for payment procedures.
14. Procedures for testing.
15. Procedures for maintaining record documents.
16. Requirements for start-up of equipment.
17. Inspection and acceptance of equipment put into service during construction period.

- D. Architect/Engineer will record minutes and distribute copies with reasonable promptness after meeting to all in attendance and Owner.

1.4 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Architect/Engineer will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, Owner, Architect/Engineer, as appropriate to agenda topics for each meeting.
- D. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems impeding planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- E. Architect/Engineer will record minutes and distribute copies with reasonable promptness after meeting to all in attendance and Owner.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of penetrated element.
- J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- K. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.2 SPECIAL PROCEDURES

- A. Materials: As specified in product sections; match existing with new products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.

- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- H. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original or specified condition.
- I. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.
- J. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.
- K. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.
- L. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition; to Architect/Engineer for review.
- M. Trim existing doors to clear new floor finish. Refinish trim to original or specified condition.
- N. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- O. Finish surfaces as specified in individual product sections.

END OF SECTION

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. References.
- B. Quality assurance.
- C. Format.
- D. Schedules.
- E. Submittals.
- F. Review and evaluation.
- G. Updating schedules.
- H. Distribution.

1.2 REFERENCES

- A. The Use of CPM in Construction - A Manual for General Contractors and the Construction Industry, Washington, D.C., The Associated General Contractors of America (AGC).

1.3 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel specializing in CPM scheduling with two years minimum experience in scheduling construction work of complexity comparable to this Project, and having use of computer facilities capable of delivering detailed graphic printout within 48 hours of request.
- B. Contractor's Administrative Personnel: two years minimum experience in using and monitoring CPM schedules on comparable projects.

1.4 FORMAT

- A. Listings: Reading from left to right, in ascending order for each activity. Identify each activity with applicable specification section number.
- B. Diagram Sheet Size: 24 inches high x width required.
- C. Scale and Spacing: To allow for notations and revisions.

1.5 SCHEDULES

- A. Prepare network analysis diagrams and supporting mathematical analyses using Critical Path Method, under concepts and methods outlined in AGC's "The Use of CPM in Construction - A Manual for General Contractors and the Construction Industry".

- B. Illustrate order and interdependence of activities and sequence of work; how start of given activity depends on completion of preceding activities, and how completion of activity may restrain start of subsequent activities.
- C. Illustrate complete sequence of construction by activity, identifying work of separate phases. Indicate dates for submittals and return of submittals; dates for procurement and delivery of critical products; and dates for installation and provision for testing. Include legend for symbols and abbreviations used.
- D. Mathematical Analysis: Tabulate each activity of detailed network diagrams, using calendar dates, and identify for each activity:
 - 1. Preceding and following event numbers.
 - 2. Activity description.
 - 3. Estimated duration of activity, in maximum 15-day intervals.
 - 4. Earliest start date.
 - 5. Earliest finish date.
 - 6. Actual start date.
 - 7. Actual finish date.
 - 8. Latest start date.
 - 9. Latest finish date.
 - 10. Total and free float; accrue float time to Owner and to Owner's benefit.
 - 11. Monetary value of activity, keyed to Schedule of Values.
 - 12. Percentage of activity completed.
 - 13. Responsibility.
- E. Analysis Program: Capable of compiling monetary value of completed and partially completed activities, of accepting revised completion dates, and recomputation of scheduled dates and float.
- F. Required Sorts: List activities in sorts or groups:
 - 1. By preceding work item or event number from lowest to highest.
 - 2. By longest float, then in order of early start.
 - 3. By responsibility in order of earliest possible start date.
 - 4. In order of latest allowable start dates.
 - 5. In order of latest allowable finish dates.
 - 6. Contractor's periodic payment request sorted by Schedule of Values listings.
 - 7. Listing of basic input data generating report.
 - 8. Listing of activities on critical path.
- G. Prepare sub-schedules for each stage of Work identified in Section 01 10 00.
- H. Coordinate contents with schedule of values in Section 01 33 00.

1.6 SUBMITTALS

- A. Within 10 days after date of Owner-Contractor Agreement, submit proposed preliminary network diagram defining planned operations for first 60 days of Work, with general outline for remainder of Work.
- B. Participate in review of preliminary and complete network diagrams jointly with Architect/Engineer.
- C. Within 10 days after joint review of proposed preliminary network diagram, submit draft of proposed complete network diagram for review. Include written certification that mechanical and electrical Subcontractors have reviewed and accepted proposed schedule.

- D. Within 10 days after joint review, submit complete network analysis consisting of network diagrams and mathematical analysis.
- E. Submit updated network schedules with each Application for Payment.
- F. Submit number of opaque reproductions Contractor requires, plus two copies Architect/Engineer will retain.
- G. Submit under transmittal letter form specified in Section 01 33 00.

1.7 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of network diagrams and analysis with Architect/Engineer at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise network diagrams and analysis incorporating results of review, and resubmit within 10 days.

1.8 UPDATING SCHEDULES

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update diagrams to graphically depict current status of Work.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Indicate changes required to maintain Date of Substantial Completion.
- E. Submit sorts required to support recommended changes.
- F. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect including effects of changes on schedules of separate contractors.

1.9 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's project site file, to Subcontractors, suppliers, Architect/Engineer, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 EXECUTION

Not Used.

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Product data.
- D. Shop drawings.
- E. Samples.
- F. Test reports.
- G. Certificates.
- H. Manufacturer's instructions.

1.2 SUBMITTAL PROCEDURES

- A. Transmit each submittal with shop drawing submittal form found at the end of this section. A copy of the submittal form must be attached to each copy of the submittal; if not, the submittal will be rejected and returned to the Contractor.**
- B. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.
- C. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- D. Schedule submittals to expedite Project and deliver to Architect/Engineer at business address. Coordinate submission of related items.
- E. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.
- F. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- G. Allow space on submittals for Contractor and Architect/Engineer review stamps.
- H. When revised for resubmission, identify changes made since previous submission.
- I. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- J. Submittals not requested will not be recognized or processed.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedules within 15 days after date established in Notice to Proceed. After review, resubmit required revised data within ten days.
- B. Submit revised Progress Schedules with each Application for Payment.
- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.
- F. Indicate estimated percentage of completion for each item of Work at each submission.
- G. Submit separate schedule of submittal dates for shop drawings, product data, and samples and dates reviewed submittals will be required from Architect/Engineer. Indicate decision dates for selection of finishes.
- H. Revisions To Schedules:
 - 1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 - 3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

1.4 PRODUCT DATA

- A. Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Submit number of copies Contractor requires, plus 3 copies Architect/Engineer will retain.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00.

1.5 SHOP DRAWINGS

- A. Shop Drawings: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01 70 00.

1.6 SAMPLES

- A. Samples: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Architect/Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full Project information.
- E. Submit number of samples specified in individual specification sections; Architect/Engineer will retain one sample.
- F. Reviewed samples which may be used in the Work are indicated in individual specification sections.
- G. Samples will not be used for testing purposes unless specifically stated in specification section.
- H. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01 70 00.

1.7 TEST REPORTS

- A. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.
- B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.8 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

1.9 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, adjusting, and finishing, to Architect/Engineer for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION



Hurst-Rosche, Inc.

SHOP DRAWING SUBMITTAL

PROJECT: Parking Lot Improvements DATE: _____
W.J. Zahnow and Rogers Elementary Schools
Waterloo C.U.S.D. #5

A/E PROJECT NO: 150-1999

CONTRACTOR: _____

PRESENTED BY: _____
(Subcontractor/Supplier) Company Name

Address

Phone/Fax

Contact Person

ITEM: _____

SPEC SECTION: _____

By approving and submitting these shop drawings, product data and samples, we represent that we have determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that we have checked and coordinated information contained within submittal with requirements of the work and contract documents.

Contractor's Signature

Date

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances
- C. References.
- D. Testing and inspection services.
- E. Examination.
- F. Preparation.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step-in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.5 TESTING AND INSPECTION SERVICES

- A. Requirements include:
 - 1. Architect/Engineer will employ and pay for testing laboratory to perform specified services.
 - 2. Employment of testing laboratory will in no way relieve Contractor's obligations to perform work in accord with the Contract.
- B. Laboratory Duties – Limits of Authority
 - 1. Cooperate with Architect/Engineer and Contractor; provide qualified personnel promptly on notice.
 - 2. Perform specified inspections, sampling and testing of materials and construction methods:
 - a. Comply with specified standards; ASTM, and other recognized authorities.
 - b. Ascertain compliance with contract requirements.
 - c. Obtain written acknowledgement of each inspection, sampling and test made from Contractor whose work is being tested or from his superintendent.
 - 3. Promptly notify Architect/Engineer and Contractor of irregularities or deficiencies of work which are observed during performance of services.
 - 4. Promptly submit three copies of reports of inspections and tests to Architect/Engineer, including:
 - a. Date issued.
 - b. Project title and number.
 - c. Testing laboratory name and address.
 - d. Name and signature of inspector.
 - e. Date of inspection and sampling.
 - f. Record of temperature and weather.
 - g. Date of test.
 - h. Identification of product and specification section.
 - i. Location of project.
 - j. Type of inspection or test.
 - k. Observations regarding compliance with contract documents.
 - 5. Perform additional services ordered by Architect/Engineer.
 - 6. Laboratory is not authorized to:
 - a. Release, revoke, alter or enlarge on, contract requirements.

- b. Approve or accept any portion of work.
 - c. Perform any duties of the Contractor.
- C. Contractor's Responsibilities
 - 1. Furnish product mix design to meet or exceed contract requirements.
 - 2. Cooperate with laboratory personnel; provide access to work and to manufacturer's operations.
 - a. Monitor, or direct superintendent to monitor each inspection, sampling and test.
 - b. Provide laboratory with written acknowledgement of each inspection, sampling or test.
 - c. Within 24 hours, notify Architect/Engineer in writing of reasons for not accepting laboratory field procedures.
 - 3. Provide to laboratory preliminary representative samples of materials to be tested, in specified quantities.
 - 4. Furnish copies of mill test reports.
 - 5. Furnish verification of compliance with contract requirements for materials and equipment.
 - 6. Furnish labor and facilities:
 - a. To provide access to work to be tested.
 - b. To obtain and handle samples at site.
 - c. To facilitate inspections and test.
 - d. For laboratory's exclusive use for storage and curing of test samples.
 - 7. Notify laboratory sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.
 - 8. Correct work which is defective or which fails to conform to the contract documents in accordance with the General Conditions. Corrective work shall not delay the project schedule or the work of other contractors.
 - 9. Pay all costs of retesting when test results indicate non-compliance with contract requirements.
 - 10. Patch all surfaces and areas disturbed by testing operations.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.

- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary electricity.
 - 2. Temporary water service.
 - 3. Temporary sanitary facilities.
- B. Construction Facilities:
 - 1. Vehicular access.
 - 2. Parking.
 - 3. Progress cleaning and waste removal.
- C. Temporary Controls:
 - 1. Dust control.
 - 2. Noise control.
 - 3. Pollution control.
- D. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

- A. Owner will pay cost of energy used. Exercise measures to conserve energy. Utilize Owner's existing power service.

1.3 TEMPORARY WATER SERVICE

- A. Owner will pay cost of temporary water. Exercise measures to conserve energy. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.

1.4 TEMPORARY SANITARY FACILITIES

- A. Existing designated facilities may be used during construction operations. Maintain daily in clean and sanitary condition.
- B. At end of construction, return existing facilities used for construction operations to same or better condition as original condition.

1.5 VEHICULAR ACCESS

- A. Location approved by Owner.
- B. Provide unimpeded access for emergency vehicles. Maintain **20 feet** wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants free of obstructions.
- D. Use designated existing on-site roads for construction traffic.

1.6 PARKING

- A. Use of designated areas of existing parking facilities used by construction personnel is permitted.

1.7 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing spaces.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and rubbish from site periodically and dispose off-site.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.8 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.

1.9 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.10 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Clean and repair damage caused by installation or use of temporary work.
- B. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 57 13

TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
 - 1. All temporary erosion and sediment control on the project site.

1.2 SUMMARY

- A. This Section includes:
 - 1. Prevention of erosion due to construction activities.
 - 2. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
 - 3. Restoration of areas eroded due to insufficient preventive measures.
- B. Related Sections include the following:
 - 1. Section 31 10 00 – Site Clearing

1.3 REFERENCE

- A. ASTM D 4355 – Standard Test Method for Deterioration of Geotextiles by Exposure to Light Moisture, and Heat in a Xenon Arc Type Apparatus.
- B. ASTM D 4491 – Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
- C. ASTM D 4533 – Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
- D. ASTM D 4632 – Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.
- E. ASTM D 4751 – Standard Test Method for Determining Apparent Opening Size of a Geotextile.
- F. ASTM D 4873 – Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples.

1.4 PERFORMANCE REQUIREMENTS

- A. Timing: Put preventive measures in place before disturbance of surface cover and before precipitation occurs.
- B. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.

2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- C. Erosion On-Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
 1. Control movement of sediment and soil temporary stockpiles of soil.
 2. Prevent development of ruts due to equipment and vehicular traffic.
 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to owner.
 - D. Erosion Off-Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
 1. Prevent windblown soil from leaving the project site.
 2. Prevent tracking of mud onto public roads outside site.
 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to owner.
 - E. Sedimentation of Waterways On-Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 1. If sedimentation occurs, install or correct preventive measure immediately at no cost to owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 2. If sediment basins are used as temporary preventive measure, pump dry and remove deposited sediment after each storm.
 - F. Sedimentation of Waterways Off-Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 1. If sedimentation occurs, install or correct preventive measures immediately at no cost to owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 - G. Open Water: Prevent standing water that could become stagnant.
 - H. Maintenance: Maintain temporary preventive measure until permanent measure have been established.

1.5 SUBMITTALS

- A. Contractor shall submit shop drawings or material certifications for all manufactured erosion and sediment control measures.
- B. Certificate: Mill certificate for silt fence fabric attesting that fabric and factory seams comply with specified requirements, signed by legally authorized official of manufacturer; indicate actual minimum average roll values; identify fabric by roll identification numbers.
- C. Inspection Reports: Submit report of each inspection; identify each preventive measure, indicate condition, and specify maintenance or repair required and accomplished.
- D. Maintenance Instructions: Provide instructions covering inspection and maintenance for temporary measures that must remain after Substantial Completion.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Silt Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
 - 1. Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D 4751.
 - 2. Permittivity: 0.05 sec^{-1} , minimum, when tested in accordance with ASTM D 4491.
 - 3. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D 4355 after 500 hours exposure.
 - 4. Tensile Strength: 100 lb-f, minimum, in cross-machine direction; 124 lb-f, minimum, in machine direction; when tested in accordance with ASTM D 4632.
 - 5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D 462.
 - 6. Tear Strength: 55 lb-f, minimum, when tested in accordance with ASTM D 4533.
 - 7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.

- B. Silt Fence Posts: One of the followings, minimum 5 feet long:
 - 1. Steel U- or T- section, with minimum mass of 1.33 lb per linear foot.
 - 2. Softwood, 4 by 4 inches in cross section.
 - 3. Hardwood, 2 by 2 inches in cross section.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.2 PREPARATION

- A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.3 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measure are not required.

- B. Storm Drain Drop Inlet Sediment Traps: If needed per Engineer's discretion.

- C. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit applications; provide at downspout outlets and storm water outlets.

- D. Soil Stockpiles: Protect using one of the following measures:
 - 1. Cover with polyethylene film, secured by placing soil on outer edges.
 - 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.

3.4 INSTALLATION

- A. The location of temporary erosion and sediment control devices may be adjusted from that shown on the Drawings to accommodate actual field conditions and increase the effectiveness of the installation.
- B. Silt Fences:
 - 1. Install in the locations shown on the Drawings or at the Engineer's discretion using the machine sliced installation method, unless directed.
 - 2. Use additional measures, such as rock aggregate, placed along the base of the silt fence where the silt fence geotextile cannot be trenched in, i.e. tree roots, frost, bedrock.
 - 3. Use short sections of silt fence placed in J-hook patterns to:
 - a. Supplement the perimeter silt fence at corner locations and areas where sediment deposition will occur. No more than 100 feet of silt fence shall be installed per 1/4 acre of drainage.
 - b. Break up flow path along silt fence running across contours to be no more than 100 feet between hooks or as directed by the Engineer.
 - 4. Silt fence longer than 600 feet shall be constructed in separate independent units with each unit having a length less than 600 foot. Avoid splices whenever possible. In necessary, make splices at an opposing fence post and according to the manufacturer's specifications.
- C. Storm Drain Inlet Protection:
 - 1. Provide effective storm drain inlet protection over the life of the Project until all sources with potential for discharging to inlets have been paved or stabilized.
 - 2. Place devices so that driving hazards or obstructions are not created. The devices must be cleaned out regularly and all devices must have an emergency overflow to reduce flooding potential.

3.5 MAINTENANCE

- A. Inspect, maintain, and repair any washouts or accumulations of sediment that occur as a result of the grading or construction. Restoration consists of grade repair, turf re-establishment, and street sweeping of mud and debris tracked from the Site.
- B. Inspection of all erosion and sediment control items will take place immediately after each runoff event and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
- C. The Contractor shall maintain the temporary sediment control devices until they are no longer necessary and are removed:
 - 1. Maintenance consists of keeping the devices functioning properly.
 - 2. The Contractor shall repair or replace plugged, torn, displaced, damaged, or non-functioning devices.
- D. Upon final acceptance of the Project and establishment of permanent erosion control measures, the Contractor shall remove all temporary erosion control measures.

3.6 CLEAN UP

- A. Remove temporary measure after permanent measures have been installed, unless permitted to remain by Engineer.

- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.
- F. Equipment electrical characteristics and components.

1.2 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

- E. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during bidding period to requirements specified in this section.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 - 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities having jurisdiction.
- E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.
- F. Substitution Submittal Procedure:
 - 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 - 2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 - 3. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

2.1 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Wiring Terminations: Furnish terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Include lugs for terminal box.
- B. Cord and Plug: Furnish minimum 6-foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 70 00

EXECUTION REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Protecting installed construction.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Product warranties and product bonds.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B. Provide submittals to Architect/Engineer required by authorities having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Owner will occupy all of building as specified in Section 01 10 00.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.
- D. Clean filters of operating equipment.
- E. Clean debris from drainage systems.
- F. Clean site; sweep paved areas, rake clean landscaped surfaces.
- G. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.4 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.
- G. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.6 OPERATION AND MAINTENANCE DATA

- A. Submit data bound in 8-1/2 x 11-inch (A4) text pages, capacity expansion binders with durable plastic covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- C. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- E. Contents: Prepare Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Certificates.
 - c. Photocopies of warranties and bonds.

1.7 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of applicable item of work.
- B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include Table of Contents and assemble in binder with durable plastic cover.
- F. Submit prior to final Application for Payment.
- G. Time Of Submittals:

1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
2. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 02 41 13

SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Work Includes:
 - 1. Removal and disposal of designated sidewalks, pavements, concrete, curbs, and other structures.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals

1.4 FIELD CONDITIONS

- A. PROTECTION
 - 1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect structures and utilities remaining intact.
 - 2. Protect designated trees and plants from damage.
- B. MAINTAINING TRAFFIC
 - 1. Ensure minimum interference with roads, street, driveways, sidewalks, and adjacent facilities.
 - 2. Do not close or obstruct streets, sidewalks, alleys, or passageways without permission from authorities having jurisdiction.
 - 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.

PART 2 - PRODUCTS

N/A

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare adjacent areas to prevent injury, movement or settlement of structures which are to remain.

- B. Arrange for and verify termination of utility services to include removing meters and capping lines.
- C. Removes items scheduled to be salvaged for Owner, and place in designated storage area.

3.2 DEMOLITION

- A. Remove concrete parking blocks, concrete bollards, concrete columns, concrete pedestal, etc. and dispose of them as follows:
 - 1. Dispose of items which are not more than two feet below sub-grade elevation.
 - 2. Break items more than two feet below subgrade elevation into sizes not-to-exceed twelve inches in maximum dimension and leave in place, unless it interferes with succeeding items of construction.
 - 3. Stockpile ballast, gravel and other pavement materials when required.

3.3 DEBRIS REMOVAL

- A. Promptly remove demolition debris from site.
- B. Obtain permission from applicable regulatory authority for disposal of debris to waste disposal plant.
- C. Do not store or burn materials on site.

END OF SECTION

SECTION 31 10 00

SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Removing above- and below-grade site improvements.
 - 2. Disconnecting, capping, and removing site utilities.

1.3 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.4 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify Illinois (JULIE) One-Call where Project is located before site clearing.
- C. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.

1.5 PRODUCTS

Not Used.

PART 2 - EXECUTION

2.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that items to remain have been flagged.
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

2.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not impact adjacent properties.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

2.3 EXISTING UTILITIES

- A. Arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing.
 - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and cap utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.
- C. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Architect/Engineer not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Architect/Engineer's written permission.
- D. Excavate for and remove underground utilities indicated to be removed.

2.4 CLEARING

- A. Remove vegetation to permit installation of new construction.

1. Do not remove vegetation indicated to remain

2.5 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, and aggregate base as indicated.
 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

2.6 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION

SECTION 32 05 16

AGGREGATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Coarse aggregate materials.
 - 2. Fine aggregate materials.
- B. Related Sections:
 - 1. Section 32 11 23 - Aggregate Base Course.

1.3 REFERENCES

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO M147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses.
 - 2. AASHTO T99 - Standard Specification for Moisture-Density Relations of Soils Using a 2.5 kg (5.5 lb) Rammer and a 305 mm (12 in.) Drop.
- B. ASTM International:
 - 1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - 2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
 - 3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 - 4. ASTM D4318 - Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Samples: Submit, in air-tight containers, a 25-pound sample of each type of aggregate fill to the Engineer.
- C. Materials Source: Submit name of imported materials suppliers.
- D. Manufacturer's Certificate: Certify aggregate suppliers are IDOT approved.

1.5 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the Work.

PART 2 PRODUCTS

2.1 COARSE AGGREGATE MATERIALS

- A. All coarse aggregates used to complete the Work shall conform to IDOT Standard Specification Section 1004.

2.2 FINE AGGREGATE MATERIALS

- A. All fine aggregate used to complete the Work shall conform to IDOT Standard Specification Section 1003.

2.3 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Testing and inspection services.
- B. Testing and Analysis of Coarse Aggregate Material: The Engineer shall perform in accordance with ASTM D698.
- C. Testing and Analysis of Fine Aggregate Material: The Engineer shall perform in accordance with ASTM D698.
- D. When tests indicate materials do not meet specified requirements, change material and retest.

PART 3 EXECUTION

3.1 STOCKPILING

- A. If necessary, stockpile materials on site at locations indicated by the Engineer.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.
- D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.2 STOCKPILE CLEANUP

- A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION

SECTION 32 11 23

AGGREGATE BASE COURSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Aggregate subbase.
 - 2. Aggregate base course.

1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Aggregate Subbase:
 - 1. Basis of Measurement: By cubic yard.
 - 2. Basis of Payment: Includes supplying, stockpiling, scarifying substrate surface, placing where required, and compacting.
- B. Aggregate Base Course:
 - 1. Basis of Measurement: By the ton.

1.4 REFERENCES

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO M288 - Standard Specification for Geotextile Specification for Highway Applications.
- B. ASTM International:
 - 1. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
 - 2. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
 - 3. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
 - 4. ASTM D2940 - Standard Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports.
 - 5. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
 - 6. IDOT Standard Specifications for Road and Bridge Construction, April 1 2016.

1.5 SUBMITTALS

- A. Section 00 72 13 - General Conditions
- B. Section 01 29 73 - Schedule of Values
- C. Samples: Submit, in air-tight containers, 10 lb. sample of each type of aggregate fill to testing laboratory.

D. Materials Source: Submit name of aggregate materials suppliers.

1.6 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the Work.
- B. Perform Work in accordance with IDOT Standard Specifications for Road and Bridge Construction.

PART 2 - PRODUCTS

2.1 SUSTAINABILITY CHARACTERISTICS

- A. Materials and Resources Characteristics:
 - 1. Recycled Content Materials: Furnish materials with maximum available recycled content.

2.2 AGGREGATE MATERIALS

- A. Subbase (Fine) Aggregate: As specified in Section 32 05 16.
- B. Base (Coarse) Aggregate: As specified in Section 32 05 16.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 31 19 – Project Meetings: Verification of existing conditions before starting work.
- B. Verify compacted substrate is dry and ready for paving and the support of imposed loads.
- C. Verify substrate has been inspected, gradients and elevations are correct.

3.2 PREPARATION

- A. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.
- B. Do not place fill on soft, muddy, or frozen surfaces.

3.3 AGGREGATE PLACEMENT

- A. Aggregate SubBase: Place in accordance with IDOT Standard Specification Section 311.
- B. Aggregate Base: Place in accordance with IDOT Standard Specification Section 351.
- C. Roller compact aggregate to 95% maximum density
- D. Level and contour surfaces to elevations, profiles, and gradients indicated.

- E. Maintain a maximum variation of 3 percent from Optimum Moisture Content of backfill materials to attain the required compaction density.
- F. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.4 TOLERANCES

- A. Section 01 40 00 – Quality Requirements: Tolerances.
- B. Maximum Variation from Flat Surface: 1/4 inch measured with 10-foot straight edge.
- C. Maximum Variation from Thickness: 1/4 inch.
- D. Maximum Variation from Elevations: 1/2 inch.

3.5 FIELD QUALITY CONTROL

- A. Field compaction and moisture testing of materials will be performed by the Engineer in accordance with ASTM D6938.
- B. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.

END OF SECTION

SECTION 32 12 16

ASPHALT PAVING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Prime Coat application.
 - 2. Construction of Hot Mix Asphalt (HMA) surface.
- B. Related Sections:
 - 1. Section 32 05 16 - Aggregates.
 - 2. Section 32 11 23 - Aggregate Base Course.

1.3 SUBMITTALS

- A. Asphalt Mixes: Submit mix data. Bituminous plant and mixture MUST be IDOT approved.

1.4 TESTING & INSPECTION

- A. Testing and inspection of bituminous concrete mixes and testing of placed aggregate base course and hot mix asphalt pavement will be performed by an independent testing laboratory employed and paid by the Contractor, in accordance with Specification Section 01 40 00 – Quality Requirements. Testing and inspection will be performed in a manner to minimize disruption of work.
- B. Allow testing laboratory access to mixing plant for verification of weights or proportions, character of materials used and determination of temperatures used in preparation of hot mix asphalt pavement.
- C. When requested, testing laboratory will perform tests on hot mix asphalt pavement mix to determine conformity with specifications.
- D. Contractor shall pay for all costs of additional testing necessary due to improper performance of work.
- E. Do not place hot-mix asphalt pavement until satisfactory results have been verified and base course approved in writing by the Engineer.
- F. When compaction test results for the hot-mix asphalt courses indicate non-conforming work, remove defective work, replace and retest.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Milling: Perform in accordance with IDOT Standard Specification Section 440.
- B. Hot-Mix Asphalt Binder Course: In accordance with IDOT Standard Specification Section 406.
- C. Hot-Mix Asphalt Surface Course: In accordance with IDOT Standard Specification Section 406.
- D. Bituminous Materials (Prime Coat): Apply in accordance with IDOT Standard Specification Section 406.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Provide all items and perform all preparation and work in accordance with IDOT Standard Specifications, referenced sections:
 - 1. Milling: 440.
 - 2. Hot-mix asphalt binder course: 406.
 - 3. Hot-mix asphalt surface course: 406.
 - 4. Bituminous materials (prime coat): 406.
 - 5. Full depth hot-mix asphalt: 407.

3.2 PREPARATION

- A. Mill and broom hot-mix asphalt surfaces in accordance with IDOT Standard Specification Section 440 and the plan set.

3.3 PLACEMENT OF HOT-MIX ASPHALT PAVEMENT

- A. Hot-mix asphalt pavement courses shall be placed in accordance with IDOT Standard Specification Section 406.
- B. In addition to the weather and temperature limitations specified in Section 406 of the Standard Specifications, in the event of sudden rain, the loading of trucks shall immediately stop whether they be from the plant or storage bins.

Material in transit will be permitted to be laid at the Contractor's risk provided the pavement is free of standing water and the proper temperatures of the asphaltic mix are maintained. Approval to unload the trucks in transit shall in no way relax the requirements of quality, density or smoothness of the bituminous mixture being placed.

At least four weeks prior to the start of construction, the Contractor shall submit samples of the coarse aggregate(s), the fine aggregate(s), mineral filler and asphalt he proposes to use for the purpose of establishing a job mix formula. This requirement may be waived by the Engineer, provided the Contractor can show evidence that his proposed materials have produced a bituminous mixture meeting the requirements below.

- C. Compact each course by rolling to specified density. Do not displace or extrude pavement from position. Hand compact in areas inaccessible to rolling equipment.
- D. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.
- E. Hot-mix asphalt pavement mix used must be IDOT approved.
- F. Bituminous Materials (Prime Coat) shall be placed between all lifts in accordance with the Tennessee Department of Transportation Standard Specifications.

3.4 TOLERANCES

- A. Section 01 40 00 – Quality Requirements: Tolerances.
- B. Flatness: Maximum variation of 1/4 inch measured with a 10-foot straight edge.
- C. Scheduled Compacted Thickness: Within 1/4 inch.
- D. Variation of Indicated Elevation: Within 1/2 inch.

END OF SECTION

SECTION 32 17 23

PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes painted markings applied to asphalt pavement.
- B. Related Sections:
 - 1. Section 32 12 16 – Asphalt Paving.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include technical data and tested physical and performance properties.
- B. Shop Drawings: For pavement markings.
 - 1. Indicate pavement markings, colors, lane separations, defined parking spaces, and dimensions to adjacent work.
 - 2. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of IDOT's Standard Specifications for Road and Bridge Construction, for pavement-marking work.
 - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.5 FIELD CONDITIONS

- A. Environmental Limitations: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 degrees F for alkyd materials 55 degrees F for water-based materials, and not exceeding 95 degrees F.

PART 2 - PRODUCTS

2.1 PAVEMENT-MARKING PAINT

- A. Pavement-Marking Paint: Alkyd-maleic type, lead and chromate free, ready mixed, complying with AASHTO M 249; colors complying with FS TT-P-1952.
 - 1. Color: White, Black, Yellow, or Blue as indicated on the Drawings.
- B. Glass Beads: AASHTO M 247, Type I.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that pavement is dry and in suitable condition to begin pavement marking according to manufacturer's written instructions.
- B. Proceed with pavement marking only after unsatisfactory conditions have been corrected.

3.2 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Engineer.
- B. Sweep and clean surface to eliminate loose material and dust.
- C. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 0.015 inch.
 - 1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to pavement. Mask an extended area beyond edges of each stencil to prevent paint application beyond stencil. Apply paint so that it cannot run beneath stencil.
 - 2. Broadcast glass beads uniformly into wet markings at a rate of a minimum application rate of 10 lbs. per 100 square feet.

3.3 PROTECTING AND CLEANING

- A. Protect pavement markings from damage and wear during remainder of construction period.
- B. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 32 92 19

SEEDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Fertilizing.
 - 2. Seeding.
 - 3. Hydroseeding.
 - 4. Mulching.
 - 5. Maintenance.

1.3 REFERENCES

- A. ASTM International:
 - 1. ASTM C602 - Standard Specification for Agricultural Liming Materials.

1.4 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.

1.5 SUBMITTALS

- A. Section 01 33 00 – Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data for seed mix, fertilizer, mulch, and other accessories.
- C. Manufacturer's Certificate: products meet or exceed the specifications requirements.

1.6 FINAL ACCEPTANCE

- A. Final inspection and acceptance will be at the end of the turf establishment period. Acceptance shall be based upon a satisfactory stand of turf defined as 95 percent ground cover of species established.
- B. Reestablish turf in areas that do not have 95 percent ground cover of the established species. Repair rejected areas of turf within acceptable planting dates as directed by Engineer.
- C. Upon seeded areas acceptance, submit written maintenance instructions recommending procedures for maintenance of seeded areas.

1.7 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.
- B. Perform Work in accordance with IDOT Standard Specifications for Road and Bridge Construction.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.
- D. Store all products off the ground, in a dry location, out of the way of construction operations. Provide protection to prevent damage until installed.

1.9 MAINTENANCE SERVICE

- A. Section 01 70 00 – Execution and Closeout Requirements: Requirements for maintenance service.
- B. Maintenance of installed and accepted seeded areas will be performed by Owner.
- C. Maintain seeded lawn areas, including watering, spot weeding, mowing, applications of herbicides, fungicides, insecticides and re-seeding until a full, uniform stand of grass free of weeds, undesirable grass species, disease, and insects is achieved and accepted.
 - 1. Water daily to maintain adequate surface soil moisture for proper seed germination. Continue daily watering for not less than 30 days, Thereafter, apply 1/2" of water twice weekly until acceptance.
 - 2. Repair, rework, and re-seed all areas that have washed out, are eroded, or do not catch.
 - 3. Mow lawn areas as soon as lawn top growth reaches a 3-inch height. Cut back 2 inches in height. Repeat mowing as required to maintain specified height.
 - 4. Apply Type B fertilizer to lawns approximately 30 days after seeding at a rate equal to 1.0 lb. Of actual nitrogen per 1,000 square feet (140 lbs./acre). Apply with mechanical rotary or drop type distributor. Thoroughly water into soil.

1.10 WARRANTY

- A. Contractor's Warranty: Supply Owner with warranty in accord with General Conditions for a period of one year plus one growing season.

PART 2 PRODCUTS

2.1 SEED MIXTURE

- A. Furnish materials in accordance with IDOT Standard Specifications for Road and Bridge Construction.

2.2 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- B. Fertilizer: Commercial grade 10-10-10 or equivalent; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil.
- C. Lime: Agricultural limestone containing a minimum 85 percent calcium carbonate equivalent.
- D. Water: Clean, fresh and free of substances or matter capable of inhibiting vigorous growth of grass.
- E. Erosion Fabric: Turf Reinforcement Matting; Class I, $6.0 < 8.0 \text{ FT}^2$ Sheer Stress
- F. Stakes: Softwood lumber, chisel pointed.
- G. String: Inorganic fiber.

2.3 SOURCE QUALITY CONTROL

- A. Section 01 40 00 – Quality Requirements: Testing, inspection and analysis requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 31 19 – Project Meetings: Verification of existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this section. Do not start seeding work until unsatisfactory conditions are corrected.

3.2 FERTILIZING

- A. Apply lime at application rate of 100 lbs. per 1000 FT^2 minimum Work lime into top 6 inches of soil.
- B. Apply fertilizer at application rate of 20 lbs. per 1000 FT^2 minimum.
- C. Apply after smooth raking of topsoil.
- D. Do not apply fertilizer at same time or with same machine used to apply seed.
- E. Mix fertilizer thoroughly into upper 2 inches of topsoil.
- F. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.3 SEEDING

- A. Apply seed at rate of 2- ½ lbs. per 1000 FT^2 evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.

- C. Planting Season: April 1 thru November 1.
- D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- E. Immediately following seeding, apply mulch in accordance with IDOT Standard Specification.
- F. Apply water with fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.4 REPAIR OF SEEDING

- A. The Contractor is responsible for the proper care of the seeded areas during the period when the vegetation is being established. If, at any time before completion and acceptance of the entire work covered by this contract, any portion of the surface becomes eroded, gullied or otherwise damaged or vandalized following seeding; has been winter-killed or otherwise destroyed, the affected portion shall be repaired to re-establish the condition and grade of the soil and reseed the areas as specified herein to attain established turf.

3.5 SEED PROTECTION

- A. Cover seeded slopes where grade is 3:1 or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.
- B. Lay fabric smoothly on surface, bury top end of each section in 6-inch-deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches. Backfill trench and rake smooth, level with adjacent soil.
- C. Secure outside edges and overlaps at 36-inch intervals with stakes.
- D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

3.6 MAINTENANCE

- A. Mow grass at regular intervals to maintain at maximum height of 3-½ inches. Do not cut more than 1/3 of grass blade at each mowing. Perform first mowing when seedlings are 40 percent higher than desired height.
- B. Neatly trim edges and hand clip where necessary.
- C. Immediately remove clippings after mowing and trimming. Do not let clippings lay in clumps.
- D. Water to prevent grass and soil from drying out.
- E. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.
- F. Immediately reseed areas showing bare spots.

- G. Repair washouts or gullies.
- H. Protect seeded areas with warning signs during maintenance period.

3.7 ACCEPTANCE

- A. Inspection to determine acceptance of seeded lawns will be made after 60 days of completed installation upon Contractor's request. Provide notification at least ten working days before requested inspection date.
 - 1. Seeded areas will be acceptable provided all requirements, including maintenance, have been complied with, and a healthy, uniform, close stand of specified grass is established free of weeds, undesirable grass species, disease, and insects.
 - 2. No individual lawn areas shall have bare spots or unacceptable cover totaling more than two percent of the individual areas, in areas requested to be inspected.
- B. Upon acceptance, Owner will assume lawn maintenance.

3.8 CLEANING

- A. Perform cleaning during installation of work and upon completion of work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from seeding operations.

END OF SECTION