
PROPOSED:

17th & Dunn Intersection Improvements

LETTING DATE: March 15th, 2021

AWARD DATE: March 16th, 2021

or subsequent BPW Meeting

FOR:

THE CITY OF BLOOMINGTON

ENGINEERING DEPARTMENT

POST OFFICE BOX 100

BLOOMINGTON, INDIANA

SUBMITTED BY:

Company or Firm Name

Street and Number

City or Town

State

Zip Code

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SECTION I

INVITATION TO BIDDERS

INVITATION TO BIDDERS

NOTICE IS HEREBY GIVEN THAT THE BOARD OF PUBLIC WORKS OF THE CITY OF BLOOMINGTON, INDIANA WILL RECEIVE SEALED BIDS FOR THE BELOW-DESCRIBED WORK AT THE LOCATION INDICATED.

17th & Dunn Intersection Improvements

This project shall include, but is not limited to, the replacement and upgrade of the traffic signal at the intersection of 17th Street and Dunn Street. This project shall include the placement of signal hardware, curbing, sidewalk, asphalt, pavement markings, and landscaping per the plans and specifications, and placement of stormwater infrastructure according to the most recent set of City of Bloomington Utilities Specifications at the time of bidding. All other work shall be completed as shown on the plans and specifications included with this packet, and by the most recent INDOT Specifications.

Bids are to be submitted in proper form, as described in the "Instructions to Bidders" which can be found on the City's website at <https://bloomington.in.gov/engineering/bids>. Sealed bids shall be received by the Department of Public Works, at City Hall, 401 North Morton Street, Atrium, Bloomington, Indiana, at or before 11:30 AM local time on March 15th, 2021. Bids will be publicly opened and read aloud at 12:00 Noon local time on March 15th, 2021, at a virtual meeting. Any bids received after the designated time will be returned unopened. Bids will be reviewed and the award may be made at the March 16th, 2021, virtual meeting or a subsequent virtual meeting of the Board of Public Works.

Each Bidder shall file with his or her sealed bid:

- (1) a properly executed Non-collusion Affidavit as required by the laws of the State of Indiana;
- (2) a Questionnaire Form 96 of the State Board of Accounts;
- (3) a cashier's check or certified check drawn on an acceptable bank or a Bid bond equal to five (5) percent of the total amount of bid;
- (4) a properly executed Trench Safety Systems Affidavit, if project may require creation of a trench of at least five (5) feet in depth;
- (5) a properly executed Employee Drug Testing Program Affidavit for a public works project estimated to cost at least \$150,000; and
- (6) a copy of the bidder's written plan for an employee drug testing program to test the employees of the bidder for drugs.

For projects utilizing Federal funding, Wage rates shall be in compliance with Davis Bacon. For bids of \$100,000.00 or more, the successful bidder shall furnish both a performance bond and a payment bond for one hundred percent (100%) of the contract amount prior to the execution of the contract, and the performance bond and the payment bond shall remain in effect for a period of one (1) year after final acceptance of the work.

A pre-bid meeting will not be held.

Each Bidder must ensure that to the greatest extent feasible, opportunities for training and employment should be given to lower income residents of the project area and purchases and/or contract for work in

connection with the project should be awarded to small business concerns which are located in, or owned in substantial part, by persons residing in the area of the project.

The City of Bloomington is an equal opportunity employer, and Bidder shall meet all requirements for equal employment under Title VII of the 1964 Civil Rights Act as amended and under the Bloomington Human Rights Ordinance, as amended.

Each Bidder for proposals over \$10,000.00 shall submit and have approved by the City of Bloomington Contract Compliance Officer, Barbara McKinney, his/her written Affirmative Action Plan at least twenty-four (24) hours prior to the deadline for submission of bid. Bidders who fail to submit acceptable plans by the deadline are subject to disqualification. Each Bidder must insure that all employees and applicants for employment are not discriminated against because of race, religion, color, sex, national origin, ancestry, disability, sexual orientation, gender identity, veteran status or housing status. All the protected classes must be included in your Affirmative Action Plan for it to be acceptable. In addition to other requirements, your plan MUST include a workforce breakdown, an internal grievance procedure, a non-retaliation statement, designation of a person by name or position who is responsible for implementation of the Plan, applicability to both applicants and employees, recruitment of minorities, equal access to training programs, and an explanation of your method of communicating the operations of your affirmative action plan to employees and prospective applicants. Barbara McKinney, Contract Compliance Officer, may be contacted at (812) 349-3429, 8:00 a.m. to 5:00 p.m. Monday through Friday.

Each Bidder required to submit an affirmative action plan now must also submit a harassment plan. The harassment plan must, at minimum, include a definition of harassment, the name or title of the individual designated to receive and investigate complaints and a statement that the contractor will not retaliate against an employee for complaining about harassment. A model harassment policy is included for your convenience, which you may amend and adapt as your own. Please note that this harassment policy requirement is new, adopted by the Bloomington Common Council in June 2019.

In accordance with Indiana Code 36-1-12-24, each Contractor that submits a bid for a public works project that is estimated to cost \$150,000 or more shall submit with his/her bid a written plan for an employee drug testing program that complies with Indiana Code 4-13-18 *et seq.*

For Bids in excess of \$300,000 on Public Works projects that are not for the construction, alteration or repair of a highway, street or alley, the Contractor must be pre-qualified with the Indiana Public Works Certification Board in accordance with Indiana Code 4-13.6-4-2.5.

If the project may require creation of a trench of at least five (5) feet in depth, the low bidder shall be required to submit a trench safety plan to the project engineer at least ten (10) days prior to beginning work on the project.

The Board of Public Works reserves the right to waive any informality and to accept or reject any or all bids submitted. Bids may be held by the Board of Public Works for a period not-to-exceed sixty (60) days from the date of the opening of Bids for the purpose of reviewing the Bids and investigating the qualifications of the Bidders prior to awarding the contract.

Board of Public Works, City of Bloomington, Indiana

Dana Palazzo, President

SECTION II

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

1.00 CONTRACT DOCUMENTS: Contract Documents that will form the Contract are:

1. The Agreement and its Attachments
2. The Invitation to Bidders
3. The Instructions to Bidders
4. The Performance Bond and the Payment Bond
5. The Specifications
6. The General Conditions
7. The Supplementary Conditions
8. The Special Conditions
9. The Escrow Agreement
10. Request for taxpayer identification number and certification: Substitute W-9.
11. All Addenda to the Bid Documents
12. All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto.
13. CONTRACTOR'S submittals
14. The current Indiana Department of Transportation Standard Specifications and the latest addenda.
15. All plans as provided for the work that is to be completed.

1.01 DEFINED TERMS:

1.01(A) Bidder: The individual or entity who submits a Bid directly to the Owner.

1.01(B) Successful Bidder: The lowest responsible and responsive Bidder to whom Owner makes an award.

1.02 INSPECTION OF THE SITE: Bidder shall examine each of the Contract Documents, visit the site of the work and thoroughly and fully inform themselves of the construction hazards, procedures, labor, conditions and factors, which could affect the prosecution and completion of the work. Such considerations shall include; the conditions of existing structures and facilities which may be affected by the proposed work, the procedure necessary for maintenance of uninterrupted operation of existing facilities, the availability and cost of labor and methods for transporting, handling, and storage of materials and equipment. All such factors shall be properly investigated and considered in the preparation of the Bidder's Bid. There will be no subsequent financial adjustment to any contract for lack of such prior information or its effects on the cost of the work.

1.03 OMISSIONS AND DISCREPANCIES: Should Bidders find discrepancies in, or omissions from, the Contract Documents, or should they be in doubt as to their meaning, written notification should be made to the City Engineer. Interpretation of the proposed contract documents will be made only by written addendum. A copy of each addendum will be posted at the City's web site at <https://bloomington.in.gov/engineering/projects/17-dunn>. The Owner will not be responsible for any other explanations or interpretations of the proposed contract documents.

1.04 PRE-BID CONFERENCE: A non-mandatory pre-bid conference may be held at the time and location indicated in the Advertisement or Invitation to Bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference; however, attendance at this conference is not required to submit a Bid. Information

presented at the pre-bid conference does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the pre-Bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

1.05 INTERPRETATIONS AND ADDENDA: Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.

Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

City of Bloomington
Attn: Matt Smethurst
Email: smethurm@bloomington.in.gov
Phone: 812-349-3514

Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received fewer than four (4) working days prior to the date for opening of Bids may not be answered.

Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

2.00 BIDS: Pursuant to the "Invitation to Bidders" sealed Bids for performing the work shall be received by the Department of Public Works, at City Hall, 401 North Morton Street, Atrium, Bloomington, Indiana, at or before 11:30 AM local time on March 15th, 2021. Bids will be publicly opened and read aloud at 12:00 PM (Noon) local time on March 15th, 2021, at a virtual meeting. Any Bid received after the designated time will be returned unopened. Bids will be reviewed and the award may be made at the March 16th, 2021 virtual meeting or a subsequent virtual meeting of the Board of Public Works. If requested by project manager, the City's Substitute IRS W-9 form shall be executed by Bidder and received by the City prior to the issuance of a Notice to Proceed to Bidder.

2.01 BASIS OF BID: Bidders must submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form. The "Bid Price" (sometimes referred to as the extended price or Bid Amount) for each unit price Bid item will be the product of the "Approximate Quantity", which Owner or its representative has set forth in the Bid Form, for the item and the corresponding "Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 11.06 of the General Conditions.

2.02 BID FORM: Each Bid shall be legibly written or printed in ink on the Bid Form with Unit Prices provided if applicable. All addenda to the Contract Documents on which a Bid is based, properly signed by the Bidder, shall accompany the Bid when submitted. No alteration in any Bid, or in the Bid Form on which it is submitted, shall be made by any person after the Bid has been submitted by the Bidder. Please indicate on the Bid Form whether you would want to receive a Single Lump Sum Payment following acceptance of this project or if you would want to receive Progressive Payments during the course of this project.

2.03 BID SIGNATURES: Each Bidder shall sign his/her Bid using his/her usual signature and giving his/her full business address. Bids by partnerships shall be signed with the partnership name

followed by the signature and designation of one of the partners or other authorized representative. Bids by corporations shall be signed with the name of the corporation followed by the signature and designation of the president, secretary, or other person authorized to bind the corporation. The names of all persons signing should also be typed or printed below the signature. A Bid by a person who affixes to his/her signature the word "president" or "secretary", "agent", or other designation without disclosing his/her principal may be held to be the Bid of the individual signing. When requested by the Owner, satisfactory evidence of the authority of the person signing shall be furnished. No Bidder may submit more than one Bid. Two Bids under different names will not be accepted from one firm or association.

- 2.04 BID SUBMISSION:** Each Bid submitted shall be enclosed in a sealed envelope or wrapping, identified on the outside with the words "SEALED BID", and the name of the project, and shall be received by the Department of Public Works at City Hall, 401 North Morton Street, Atrium, Bloomington, Indiana, on the date and at the time provided above in 2.00 BIDS.
- 2.05 INDIANA LEGAL REQUIREMENTS:** Each bidder shall submit under oath with his/her Bid a statement of his/her experience, proposed plan for performing the Work, equipment available to perform the work, and a financial statement. The statements shall be submitted on Questionnaire Form No. 96 of the Indiana State Board of Accounts. Each Bid shall be accompanied by a properly executed Non-Collusion Affidavit as required by the laws of the State of Indiana.
- 2.06 BID GUARANTEE:** Each Bid shall be accompanied by a cashier's check or a certified check drawn on an acceptable bank, or an acceptable Bidder's bond in an amount of not less than five percent (5%) of the total Bid. No personal and/or company checks will be accepted or the Bid shall be deemed unresponsive. The Bid guarantee shall be made payable without condition to the City of Bloomington, Indiana, hereinafter referred to as "Owner", and the amount of said Bid Guarantee may be retained by and forfeited to the Owner as liquidated damages if the Bid covered thereby is accepted and a contract based thereon is awarded and the Bidder should fail to enter into a contract in the form prescribed, with legally responsible sureties, within fifteen (15) days after such award is made and confirmed by the Owner.
- 2.07 RETURN OF BID GUARANTEE:** The Bid Guarantee deposit of each unsuccessful Bidder will be returned when his/her Bid is rejected. The Bid Guarantee deposit of the Bidder to whom the Contract is awarded will be returned when the successful Bidder executes a contract and files a satisfactory performance bond and payment bond. The Bid Guarantee deposit of the second and third lowest responsible Bidders may be retained for a period not to exceed ninety (90) days pending the execution of the Contract and bonds by the successful Bidder.
- 2.08 WITHDRAWAL OF BID:** No Contractor may withdraw his/her Bid for a period of sixty (60) days after the date and hour set for the opening, and the Bidders submitting the three lowest Bids may not withdraw their Bid for a period of one hundred eighty (180) days after the opening date. A Bidder may withdraw his/her Bid at any time prior to the expiration of the Bid period during which Bids may be submitted by a written request signed in the same manner and by the same person who signed the Bid.
- 2.09 ACCEPTANCE AND REJECTION OF BIDS:** The Owner reserves the right to accept the Bid submitted by the lowest responsible and responsive Bidder; to reject any or all Bids; and to waive irregularities or informalities in any Bid. Bids received after the specified time of closing will be returned unopened. The acceptance of a Bid shall bind the successful Bidder to execute the Contract and to be responsible for liquidated damages as provided in Section 4.00 below and in section 13.00 of the General Conditions.

3.00 QUALIFICATION OF BIDDERS: Bidders shall submit satisfactory evidence that they have a practical knowledge of the particular work Bid upon, and that they have the necessary financial resources to complete the proposed work. Each Bidder shall execute completely and accurately 'Questionnaire Form No. 96' of the Indiana State Board of Accounts and the 'Request for taxpayer identification number and certification' form of the City of Bloomington and shall file the same with his/her Bid. The information contained therein shall be used by the Owner to determine the ability, experience, and capital resources of the Bidder. In determining the Bidder's qualifications, the following factors will be considered: whether the Bidder (a) maintains a permanent place of business; (b) has adequate plant and equipment to do the work properly and expeditiously; (c) has the necessary financial resources to meet all obligations incident to the work; (d) has appropriate technical experience; and (e) can be added as an approved vendor to the City of Bloomington. Each Bidder may be required to show that previous work performed has been handled in such a manner that there are no just and proper claims pending against such work. No Bid will be accepted which is submitted by a Bidder who is engaged in any work which would impair their ability to finance the work covered by such Bid or to provide suitable equipment for its proper prosecution and completion.

3.01 PRE-QUALIFICATION OF CONTRACTORS: For bids in excess of \$300,000 on Public Works projects that are not considered the construction, alteration, or repair of a highway, street, or alley, the Contractor shall be pre-qualified with the Indiana Public Works Certification Board prior to starting work.

4.00 EXECUTION OF CONTRACT: Any Bidder whose Bid shall be accepted will be required to appear at the office of the City Engineer in person, or, if a firm or corporation, a duly authorized representative shall so appear, to execute the Contract within fifteen (15) days after notice that the Contract has been awarded to him/her. Failure or neglect to do so shall constitute a breach of the agreement effected by the acceptance of the Bid. The amount of the Bid Guarantee accompanying the Bid of such Bidder may be retained by the City as liquidated damages for such breach. In the event that any Bidder whose Bid shall be accepted shall fail or refuse to execute the Contract as hereinbefore provided, the Board of Public Works may at their option, determine that such Bidder has abandoned the Contract and thereupon his/her Bid and the acceptance thereof shall be null and void and the Owner shall be entitled to liquidated damages as provided herein.

4.01 INSURANCE: The Contractor will be required to carry insurance throughout the lifetime of the Contract, as provided in the General Conditions, the amount of insurance of the various types being not less than the amounts specified therein.

4.02 PAYMENTS: Payment for all work performed under the proposed contract will be made in cash, or its equivalent, by the Owner within sixty (60) days after completion and final acceptance of the work covered by the contract. Partial estimates will be issued and paid as provided in the General Conditions.

4.03 TIME FOR BEGINNING AND COMPLETING THE WORK: The Contractor shall start active and continuous work on the contract within fifteen (15) calendar days after the date of the notice to proceed. All work shall be completed within ninety (90) calendar days after the date of the notice to proceed. Calendar and work days shall be as defined in the General Conditions of these documents.

4.04 TAXES AND PERMITS: Attention is directed to the requirements of the General Conditions regarding payments of taxes and obtaining permits. The Contractor shall be responsible for obtaining all necessary permits.

- 4.05 WORKER'S COMPENSATION:** Before any work is started, the Contractor shall obtain from the Indiana State Industrial Board and file with the Owner, a certificate as evidence of compliance with the provisions of the Indiana Worker's Compensation Act and the Indiana Worker's Occupational Diseases Act.
- 4.06 PERFORMANCE BOND:** For all contracts in the amount of \$100,000.00 or more, the Bidder to whom a contract is awarded will be required to furnish a Performance Bond to the Owner in an amount equal to one hundred percent (100%) of the contract price. The bond shall be executed on the form included in the Contract Documents by a surety company authorized to do business in the State of Indiana and acceptable as surety to the Owner. Accompanying the bond shall be a "Power of Attorney" authorizing the attorney-in-fact to bind the surety company and certified to include the date of the bond. The surety on the Performance Bond cannot be released for one year, and the bond must require that the surety will not be discharged for:
1. modifications, omissions, or additions;
 2. defects in the contract; or
 3. defects in the Bidding or awarding process.
- 4.07 PAYMENT BOND:** For all contracts in the amount of \$100,000.00 or more, the Bidder to whom a contract is awarded will be required to furnish a Payment Bond to the Owner in an amount equal to one hundred percent (100%) of the contract price. The bond shall be executed on the form included in the Contract Documents by a surety company authorized to do business in the State of Indiana and acceptable as surety to the Owner. Accompanying the bond shall be a "Power of Attorney" authorizing the attorney-in-fact to bind the surety company and certified to include the date of the bond. The surety on the Payment Bond cannot be released until one year after the Board's final settlement with the Contractor, and the bond is required to insure payment of subcontractors, laborers, material suppliers, and persons furnishing services. The bond must provide the same assurances as does the Performance Bond against conditions discharging the surety.
- 4.08 LOCAL MATERIALS:** Preference will be given to materials, products, supplies, and all other articles produced, manufactured, made, or grown in the State of Indiana.
- 4.09 NON-DISCRIMINATION IN EMPLOYMENT:** Each Bidder for Bids over \$10,000.00 shall submit and have approved by the City of Bloomington Contract Compliance Officer, Barbara McKinney, his/her written Affirmative Action Plan at least twenty-four (24) hours prior to the deadline for submission of Bids. Bidders who fail to submit acceptable plans by the deadline are subject to disqualification. Each Bidder must insure that all employees and applicants for employment are not discriminated against because of race, religion, color, sex, national origin, ancestry, disability, sexual orientation, gender identity, veteran status or housing status. All the protected classes must be included in your Affirmative Action Plan for it to be acceptable. In addition to other requirements, your plan MUST include a workforce breakdown, an internal grievance procedure, a non-retaliation statement, designation of a person by name or position who is responsible for implementation of the Plan, applicability to both applicants and employees, recruitment of minorities, equal access to training programs, and an explanation of your method of communicating the operations of your affirmative action plan to employees and prospective applicants. Barbara McKinney, Contract Compliance Officer, may be contacted at (812) 349-3429, 8:00 a.m. to 5:00 p.m. Monday through Friday. The successful Bidder must comply with each section of its affirmative action plan and be prepared to comply in all respects with the contract provisions regarding non-discrimination which are included in the Employment Requirement and Wage Rate section. For contracts paid in whole or in part with federal funds, the Bidder must submit a signed

statement as to whether he or she has previously performed work subject to Executive Order 11246. For contracts paid in whole or in part with federal funds, the successful Bidder must, if requested, submit a list of all subcontractors who will perform work on the project, and written and signed statements from authorized agents of the labor pools with which he/she will or may deal for employees on the work, together with supporting information to the effect that said labor pools' practices and policies are in conformity with Executive Order 11246, and that said labor pools will affirmatively cooperate in, or offer no hindrance to, recruitment, employment, and equal treatment of employees seeking employment, and performing work under the Contract, or a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish same, prior to the award of the Contract.

4.10 Harassment Policy: Each Bidder required to submit an affirmative action plan now must also submit a harassment plan. The harassment plan must, at minimum, include a definition of harassment, the name or title of the individual designated to receive and investigate complaints and a statement that the contractor will not retaliate against an employee for complaining about harassment. A model harassment policy is included for your convenience in Section IV of this bidding packet, which you may amend and adapt as your own. Please note that this harassment policy requirement is new, adopted by the Bloomington Common Council in June, 2019.

4.11 Permits: Contractor is responsible for obtaining all permits.

SECTION III

BID FORM

UNIT PRICES

SAMPLE BOND FORMS

ESCROW AGREEMENT

BID FORM

This BID Summary Sheet shall be completed and submitted with all other BID Documents.

The total project bid amount to complete the 17th & Dunn Intersection Improvements, including all associated work per plans and specification is;

_____, \$ _____

For projects requiring submission of Trench Safety Systems Affidavit, the portion of the total project bid cost provided above which is attributable to trench safety systems is \$ _____.

Requested Form of Payment (Choose one):	<input type="checkbox"/>	A Single Lump Sum Payment following completion of the project. Invoice shall be submitted within sixty (60) days following acceptance of the project.
	<input type="checkbox"/>	Progressive Payments for work completed and invoiced throughout the project.

All work shall be completed within ninety (90) calendar days after the date of the Notice to Proceed.

Any and all Subcontractors performing work valued over \$10,000 shall be listed below: Any subcontractor not listed below at the time of bid, must be approved by the City of Bloomington prior to performing any work on this contract. Subcontractors not listed or approved will not be paid for work under this contract. In accordance with Indiana Code 5-16-13 *et seq.*, incorporated herein by reference, any subcontractor performing work on this contract is a Tier 2 contractor.

SUBCONTRACTORS	ADDRESS	TYPE OF WORK

In submitting this Bid, Bidder represents that:

- A. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
- B. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents and the following Addenda, receipt of which is hereby acknowledged.

No. _____	Dated _____
No. _____	Dated _____
No. _____	Dated _____

Final Invoice shall be submitted within thirty (30) days following final acceptance of the project.

SIGNATURE OF BIDDER

Name of Bidder: _____ Date: _____
 By: _____
 Name & Title Printed: _____
 Bidder Address: _____ Telephone: _____

UNIT PRICES



Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
001	104-05404	DESIGN/BUILD (CURB RAMP)	LS	1.00		
002	105-06845	CONSTRUCTION ENGINEERING	LS	1.00		
003	110-01001	MOBILIZATION AND DEMOBILIZATION	LS	1.00		
004	201-02245	TREE 6 IN., REMOVE	EACH	4.00		
005	201-02250	TREE 10 IN., REMOVE	EACH	1.00		
006	201-02255	TREE 18 IN., REMOVE	EACH	1.00		
007	201-02260	TREE 30 IN., REMOVE	EACH	1.00		
008	201-52370	CLEARING RIGHT OF WAY	LS	1.00		
009	202-02272	PAVED SIDE DITCH, REMOVE	LFT	101.00		
010	202-02279	CURB AND GUTTER, REMOVE	LFT	714.00		
011	202-52710	SIDEWALK, CONCRETE, REMOVE	SYS	407.00		
012	202-90747	RETAINING WALL, REMOVE	LFT	65.00		
013	202-91385	INLET, REMOVE	EACH	2.00		
014	202-93047	MANHOLE, REMOVE	EACH	1.00		
015	202-93615	CONCRETE, REMOVE	SYS	2.00		
016	202-96128	GUTTER, CONCRETE, REMOVE	LFT	247.00		
017	202-96133	PIPE, REMOVE	LFT	150.00		
018	203-02000	EXCAVATION, COMMON	CYS	365.00		
019	203-02070	BORROW	CYS	55.00		
020	205-03371	SEDIMENT, REMOVE	CYS	10.00		
021	205-06933	TEMPORARY INLET PROTECTION	EACH	15.00		
022	205-06934	TEMPORARY MULCH	TON	1.00		
023	205-06937	TEMPORARY SILT FENCE	LFT	505.00		
024	205-08594	FILTER SOCK	LFT	10.00		
025	205-09543	NO. 2 STONE	TON	50.00		
026	205-11591	TEMPORARY SEED MIXTURE	LBS	45		
027	207-08264	SUBGRADE TREATMENT, TYPE II	SYS	286		
028	207-08268	SUBGRADE TREATMENT, TYPE IV	SYS	844		
029	211-09265	STRUCTURE BACKFILL TYPE 2	CYS	146		

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LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
030	211-09266	STRUCTURE BACKFILL TYPE 3	CYS	74.00		
031	211-09267	STRUCTURE BACKFILL TYPE 4	CYS	74.00		
032	214-12237	GEOTEXTILE FOR PAVEMENT, TYPE IB	SYS	169.00		
033	301-12234	COMPACTED AGGREGATE, NO. 53	CYS	257.00		
034	305-07464	PCC BASE PATCHING, 9 IN	SYS	122.00		
035	306-08034	MILLING, ASPHALT, 1 1/2 IN.	SYS	2344.00		
036	401-XXXXX	HMA, TYPE B, SURFACE	TON	274.00		
037	401-XXXXX	HMA, TYPE B, INTERMEDIATE	TON	548.00		
038	401-XXXXX	HMA, TYPE B, BASE	TON	140.00		
039	401-10258	JOINT ADHESIVE, SURFACE	LFT	1962.00		
040	401-10259	JOINT ADHESIVE, INTERMEDIATE	LFT	1830.00		
041	401-11785	LIQUID ASPHALT SEALANT	LFT	1962.00		
042	406-05520	ASPHALT FOR TACK COAT	TON	2.00		
043	601-02241	GUARDRAIL, REMOVE	LFT	48.00		
044	604-06070	SIDEWALK, CONCRETE	SYS	580.00		
045	604-08086	CURB RAMP, CONCRETE	SYS	140.00		
046	604-12083	DETECTABLE WARNING SURFACES	SYS	19.00		
047	604-95344	HAND RAIL, PEDESTRIAN	LFT	295.00		
048	605-06120	CURB, CONCRETE	LFT	196.00		
049	605-06155	CURB & GUTTER, CONCRETE, MODIFIED	LFT	1413.00		
050	610-07487	HMA FOR APPROACHES, TYPE B	TON	19.00		
051	610-09108	PCCP FOR APPROACHES, 9 IN.	SYS	238.00		
052	615-06527	MONUMENT, SECTION CORNER	EACH	1.00		
053	621-01004	MOBILIZATION/DEMOBILIZATION SEEDING	EACH	1.00		
054	621-06545	FERTILIZER (FOR TEMPORARY SEEDING)	TON	0.10		
055	621-06567	WATER	KGAL	6.00		
056	621-XXXXX	LANDSCAPING STONE	TON	222.00		
057	621-06570	TOPSOIL	CYS	60.00		
058	621-06575	SODDING, NURSERY	SYS	1349.00		
059	622-05650	PLANT, DEC. TREE, SINGLE STEM, 2 IN. TO 2.5	EACH	5.00		
060	702-44240	CONCRETE A, STRUCTURES	CYS	2.40		
061	715-05048	PIPE, TYPE 4, CIRCULAR, 6 IN.	LFT	292.00		
062	715-05053	PIPE, UNDERDRAIN OUTLET, 6 IN.	LFT	16.00		
063	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	LFT	92.00		
064	715-05151	PIPE, TYPE 2, CIRCULAR, 15 IN.	LFT	53.00		
065	715-05154	PIPE, TYPE 2, CIRCULAR, 24 IN.	LFT	134.00		
066	715-05331	PIPE, TYPE 2, DEFORMED, MIN. AREA 3.3 SFT	LFT	100.00		
067	715-09064	VIDEO INSPECTION FOR PIPE	LFT	395.00		

Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
068	715-46020	PIPE END SECTION, DIAMETER, 24 IN.	EACH	1.00		
069	715-92537	PIPE PVC 8 IN.	LFT	16.00		
070	718-04986	CLEANOUT	EACH	1.00		
071	720-02442	PIPE, PLUG EXISTING	EACH	3.00		
072	720-04682	INLET (G4)	EACH	1.00		
073	720-04682	INLET (F4)	EACH	1.00		
074	720-44000	CASTING, ADJUST TO GRADE, INLET & MANH.	EACH	4.00		
075	720-44045	CASTING, 8, FURNISH, ADJUST TO GRADE	EACH	1.00		
076	720-45045	INLET, J10	EACH	4.00		
077	720-45055	INLET, M10	EACH	1.00		
078	720-45410	MANHOLE, C4	EACH	3.00		
079	720-90349	MANHOLE, C8	EACH	4.00		
080	732-11810	MODULAR BLOCK WALL	SFT	2867.00		
081	732-11811	MODULAR BLOCK WALL ERECTION	SFT	2867.00		
082	801-04308	ROAD CLOSURE SIGN ASSEMBLY	EACH	4.00		
083	801-06625	DETOUR ROUTE MARKER ASSEMBLY	EACH	23.00		
084	801-06640	CONSTRUCTION SIGN, A	EACH	4.00		
085	801-06645	CONSTRUCTION SIGN, B	EACH	2.00		
086	801-06775	MAINTAINING TRAFFIC	LS	1.00		
087	801-07119	BARRICADE, III-B	LFT	128.00		
088	802-05701	SIGN POST, SQUARE, 1, RNFRCD ANCHR BSE	LFT	78.00		
089	802-07058	SIGN, SHEET, ASSEMBLY, RELOCATE	EACH	3.00		
090	802-07060	SIGN, SHEET, RELOCATE	EACH	5.00		
091	802-09838	SIGN, SHEET, WITH LEGEND, 0.080 IN.	SFT	23.00		
092	802-09840	SIGN, SHEET, WITH LEGEND, 0.100 IN.	SFT	14.00		
093	802-09842	SIGN, SHEET, WITH LEGEND, 0.125 IN.	SFT	19.00		
094	805-01300	TRAFFIC SIGNAL EQUIPMENT, REMOVE	EACH	1.00		
095	805-01842	HANDHOLE SIGNAL TYPE 1	EACH	5.00		
096	805-01844	CONDUIT, STEEL, GALVANIZED, 2 IN.	LFT	60.00		
097	805-02150	PEDESTRIAN SGNL HD, COUNTDOWN 18 IN.	EACH	8.00		
098	805-02445	CNTRLR & CBNT, P1, W/ UPS ATTCHD CBNT	EACH	1.00		
099	805-02645	SGNL POLE FNDTN 24 IN. X 24 IN. X 36 IN.	EACH	7.00		
100	805-04782	VIDEO VEHICLE DETECTOR SYSTEM	EACH	1.00		
101	805-05405	SGNL POLE, PDDL, 4 FT., PAINTED BLACK	EACH	7.00		
102	805-11387	SGNL CNTLVR STRC, SPRD FTNG FNDTN, C	EACH	4.00		
103	805-11437	SGNL CNTLVR STRC SNGL ARM CMB ARM LM	EACH	4.00		
104	805-11815	CONDUIT, HDPE, 2 IN. SCHEDULE 80	LFT	1300.00		
105	805-11817	PEDESTRIAN PUSH BUTTON, APS	EACH	8.00		

Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
106	805-78205	TRAFFIC SIGNAL HEAD, 3 SECTION, 12 IN.	EACH	8.00		
107	805-78225	TRAFFIC SIGNAL HEAD, 4 SECTION, 12 IN.	EACH	3.00		
108	805-78445	SIGNAL SERVICE	EACH	1.00		
109	805-78467	SIGNAL CABLE, SERVICE, COPPER 3C/8 GA	LFT	210.00		
110	805-78480	SIGNAL CABLE, SERVICE, COPPER, 3C/14 GA	LFT	1300.00		
111	805-78485	SIGNAL CABLE, SERVICE, COPPER, 5C/14 GA	LFT	240.00		
112	805-78490	SIGNAL CABLE, SERVICE, COPPER, 7C/14 GA	LFT	810.00		
113	805-78495	SIGNAL CABLE, SERVICE, COPPER, 9C/14 GA	LFT	740.00		
114	805-78925	CONTROLLER CABINET FOUNDATION, P1	EACH	1.00		
115	805-XXXXX	MODIFY EXIST. SGNL CABNT & FNDTN, P1	LS	1.00		
116	805-XXXXX	AI-500-02 SRS GLNC PRE-EMPT & PRY FLD MNT	EACH	1.00		
117	807-86910	CONNECTOR KIT, UNFUSED	EACH	4.00		
118	807-86915	CONNECTOR KIT, FUSED	EACH	1.00		
119	807-95709	PHOTOCELLS	EACH	1.00		
120	807-95889	WIRE, NO. 10 COPPER, 1/C	LFT	2560.00		
121	808-03439	TRNVRS MRKNGS THRMPLSTC CRSWLK WHT 24"	LFT	329.00		
122	808-06703	LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.	LFT	239.00		
123	808-75245	LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.	LFT	1856.00		
124	808-75297	TRNSVRS MRKNG, THRMPLSTC, STOP LINE, 24 IN.	LFT	86.00		
125	808-75320	ARRW	EACH	5.00		

TOTAL PROJECT BID:

BID BOND

Bidder Name: [Full formal name of Bidder] Address <i>(principal place of business)</i> : [Address of Bidder's principal place of business]	Surety Name: [Full formal name of Surety] Address <i>(principal place of business)</i> : [Address of Surety's principal place of business]
Owner Name: [Full formal name of Owner] Address <i>(principal place of business)</i> : [Address of Owner's principal place of business]	Bid Project <i>(name and location)</i> : [Owner project/contract name, and location of the project] Bid Due Date: [Enter date bid is due]
Bond Penal Sum: [Amount] Date of Bond: [Date]	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder _____ <i>(Full formal name of Bidder)</i> By: _____ <i>(Signature)</i> Name: _____ <i>(Printed or typed)</i> Title: _____ Attest: _____ <i>(Signature)</i> Name: _____ <i>(Printed or typed)</i> Title: _____	Surety _____ <i>(Full formal name of Surety) (corporate seal)</i> By: _____ <i>(Signature) (Attach Power of Attorney)</i> Name: _____ <i>(Printed or typed)</i> Title: _____ Attest: _____ <i>(Signature)</i> Name: _____ <i>(Printed or typed)</i> Title: _____
<i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary. (3) Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.</i>	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

PERFORMANCE BOND

<p>Contractor</p> <p>Name: [Full formal name of Contractor]</p> <p>Address <i>(principal place of business)</i>: [Address of Contractor's principal place of business]</p>	<p>Surety</p> <p>Name: [Full formal name of Surety]</p> <p>Address <i>(principal place of business)</i>: [Address of Surety's principal place of business]</p>
<p>Owner</p> <p>Name: [Full formal name of Owner]</p> <p>Mailing address <i>(principal place of business)</i>: [Address of Owner's principal place of business]</p>	<p>Contract</p> <p>Description <i>(name and location)</i>: [Owner's project/contract name, and location of the project]</p> <p>Contract Price: [Amount from Contract]</p> <p>Effective Date of Contract: [Date from Contract]</p>
<p>Bond</p> <p>Bond Amount: [Amount]</p> <p>Date of Bond: [Date]</p> <p><i>(Date of Bond cannot be earlier than Effective Date of Contract)</i></p> <p>Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
<p style="text-align: center;"><i>(Full formal name of Contractor)</i></p> <hr/> <p>By: _____ <i>(Signature)</i></p> <p>Name: _____ <i>(Printed or typed)</i></p> <p>Title: _____</p> <p>Attest: _____ <i>(Signature)</i></p> <p>Name: _____ <i>(Printed or typed)</i></p> <p>Title: _____</p>	<p style="text-align: center;"><i>(Full formal name of Surety) (corporate seal)</i></p> <hr/> <p>By: _____ <i>(Signature)(Attach Power of Attorney)</i></p> <p>Name: _____ <i>(Printed or typed)</i></p> <p>Title: _____</p> <p>Attest: _____ <i>(Signature)</i></p> <p>Name: _____ <i>(Printed or typed)</i></p> <p>Title: _____</p>
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such statutory or other legal

requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. A modification, omission, or addition to the terms and conditions of the public work contract, plans, specifications, drawings, or profile, or any defect in the public work contract or in the proceedings preliminary to the letting and awarding of the public work contract does not discharge the surety.
17. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

PAYMENT BOND

<p>Contractor</p> <p>Name: [Full formal name of Contractor]</p> <p>Address <i>(principal place of business)</i>: [Address of Contractor's principal place of business]</p>	<p>Surety</p> <p>Name: [Full formal name of Surety]</p> <p>Address <i>(principal place of business)</i>: [Address of Surety's principal place of business]</p>
<p>Owner</p> <p>Name: [Full formal name of Owner]</p> <p>Mailing address <i>(principal place of business)</i>: [Address of Owner's principal place of business]</p>	<p>Contract</p> <p>Description <i>(name and location)</i>: [Owner's project/contract name, and location of the project]</p> <p>Contract Price: [Amount, from Contract]</p> <p>Effective Date of Contract: [Date, from Contract]</p>
<p>Bond</p> <p>Bond Amount: [Amount]</p> <p>Date of Bond: [Date]</p> <p><i>(Date of Bond cannot be earlier than Effective Date of Contract)</i></p> <p>Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
_____	_____
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____	By: _____
<i>(Signature)</i>	<i>(Signature)(Attach Power of Attorney)</i>
Name: _____	Name: _____
<i>(Printed or typed)</i>	<i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____	Attest: _____
<i>(Signature)</i>	<i>(Signature)</i>
Name: _____	Name: _____
<i>(Printed or typed)</i>	<i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. A modification, omission, or addition to the terms and conditions of the public work contract, plans, specifications, drawings, or profile, or any defect in the public work contract or in the proceedings preliminary to the letting and awarding of the public work contract does not discharge the surety.
19. Modifications to this Bond are as follows: **[Describe modification or enter “None”]**

ESCROW AGREEMENT

17th & Dunn Intersection Improvements

THIS ESCROW AGREEMENT is made and entered into this _____ day of _____, 20____, by and between the City of Bloomington, Indiana, Board of Public Works (the "Owner"), and _____, (the "Contractor"), and First Financial Bank, an Ohio state chartered bank (the "Escrow Agent"). The Owner and Contractor shall be collectively referred to as the "Parties" herein.

WHEREAS, the Owner and Contractor entered into an Agreement dated the _____ day of _____, 20____, in the amount of \$100,000.00 or more, for the construction of a public works project (the "Construction Agreement"); and

WHEREAS, said Construction Agreement provides that portions of payments by Owner to Contractor shall be retained by Owner (the "Retainage") and shall be placed in the escrow account created hereby.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

To the extent that the Owner retains funds out of payments applied for by the Contractor under the provisions of the Construction Agreement providing for payments based on the value of the work in place and the materials stored, the Owner shall place the funds so retained in an escrow account. Such deposit shall be made within three (3) business days after the date such payments are made to Contractor.

The Escrow Agent shall open a "Money Market" account that invests primarily in short-term, interest bearing bank deposit accounts, and/or investment grade securities and deposit said Retainage promptly into the account; however, the Escrow Agent makes no representation as to the yield of such investment and will not bear liability for any delays in depositing the Retainage or for any failure to achieve the maximum possible yield from such Deposit.

The income from and earnings on and all gains derived from the investment and reinvestment of the funds (escrow income) shall be held in the escrow account. The Escrow Agent shall deposit all funds and hold all investments in a specific escrow fund so that a quarterly accounting can and shall be made to the Contractor of all investments made in such funds and all income, fees, payments, deposits, and other activities related to the escrow funds.

The Deposit, less any and all transaction or account fees or charges and out-of-pocket expenses of Escrow Agent attributable to, or incurred in connection with, the deposit thereof in accordance with the terms of this Agreement which items may be deducted by the Escrow Agent from the Deposit as set forth below (such net sum being the "Net Deposit"), will be delivered by Escrow Agent in accordance with the terms of this Escrow Agreement to the person or persons entitled thereto or, herein, to a substitute impartial party or a court of competent jurisdiction. Escrow Agent agrees to provide the Parties with copies of each monthly statement for the Escrow Account for the period for which the Deposit is held by Escrow Agent. As a condition to the delivery of any funds constituting part of the Deposit, Escrow Agent may require from the recipient a receipt therefor and, upon final payment or

disposition, may require its release from any liability arising out of the execution or performance hereof, such release to be in a form reasonably satisfactory to Escrow Agent.

The Escrow Agent shall pay over the net sum held by it hereunder as follows:

The Escrow Agent shall hold all of the escrow funds and shall release the principal, Net Deposit, plus any accrued interest thereon, less any expenses, including but not limited to attorneys' fees, thereof only upon the execution and delivery to it of a Payment Certificate attached here as Exhibit A, executed by the Owner and by the Contractor specifying the portion or portions of the principal of the escrow funds to be released and the person or persons to whom such portions are to be released. After receipt of said Payment Certificate the Escrow Agent shall remit the designated part of escrowed principal and the same proportion of the escrowed income to the person(s) specified in the Payment Certificate. Such release of escrow funds shall be no more than thirty (30) days from the date of receipt by the Escrow Agent of the release executed by the Owner and Contractor.

Although statutorily entitled to a fee, the Escrow Agent agrees to waive the monthly statement fee and the monthly minimum balance.

All income earned on the escrowed principal shall be paid to the Contractor.

In lieu of the presentation of the Payment Certificate described above, any document purporting to be a certificate will be deemed by the Escrow Agent to be a proper certificate, or will suffice as a joint instruction, if it contains: (i) the name of the payee; (ii) the amount of the payment to be made; (iii) the manner of payment (i.e., by certified or cashier's check, by account-to-account transfer, or by wire transfer, whichever is applicable); and (iv) the signatures of each of the Parties hereto, excluding the Escrow Agent.

Escrow Agent will be entitled to rely upon the authenticity of any signature (and upon any facsimile of a signature as if it were an original signature) and the genuineness and/or validity of any writing received by Escrow Agent from either of the Parties pursuant to or otherwise relating to this Escrow Agreement.

Each signatory to this Escrow Agreement warrants that it has full and complete authority to enter into this Escrow Agreement.

The Escrow Agent may at any time request written instructions from the Parties with respect to the interpretation hereof or of action to be taken or suffered or not taken hereunder and, notwithstanding any other provision hereof, will be entitled to withhold (and will not be under any liability to any person for withholding) action hereunder until it has received written instructions signed by all of the Parties.

In the event of the receipt by the Escrow Agent of any notice, demand, or certificate not provided for or in compliance with this Escrow Agreement or of any inconsistent or conflicting notices or certificates, the Escrow Agent will be protected in taking no action whatsoever with reference to any such notice or demand, unless such inaction constitutes gross negligence or willful misconduct on the part of the Escrow Agent. In case of: (i) receipt of contradictory instructions from the Parties; (ii) any dispute as to any matter arising under this Agreement; or (iii) any uncertainty as to the meaning or applicability of any of the provisions hereof, Escrow Agent may, at its option at any time thereafter, deposit the Deposit and/or documents or assets then being held by it in escrow into a court having appropriate jurisdiction, or take such affirmative steps as it may elect in order to substitute an impartial bank of comparable

financial and industrial standing to hold the Deposit and/or documents and will thereby be discharged and relieved of any and all liability hereunder.

The Escrow Agent may resign at any time by giving a minimum of thirty (30) days' prior written notice of resignation to the Parties, such resignation to be effective on the date specified in such notice. The Deposit, and any other assets held by the Escrow Agent under the terms of this Escrow Agreement as of the effective date of the resignation, will be delivered to a successor escrow agent designated in writing jointly by the Parties. If no successor escrow agent has been appointed as of the effective date of the resignation, all obligations of the Escrow Agent hereunder will nevertheless cease and terminate, except that the Escrow Agent's sole responsibility thereafter will be to keep safely the Deposit then held by it and to deliver the same to a person designated by both Parties or in accordance with the direction of a final order or judgment of a court of competent jurisdiction.

The Escrow Agent has no responsibility concerning compliance by the Parties with their duties to each other under this Escrow Agreement or any other agreements. Escrow Agent will have only such duties and obligations as are specifically imposed upon it by the terms and conditions of this Escrow Agreement and no implied duties or obligations will be read into this Escrow Agreement against Escrow Agent.

The Parties, jointly and severally, agree to indemnify and hold harmless Escrow Agent from and against any and all costs including its attorney's fees, claims or damages howsoever occasioned that may be incurred by Escrow Agent acting under this Escrow Agreement or to which Escrow Agent may be put in connection with Escrow Agent acting under this Escrow Agreement arising from the Parties' willful misconduct or negligence.

In the absence of such a joint written authorization and in the absence of the termination of the Contractor as provided above, the escrowed funds shall be paid in the manner directed by a certified copy of a judgment of a court of record establishing the rights of the parties to said funds.

The account shall be a commercial money market account set up by the Escrow Agent to hold the retainage, and there shall be no fees and no minimum balance required. The account shall earn interest rate based on balances. The Parties agree to reimburse Escrow Agent for all reasonable expenses, disbursements and advances incurred or made by Escrow Agent in the performance of its duties hereunder (including reasonable fees, expenses and disbursements of its counsel).

The Escrow Agent will not be required to use its own funds in the performance of any of its obligations or duties or the exercise of any of its rights or powers, and will not be required to take any action which in Escrow Agent's reasonable judgment would cause it to incur expense or liability unless furnished with security and indemnity which it reasonably deems to be satisfactory.

This Agreement and anything done or performed hereunder by either the Contractor or Owner shall not be construed to prejudice or limit the claims which either party may have against the other arising out of the aforementioned Construction Agreement.

This instrument constitutes the entire agreement between the Parties regarding the duties of the Escrow Agent with respect to the investment and payment of escrow funds. The Escrow Agent is not liable to the Owner and Contractor for any loss or damages, other than loss or damage directly caused by Escrow Agent's own gross negligence or willful misconduct.

This Escrow Agreement may be amended, modified, superseded, cancelled, renewed or extended, and the terms or covenants hereof may be waived only by a written instrument executed by all the Parties hereto.

This Escrow Agreement contains the entire agreement between the Parties with respect to the escrow transaction contemplated herein and may not be changed or terminated orally.

This Escrow Agreement shall be governed by the laws of the State of Indiana.

This Escrow Agreement will be binding upon and inure solely to the benefit of the Parties hereto and their respective heirs, administrators, successors and assigns, and will not be enforceable by or inure to the benefit of any third party, except any successor escrow agent. No party may assign any of its rights or obligations under this Escrow Agreement without the written consent of the other parties, except that either of the Parties may assign its rights and obligations hereunder in connection with a permitted assignment of its rights and obligations under the Agreement in which case any signatures required hereunder will be those of such assignee.

This Escrow Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed will be deemed to be an original and all of which taken together will constitute one and the same agreement. Any party so executing this Agreement by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.

All notices, waivers, consents, approvals and other communications hereunder shall be in writing and shall be deemed to have been properly given on the date of service if delivered personally or on the date of mailing if deposited in the United States mail, first class postage prepaid, to the extent required by applicable law, and will comply with the requirements of the Uniform Commercial Code then in effect, addressed appropriately as follows:

If to Owner:

City of Bloomington Board of Public Works
401 N. Morton Street, Suite 130
Bloomington IN 47404
Attn: Andrew Cibor, City Engineer

If to Escrow Agent:

First Financial Bank
536 N. College Ave.
Bloomington, IN 47404
Attn: Cindy Kinnarney

If to Contractor:

Name: _____
Address: _____
City/State: _____
Attn: _____

In Witness Whereof, the undersigned have executed this Escrow Agreement as of the day and year first above written.

OWNER:

City of Bloomington, Board of Public Works

By: _____
Danna Palazzo, President

CONTRACTOR:

By: _____

Printed Name: _____

Title: _____

Tax I.D. No.: _____

ESCROW AGENT:

First Financial Bank

By: _____

Printed Name: _____

Title: _____

AUTHORIZATION TO RELEASE ESCROW FUNDS

(Date)

First Financial Bank
536 N. College Avenue
Bloomington, IN 47404

Attn: Cindy Kinnarney

Ladies and Gentlemen:

Pursuant to that certain Escrow Agreement dated as of _____, 20____, by and among you as Escrow Agent and the undersigned (the "Escrow Agreement"), the undersigned hereby jointly notify and instruct you to issue a check for the balance in the Escrow Account as follows:

Escrow Account for Retainage on Project: _____
Account Holder/Contractor: _____
Primary Account Number: _____

The undersigned, in consideration of the release of funds being held by Escrow Agent, and other good and valuable consideration, receipt of which is hereby acknowledged, hereby release, acquit and forever discharge the Escrow Agent, and its employees, officers, directors, agents, accountants, attorneys and parent companies, and all directors, agents, accounts and attorneys of such parent companies and all employees, officers, and heirs, executors, administrators, successors and assigns of all of the foregoing, jointly and severally (collectively, the "Bank Parties"), of and from all and any manner of action, actions, cause and causes of action, suits, debts, dues, sums of money, accounts, bonds, bills, covenants, contracts, agreements, promises, obligations, defenses, offsets, counterclaims, damages, judgments, claims, demands and liabilities of any kind or character whatsoever, known or unknown, suspected or unsuspected, in contract or in tort, in law or in equity, that any one or more of the undersigned had, have, may have or may in the future have against any one or more of the Bank Parties arising out of, for or by reason of or resulting from or in any way related, directly or indirectly, to the Escrow Agreement. In addition, the undersigned, jointly and severally, agree not to commence, aid, cause, permit, join in, prosecute or participate in any suit or other proceeding in a position which is adverse to any of the Bank Parties, which suit or proceeding arises from or relates to, in whole or in part, directly or indirectly, any of the foregoing matters.

Sincerely,

THE ESCROW PARTIES:

The City of Bloomington

Contractor

By: _____
Andrew Cibor, City Engineer
City of Bloomington

By: _____
Printed Name: _____

Reviewed and Approved By:

Title: _____

Jeffrey Underwood, Controller
City of Bloomington

Escrow Agent
First Financial Bank

Dated: _____

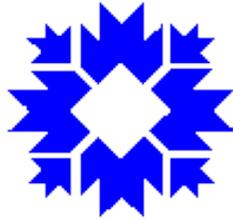
By: _____

Printed Name and Title

SECTION IV

AFFIRMATIVE ACTION PLAN REQUIREMENTS

**Director/Assistant City
Attorney
Barbara E. McKinney**



**City of Bloomington
Human Rights Commission**

Updated January 1, 2021

To: Prospective Bidders/Vendors

RE: Affirmative Action, Harassment Policy, Living Wage Ordinance and Drug Testing Policy FROM: Barbara

E. McKinney, Human Rights Director/ Contract Compliance Officer

AFFIRMATIVE ACTION: All bidders and vendors with the City of Bloomington for projects in excess of \$10,000.00 must submit an affirmative action plan to my office. This plan must insure applicants and employees are treated in a manner that provides equal employment opportunity and tends to eliminate inequality based upon race, religion, color, sex, national origin, ancestry, disability, sexual orientation, gender identity, veteran status and/or housing status.

Even if your company already has a plan on file with the City, you must check with me to make sure it complies with our current requirements, including having a workforce breakdown form that is no more than six months out of date. If you already have a plan, but it does not cover all of the City's current requirements, you may submit a separate supplement with your plan to fill any gaps.

You must submit your written affirmative action plan (or supplement) to me at least twenty-four hours before the bid, quote or proposal deadline. You must submit your plan to me separately from your bid or quote.

Twenty-four hours will give me sufficient time to review your and the other plans. I recommend you submit your affirmative action plan to me earlier, if possible, so you and I will have time to work out any problems that may be in your plan. Bidders who fail to submit acceptable plans by the deadline are subject to disqualification.

I strongly advise you to confirm with me that I have received your plan and that it meets our requirements well before the submittal deadline. We will make every effort to work with you to clear up any problems. However, it remains your responsibility to confirm that I have received your plan and that it complies with our requirements. If you fail to confirm that I received and approved your plan, you risk losing your eligibility to submit a bid or quote. We will be glad to provide a receipt upon request. Please let us know if you want a receipt when you submit your plan.

You must insure all of the required protected classes listed above are included in your plan. In addition to other requirements, your plan **MUST** include a current workforce breakdown, an internal grievance procedure, a non- retaliation statement, designation of a person by name or position who is responsible for implementing the plan, applicability to both applicants and employees, recruitment of minorities, equal access to training programs, and an explanation of your methods of communicating the operations of your affirmative action plan to your employees and prospective applicants.

Accompanying this letter you will find the following materials:

1. A workforce breakdown form. You **MUST** submit a workforce breakdown form (sometimes called a "utilization report") with your affirmative action plan. This form is provided for your convenience. If you already have a current form you have completed for another jurisdiction that includes the same type of information, you may submit a copy of that form instead of using our form. Your workforce breakdown data cannot be more than six months old. Even if you already have an acceptable affirmative action plan

on file with my office, you should submit a new workforce breakdown each time you bid for a city contract, to be sure we have up-to-date figures.

2. An affirmative action plan checklist. I will use this checklist to review your affirmative action plan. If you compare your plan with this list, you should be able to tell whether your plan fulfills the City's requirements. If your plan omits any elements on the checklist, your plan will not be approved.
3. A sample affirmative action plan that you may amend and adapt as your own.

These documents may be useful if your company has not designed an affirmative action plan before. Feel free to adopt this plan as your own or to amend it to meet your needs.

Additional materials, such as the City of Bloomington's Contract Compliance Regulations, are available from my office upon request.

HARASSMENT POLICY: All bidders and vendors required to submit an affirmative action plan now must also submit a harassment plan. The harassment plan must, at minimum, include a definition of harassment, the name or title of the individual designated to receive and investigate complaints and a statement that the contractor will not retaliate against an employee for complaining about harassment. A model harassment policy is included for your convenience as part of our attached model affirmative action plan, which you may amend and adapt as your own. Please note that this harassment policy requirement is new, adopted by the Bloomington Common Council in June, 2019.

LIVING WAGE: Also, please be aware that you may be required to comply with the Bloomington Living Wage Ordinance. Whether the LWO applies to your project depends upon the size and type of your project and the number of people you employ. If you have questions about the applicability of the LWO, click on the LWO flow chart at www.bloomington.in.gov/livingwage, or call me. For 2021, the living wage for covered employees is \$13.29 an hour.

DRUG TEST POLICY: Finally, please be aware that if you are submitting a bid for a public works project with an estimated cost of \$150,000.00 or more, you will need to submit your company's written drug testing plan with your bid. Your plan must comply with I.C. 4-13-18-1. Failure to do so may make you ineligible to be awarded a bid or contract. Please see your bid packet for more details.

If you have any questions, contact me at 812.349.3429 or email me at mckinneb@bloomington.in.gov. My office hours are Monday through Friday, 8-5.

Thank you.

Model Affirmative Action Plan and Harassment
Policy

_____, declares its policy to provide equal opportunity in employment, training and advancement, and to administer its employment practices without regard to race, color, religion, sex, national origin, ancestry, disability, sexual orientation, gender identity, veteran status, or housing status. Our policy of nondiscrimination will prevail throughout every aspect of our employment practices, including recruitment, hiring, training and all other terms and conditions of employment. We shall implement this affirmative action plan to make it widely known that equal employment opportunities are available on the basis of individual merit. We shall survey and analyze our employment workforce annually to determine what steps, if any, are needed to conform effectively to this equal employment policy.

Responsible Officer

Mr. or Ms. _____ (or the _____ officer) is the equal employment opportunity officer for our company and is responsible for implementing this affirmative action policy.

Publication of Policy

Our employees will be made aware of our commitment to affirmative action through the following procedures:

- posting notices on employee bulletin boards,
- including our policy statement and plan in our personnel manual,
- regularly sending out notices of our policy in paycheck envelopes, and/or
- training supervisors to recognize discriminatory practices.

We will make potential employees aware of our policy through the following procedures:

- including the words "Equal Opportunity Employer" in all of our advertisements and notices for job openings,
- notifying employment agencies about our commitment, and
- sending notice of our policy to unions.

Implementing Our Policy

Our affirmative action plan will be implemented by widening our recruitment sources. We shall advertise in newspapers and other media that reach people in protected classes. We shall send job notices to schools with large percentages of students in the protected classes and to local groups that serve these classes.

We shall examine our hiring practices periodically to insure that we consider only job-related qualifications in filling our positions. We shall discard irrelevant educational requirements and unnecessary physical requirements. We shall ask only job-related questions on our employment applications.

We shall keep affirmative action information on each applicant who voluntarily provides this information, but separate from his or her application. We shall keep records on our hiring decisions to evaluate the success of our affirmative action measures. We shall decide placement, duties, benefits, wages, training prospects, promotions, layoffs and terminations without regard to race, sex, religion, color, national origin, ancestry, disability, sexual orientation, gender identity, veteran status or housing status.

GRIEVANCE PROCEDURE

If an employee or applicant feels she or he has been discriminated against on the basis of race, sex, religion, color, national origin, ancestry, disability, sexual orientation, gender identity, veteran status or housing status, she or he may bring the complaint to her or his immediate supervisor. If the complaint is not resolved readily at that level, she or he may submit it to _____ (personnel officer, corporate president, other) who will make a final decision on its validity. This grievance process does not preclude him or her from complaining to local, state or federal civil rights agencies. We will not retaliate against an employee or applicant for voicing a grievance or for filing a complaint with the appropriate agency.

Our current workforce breakdown is shown on the attached form.

Policy prohibiting harassment in the workplace

It is the policy of _____ (company name) to maintain a workplace free of harassment on the basis of race, sex, color, ancestry, national origin, religion, disability, age, sexual orientation, gender identity, housing status or veteran status. Harassment, as defined herein, is strictly prohibited in the workplace, and is punishable by appropriate discipline up to and including termination.

Harassment means any unwelcome or offensive conduct, whether written, verbal or physical, which is

- (a) directed at or to an employee because of his or her actual or perceived race, sex, color, ancestry, national origin, religion, disability, age, sexual orientation, gender identity, housing status or veteran status or
- (b) directed toward any person concerning an individual, or a class of individuals, because of the race, sex, color, ancestry, national origin, religion, disability, age, sexual orientation, gender identity, housing status or veteran status of the individual or class of individuals. For example, racial or ethnic slurs or derogatory epithets are prohibited in the workplace, regardless of whether a member of the racial or ethnic group is present when the statement is made.

Harassment does not refer to occasional compliments or other statements of a socially acceptable nature. Harassment refers to behavior which is unwelcome and which is offensive and/or persistent enough to create, or has the potential of creating an intimidating, hostile or offensive working environment for any employee.

Harassment includes unwelcome sexual advances or requests for sexual favors, unwelcome touching of a sexual nature and unwelcome and/or offensive sexual comments.

2. This policy applies to all full-time, part-time, permanent and temporary employees, including supervisors and department heads, as well as to volunteers.
3. It is a violation of this policy to use an individual's submission to or rejection of harassing conduct as the basis for any employment decision affecting the individual.
4. An employee who believes she, he or they have been subjected to harassment as defined in this policy shall promptly report the harassment to her, his or their supervisor and/or the director of human resources or designee. _____ (company name) will make reasonable efforts to insure that a human resources representative of each sex is available to receive such complaints. The human resources department shall conduct a thorough and prompt investigation and, if appropriate, take disciplinary action against any offender, including but not limited to discharge. Staff will keep the complaint as confidential as reasonably possible. No one will be retaliated against for filing a harassment complaint.

5. All supervisory personnel who observe or otherwise learn of or have reason to suspect any conduct which may violate this policy shall promptly report such facts to the director of human resources or designee, and shall cooperate fully in any investigation or disciplinary action undertaken pursuant to this policy. Failure to comply with this section shall be grounds for appropriate disciplinary action, up to and including termination.

6. _____(company name) will provide regular training to employees and supervisors on the subject of harassment in the workplace. We will include information about this policy in our orientation and in our personnel policy. A copy of this policy will be posted on a prominent bulletin board. We take this matter seriously and will do all that is reasonably necessary to maintain a harassment-free workplace for our employees.

Signature

Date

AFFIRMATIVE ACTION PLAN AND HARASSMENT POLICY CHECKLIST

NOTE: This is not an Affirmative Action Plan

Company Name: _____
 Effective Date: _____

Contractor: Plan MUST Include:		Yes	No	Comments:
Policy statement of equal employment opportunity		<input type="checkbox"/>	<input type="checkbox"/>	
Covers:	Applicants for employment	<input type="checkbox"/>	<input type="checkbox"/>	
	Employees	<input type="checkbox"/>	<input type="checkbox"/>	
On basis of:	Race	<input type="checkbox"/>	<input type="checkbox"/>	
	Religion	<input type="checkbox"/>	<input type="checkbox"/>	
	Color	<input type="checkbox"/>	<input type="checkbox"/>	
	Sex	<input type="checkbox"/>	<input type="checkbox"/>	
	National Origin	<input type="checkbox"/>	<input type="checkbox"/>	
	Ancestry	<input type="checkbox"/>	<input type="checkbox"/>	
	Disability	<input type="checkbox"/>	<input type="checkbox"/>	
	Sexual Orientation	<input type="checkbox"/>	<input type="checkbox"/>	
	Gender Identity	<input type="checkbox"/>	<input type="checkbox"/>	
	Veteran Status	<input type="checkbox"/>	<input type="checkbox"/>	
	Housing Status	<input type="checkbox"/>	<input type="checkbox"/>	
Designates a person responsible for implementation of the Plan		<input type="checkbox"/>	<input type="checkbox"/>	
Provides for communication of the policy:				
	Within the Organization	<input type="checkbox"/>	<input type="checkbox"/>	
	Outside the Organization (e.g., recruitment sources, unions)	<input type="checkbox"/>	<input type="checkbox"/>	
Applies to all terms and conditions of employment (e.g., hiring, placement, promotion, duties, wages, benefits, use of facilities, layoff, discipline, termination)		<input type="checkbox"/>	<input type="checkbox"/>	
Provision for: Recruitment from minority groups		<input type="checkbox"/>	<input type="checkbox"/>	
Provision for: Equal access to training programs		<input type="checkbox"/>	<input type="checkbox"/>	
Grievance Procedure		<input type="checkbox"/>	<input type="checkbox"/>	
Prohibits retaliation for filing grievances		<input type="checkbox"/>	<input type="checkbox"/>	
Workforce Breakdown (figures up to date within 6 months)		<input type="checkbox"/>	<input type="checkbox"/>	

HARASSMENT POLICY CHECKLIST

Definition of harassment	<input type="checkbox"/>	<input type="checkbox"/>
Designates a person to receive and Investigate harassment complaints	<input type="checkbox"/>	<input type="checkbox"/>
Prohibits retaliation for filing a harassment complaint	<input type="checkbox"/>	<input type="checkbox"/>

SECTION V

STATE FORM NO. 96
QUESTIONNAIRE/NON-COLLUSION AFFIDAVIT
REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION



CONTRACTOR'S BID FOR PUBLIC WORK- FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)

Prescribed by State Board of Accounts

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year): _____

1. Governmental Unit (Owner): _____

2. County: _____

3. Bidder (Firm): _____

Address: _____

City/State/ZIP code: _____

4. Telephone Number: _____

5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of _____

(Governmental Unit) in accordance with plans and specifications prepared by _____

_____ and dated _____ for the sum of

_____ \$ _____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, subject to the following conditions: _____

Contracting Authority Members:

_____	_____
_____	_____
_____	_____

PART II

(For projects of \$150,000 or more -IC 36-1-12-4)

Governmental Unit: _____

Bidder (Firm) _____

Date (month, day, year): _____

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

4. List references from private firms for which you have performed work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV CONTRACTOR'S NON-COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he or she has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him or her, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He or she further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at _____ this _____ day of _____

(Name of Organization)

By _____

(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) ss
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named _____ and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____

Notary Public

My Commission Expires: _____

County of Residence: _____

BID OF

(Contractor)

(Address)

FOR

PUBLIC WORKS PROJECTS

OF

Filed _____

Action taken _____

SECTION VI

GENERAL CONDITIONS

GENERAL CONDITIONS

For

Construction

INDEX TO THE ARTICLES OF THE GENERAL CONDITIONS

DEFINITIONS	CHANGES IN CONTRACT PRICE
EXECUTION OF DOCUMENTS	CHANGE OF CONTRACT TIME
CORRELATION, INTERPRETATION AND INTENT OF DOCUMENTS	LIQUIDATED DAMAGES
AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS	WARRANTY AND GUARANTEE: TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK.
BONDS AND INSURANCE	PAYMENTS AND COMPLETION.
CONTRACTOR'S RESPONSIBILITIES	SUSPENSION OF WORK AND TERMINATION.
WORK BY OTHERS	ARBITRATION.
OWNER'S RESPONSIBILITIES	ENVIRONMENTAL REQUIREMENTS.
ENGINEER'S RESPONSIBILITIES DURING CONSTRUCTION	MISCELLANEOUS.
CHANGES IN THE WORK	

1.00 DEFINITIONS. The Owner, the Contractor and the Engineer, are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if each were of the singular number and masculine gender. Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

1.01. ADDENDA. Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, by additions, deletions, clarifications, or corrections. Addenda will become part of the Contract Documents when the Agreement is executed.

1.02. AGREEMENT. The contractual agreement between the Contractor and the Owner.

1.03. APPLICATION FOR PAYMENT. The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents..

1.04. BID. The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.05. BIDDER. Any person, firm, or corporation submitting a Bid for the Work.

1.06. BOARD. The City of Bloomington Board of Public Works.

- 1.07. BONDS.** Bid, performance, and payment bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.
- 1.08. CALENDAR DAY.** Every day shown on the calendar.
- 1.09. CHANGE ORDER.** A written order to the Contractor signed by the Owner authorizing an addition, deletion, or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement.
- 1.10. CONTRACT.** The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Engineer and the Contractor, (2) between the Owner and a Subcontractor or Sub subcontractor, or (3) between any persons or entities other than the Owner and Contractor.
- 1.11. CONTRACT DOCUMENTS.** The Agreement, Addenda (whether issued prior to the opening of Bid or the execution of the Agreement), Change Orders issued by the Owner or Engineer, Invitation to Bidders, Instructions to Bidders, Proposal, Non-Collusion Affidavit, Questionnaire, Contractor's Bid, the Bonds, Employment Requirements and Wage Rates, Notification Procedures, General Equipment Stipulations, the Notice of Award, the Notice to Proceed, these General Conditions, the Special Conditions, the Specifications, Drawings, and Modifications.
- 1.12. CONTRACT PRICE.** The total amount payable to the Contractor under the Contract Documents.
- 1.13. CONTRACT TIME.** The number of days stated in the Agreement for the completion of the Work, computed as provided in these General Conditions; or by the date set forth in the Agreement.
- 1.14. CONTRACTOR.** The person, firm, or corporation with whom the Owner has executed the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative. The relationship of the Contractor to the Owner shall be that of an independent contractor.
- 1.15. DAY.** A calendar day of twenty-four hours measured from midnight to the next midnight.
- 1.16. DATE OF CONTRACT.** The date written in the first paragraph of the Contract Agreement.
- 1.17. DRAWINGS OR PLANS.** The graphic and pictorial portions of the Contract Documents, wherever located or whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
- 1.18. ENGINEER.** The Traffic and Transportation Engineer (herein after "City Engineer", or "Engineer"), person, firm, or corporation named by the Owner "the City of Bloomington", or the duly authorized agents of the Engineer, acting within the scope of the duties entrusted to them.

- 1.19. FIELD ORDER.** A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 1.20. MODIFICATION.** (a) A written amendment of the Contract Documents signed by both parties. (b) A Change Order. (c) A written clarification or interpretation issued by the Engineer. (d) A written order for a minor change or alteration in the Work issued by the Engineer. A Modification may be issued only after execution of the Agreement.
- 1.21. NOTICE OF AWARD.** The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 1.22. NOTICE TO PROCEED.** A written notice given to the Contractor by the Owner (with a copy to the Engineer) fixing the date on which the Contract Time will commence to run and on which the Contractor shall start to perform his or her obligations under the Contract Documents.
- 1.23. OWNER.** The City of Bloomington named and designated in the Agreement as "Owner" acting through its Board of Public Works and its authorized agents. All notices, letters, and other communication directed to the Owner shall be addressed and delivered to the Office of the City Engineer, 401 North Morton, Suite #130, Bloomington, Indiana, 47404.
- 1.24. PROGRESS SCHEDULE.** A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
- 1.25. PROJECT.** The total construction of which the Work performed under the Contract Documents may be the whole or a part, and which may include construction by the Owner or by separate contractors.
- 1.26. RESIDENT PROJECT REPRESENTATIVE.** The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
- 1.27. RESPONSIBLE BIDDER.** One who is fully capable of performing the contract requirements and who has the integrity and reliability to insure faithful performance.
- 1.28. RESPONSIVE BIDDER.** One who has submitted a Bid conforming in all material respects to the Contract Documents.
- 1.29. SHOP DRAWINGS.** All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work.
- 1.30. SPECIFICATIONS.** Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work, and performance of related services.

- 1.31. SUBCONTRACTOR.** An individual, firm, or corporation having a direct contact with the Contractor or with any other Subcontractor for the performance of a part of the Work to a special design at the site, but does not include a firm which merely furnishes material. All Subcontractor's performing work having a value over \$10,000.00 must be approved prior to performing any work under this contract agreement. Any work performed without prior approval will not be compensated for.
- 1.32. SUBSTANTIAL COMPLETION.** The date as determined by the Engineer when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there be no such determination, the date of final completion.
- 1.33. WORK.** Any and all obligations, duties, and responsibilities necessary to the successful completion of the Project assigned to, or undertaken by, the Contractor under the Contract Documents, including all labor, materials, equipment, and other incidentals, and the furnishing thereof.
- 1.34. WORK CHANGE DIRECTIVE.**—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.35. MISCELLANEOUS DEFINITIONS

1.35.1. AS ORDERED, AS DIRECTED, AS REQUIRED, AS PERMITTED, AS ALLOWED. The order, directions, requirement, permission, or allowance of the Owner or Engineer is intended only to the extent of judging compliance with the Contract Documents. The terms do not imply that the Owner or Engineer has any authority or responsibility for supervision of the Contractor's forces or construction operations. Such supervision is the sole responsibility of the Contractor.

1.35.2. REASONABLE, SUITABLE, ACCEPTABLE, PROPER, SATISFACTORY. The terms reasonable, suitable, acceptable, proper, and satisfactory mean such to the Owner or Engineer and are intended only to the extent of judging compliance with the Contract Documents.

1.35.3. UNDERSTOOD AND AGREED. Whenever in these Contract Documents the expression "it is understood and agreed" or an expression of like import is used, such expression means the mutual understanding and agreement of the parties executing the Contract Agreement.

2.00. EXECUTION OF AGREEMENT.

- 2.01. EXECUTION OF AGREEMENT.** The Agreement and other Contract Documents will be executed as set forth in the Special Conditions.
- 2.02. DELIVERY OF BONDS AND EVIDENCE OF INSURANCE.** When the executed Agreements are delivered to the Owner, the Contractor shall also deliver to the Owner such Bonds and evidence of insurance as he or she may be required to furnish in accordance with the Agreement.
- 2.03. COPIES OF DOCUMENTS.** The Owner, upon request from the Contractor, shall furnish to the Contractor the number of copies of the Contract Documents set forth in the Special Conditions or a minimum of 1 set of complete documents.
- 2.04. CONTRACTOR'S PRE-AWARD REPRESENTATIONS.** The Contractor represents that Contractor has familiarized themselves with, and assumes full responsibility for having familiarized themselves

with, the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state, and local laws, ordinances, rules and regulations that may in any manner affect performance of the Work, and represents that the Contractor has correlated their study, observations and site visits with the requirements of the Contract Documents. The Contractor also represents that the Contractor has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Specifications and made such additional surveys and investigations as the Contractor deems necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents and that the Contractor has correlated the results of all such data with the requirements of the Contract Documents.

- 2.05. COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED.** Unless otherwise provided in the SPECIAL CONDITIONS, the Contractor will be expected to start active and continuous work on the contract within fifteen (15) calendar days after the date of the Notice to Proceed. In **no case** shall work begin prior to the date of the Notice to Proceed unless this time is waived and mutually agreed upon and indicated on the Notice to Proceed. If a delayed starting date is indicated in the proposal, the fifteen (15) calendar day limitation shall be waived. Work day charges will then begin on a date mutually agreed upon, but not later than the delayed starting date specified. In the event that any contract is canceled after an award has been made but prior to the issuing of the Notice to Proceed, no reimbursement will be made for any expenses accrued relative to this contract during that period.
- 2.06. STARTING THE PROJECT.** The Engineer shall be notified at least three (3) days in advance of the date on which the work is expected to begin. Should the prosecution of the work for any reason be discontinued, the Engineer shall be notified at least twenty-four (24) hours in advance of resuming operations.
- 2.07. BEFORE STARTING CONSTRUCTION.** Before undertaking each part of the Work, the Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. The Contractor shall at once report in writing to the Engineer any conflict, error, or discrepancy which the Contractor may discover. However, Contractor shall not be liable to the Owner or Engineer for the Contractors failure to discover any conflict, error, or discrepancy in the Drawings or Specifications.
- 2.08. SUBMISSION OF SCHEDULES.** Within ten (10) days after delivery of the executed Agreement by the Owner to the Contractor, the Contractor shall submit to the Engineer for review, an estimated progress schedule that shall be in 'Critical Path' format and indicating the starting and completion dates of the various stages of the Work, and a preliminary schedule of Shop Drawing submissions and other specified schedules. The 'Critical Path' schedule must include all possible overlapping work that can be accomplished should one action or function not be available or accessible to the contractor in order to show that the Contractors interrelated activities that will control the work path to complete the project within the time limits set forth for the project. Contracts with fewer than sixty (60) calendar days completion time, fewer than thirty-five (35) work days, or fewer than sixty (60) days between the date of the notice to proceed and the completion date do not need to submit a progress schedule. The progress schedule may be used as a basis for establishing major construction operations and as a check on the progress of the work. The Engineer shall be notified at least three (3) days in advance of the date on which the work is expected to begin. Sufficient materials, equipment, labor shall be provided by the Contractor to meet the progress schedule (if

required) and to guarantee the completion of the project in accordance with the plans and specifications.

- 3.00. CORRELATION, INTERPRETATION, AND INTENT OF CONTRACT DOCUMENTS.** It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the Owner and the Contractor. They may be altered only by a Modification.

The Contract Documents are complementary. What is called for by one is as binding as if called for by all. If the Contractor finds a conflict, error, or discrepancy in the Contract Documents, the Contractor shall call it to the Engineer's attention in writing at once. Before proceeding with the Work affected thereby, the Contractor shall not be liable to the Owner or Engineer for their failure to discover any conflict, error or discrepancy in the Specifications or Drawings. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards.

In case of discrepancy, and subject to the terms of the **AGREEMENT** between Owner and Contractor, calculated dimensions will govern over scaled dimensions; plans will govern over specifications; special conditions will govern over the plans and specifications. The instructions to Bidders and the description of the pay items listed in the itemized proposal will govern over plans, specifications, and special conditions. The precedence outlined herein shall not absolve the Contractor of their responsibility with regard to errors and omissions, or from the Contractor's requirement to follow all IOSHA, OSHA, any local safety ordinances, and general good construction practices.

Advantage shall not be taken of any apparent error or omission in the plans or specifications. In the event such an error or omission is discovered, the Engineer shall be notified immediately in writing. Such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications will then be made.

- 4.00. AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS.**

4.01. AVAILABILITY OF LANDS. The Owner shall furnish, as indicated in the Contract Documents and not later than the date of the Notice to Proceed, the lands upon which the Work is to be done, rights-of-way for access thereto, and such other lands which are designated for use by the Contractor. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by Owner, unless otherwise specified in the Contract Documents. If the Contractor believes that any delay in the Owner's furnishing these lands or easements entitles the Contractor to an extension of the Contract Time, the Contractor may make a claim therefore as provided in these General Conditions.

4.02. PHYSICAL CONDITIONS; SURVEYS AND REPORTS. Refer to **Instructions to Bidder**. For identification of those surveys and investigation reports of subsurface and latent physical conditions at the Project site or otherwise affecting performance of the Work which have been relied upon by the Engineer in preparation of the Drawings and Specifications, refer to **SPECIAL CONDITIONS**.

4.03. UNFORESEEN PHYSICAL CONDITIONS. The Contractor shall promptly notify the Owner and Engineer in writing of any subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents. The Engineer will promptly investigate those conditions and advise the Owner in writing if further surveys or subsurface tests are necessary. Promptly thereafter, the Owner shall obtain the necessary additional surveys and tests and furnish copies to the Engineer and Contractor. If the Engineer finds that the results of such surveys or tests indicate

that there are subsurface or latent physical conditions which differ materially from those intended in the Contract Documents, and which could not reasonably have been anticipated by the Contractor, a Change Order shall be issued incorporating the necessary revisions.

4.04. REFERENCE POINTS. The Owner shall provide engineering surveys for construction to establish reference points which in the Owner's judgment are necessary to enable the Contractor to proceed with the Work. The Contractor shall be responsible for surveying and laying out the Work (unless otherwise provided in the Special Conditions), and shall protect and preserve the established reference points and shall make no changes or reallocations without the prior written approval of the Owner. The Contractor shall report to the Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations. The Contractor shall replace and accurately relocate all reference points so lost, destroyed or moved at the Contractor's expense.

5.00. BONDS AND INSURANCE.

5.01. PERFORMANCE, PAYMENT AND OTHER BONDS. When Contractor delivers the executed counterparts of the **AGREEMENT** to Owner, the Contractor shall furnish a Performance Bond, Payment Bond, and other Bonds specified in **AGREEMENT** as security for the faithful performance and payment of all the Contractor's obligations under the Contract Documents. The Performance Bond shall be in an amount at least equal to 100% of the Contract Price, unless otherwise listed in **SUPPLEMENTARY CONDITIONS**. The Payment Bond shall also be in an amount at least equal to 100% of the Contract Price, unless otherwise listed in **SUPPLEMENTARY CONDITIONS**. Bonds shall be executed on the forms (when provided) included in the Contract Documents and with such sureties as are licensed to conduct business in the state of Indiana and are named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. The surety shall have an "A" minimum rating of performance and a financial rating strength of five times the Contract Price, all as stated in "Best's Key Rating Guide, Property-Liability". Each Bond shall be accompanied by a "Power of Attorney" authorizing the attorney-in-fact to bind the surety and certified to include the date of the Bond.

5.02. TERMINATION OF SURETY. If the surety on any Bond furnished by the Contractor is declared a bankrupt or becomes insolvent or its right to do business is terminated or revoked in any state where any part of the Project is located, the Contractor shall within five (5) days thereafter substitute another Bond and surety, both of which shall be acceptable to the Owner.

5.03. CONTRACTOR'S LIABILITY INSURANCE. The Contractor shall purchase and maintain such insurance as will protect the Contractor from claims under worker's compensation laws, disability benefit laws, or similar employee benefit laws, from claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees, and claims insured by personal injury liability coverage; from claims for damages because of bodily injury, sickness or disease, or death of any person other than his or her employees including claims insured by personal injury liability coverage; and from claims for injury to or destruction of tangible property, including loss of use resulting therefrom - any or all of which may arise out of or result from the Contractor's operations under the Contract Documents, whether such operations be by Contractor or by any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. This insurance shall include the specific coverage's and be written for not less than any limits of liability and maximum deductibles specified in the

Supplementary Conditions or required by law, whichever is greater, shall include contractual liability insurance and shall include the Owner and Engineer as additional insured parties. Before starting the Work, the Contractor shall file with the Owner and Engineer certificates of such insurance, acceptable to the Owner; these certificates shall contain a provision that the coverage afforded under the policies will not be canceled or materially changed until at least fifteen (15) days prior written notice has been given to the Owner and Engineer.

6.00. CONTRACTOR'S RESPONSIBILITIES.

6.01. SUPERVISION AND SUPERINTENDENCE. The Contractor shall supervise and direct the Work efficiently and with the Contractor's best skill and attention. The Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but the Contractor shall not be solely responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. The Contractor shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.02. RESIDENT SUPERINTENDENT. The Contractor shall keep on the Work site at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to the Owner and Engineer. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor.

6.03. LABOR, MATERIALS AND EQUIPMENT. The Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities, and all other facilities and incidentals necessary for the execution, testing, initial operation, and completion of the Work.

All materials and equipment shall be new, except as otherwise provided in the Contract Documents. If required by the Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the contract Documents.

The Contractor shall be fully responsible for all acts and omissions of the Contractor's Subcontractors and of persons and organizations directly or indirectly employed by them, and of persons and organizations for whose acts any of them may be liable to the same extent that the Contractor is responsible for the acts and omissions of persons directly employed by the Contractor. Nothing in the Contract Documents shall create any contractual relationship between the Owner or Engineer and any Subcontractor or other person or organization having a direct contact with the Contractor, nor shall it create any obligation on the part of the Owner or Engineer to pay or to see to the payment of any monies due any Subcontractor or any other person or organization, except as may otherwise be required by law. The Owner or Engineer may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work done in accordance with the schedule of values.

The divisions and sections of the Specifications and the identification of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

The Contractor agrees to bind specifically every Subcontractor to the specific terms and conditions of the Contract Documents for the benefit of the Owner.

All Work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor which shall contain provisions that waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by insurance, except such rights as they may have to the proceeds of such insurance. The Contractor shall pay each Subcontractor a just share of any insurance monies received by the Contractor.

- 6.04. PATENT FEES AND ROYALTIES.** The Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of the Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents. The Contractor shall indemnify and hold harmless the Owner and Engineer and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.
- 6.05. PERMITS.** The Contractor shall obtain and pay for all construction permits and licenses and shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of his/her Bid. The Owner shall assist the Contractor, when necessary, in obtaining such permits and licenses. The Contractor shall also pay all public utility charges necessary for the meter/service connections to place installed devices into working order and placing said service accounts in the name of the City of Bloomington, or their assigned designee.
- 6.06. LAWS AND REGULATIONS.** The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the Contractor observes that the Specifications or Drawings are in conflict therewith, the Contractor shall give the Engineer prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, the Contractor shall bear all costs arising there from; however, it shall not be the Contractors primary responsibility to make certain that the Specifications and Drawings are in accordance with such laws, ordinances, rules and regulations.
- 6.07. TAXES.** The Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by the Contractor in accordance with the law of the place where the work is to be performed. The Owner is exempt from sales tax on products permanently incorporated into the work. The Contractor may obtain sales tax exemption for such materials, products, and equipment and may obtain an Indiana General Sales Tax Exemption Certificate from the Owner.

6.08. Use of PREMISES. The Contractor shall confine their equipment, the storage of materials and equipment and the operations of the Contractor's workmen to areas permitted by law, ordinances, permits, or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with materials or equipment. No assumptions of allowable traffic closures shall be made by the Contractor unless specifically called for in a "Maintenance of Traffic" plan should one exist. All roadway and lane closures must be approved by the Engineer prior to implementing the closure and a 'Notice of Intent' to close a lane or roadway must be delivered in writing to the Engineer by the Wednesday preceding the week of the desired closure date or time so proper notification can be given to the required personnel.

The Contractor shall not load nor permit any part of any structure to be loaded with weights that will endanger the structure, nor shall the Contractor subject any part of the Work to stresses or pressures that will endanger it.

6.09. RECORD DRAWINGS. The Contractor shall keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the Engineer and shall be delivered to the Engineer for the Owner upon completion of the Project and prior to final payment.

6.10. SAFETY AND PROTECTION. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to: all employees on the Work and other persons who may be affected thereby. This includes ensuring the safety of pedestrians, bicyclist, and motorists who are allowed to access the site during the project. All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. The Contractor shall notify owners of adjacent utilities when prosecution of the Work may affect them. All damage, injury or loss to any property caused directly or indirectly, in whole or in part, by the Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor: except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of the Owner or Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor. The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and the Engineer has issued a notice to the Owner and Contractor in accordance with Supplementary Conditions that the Work is acceptable.

6.11. SUPERINTENDENT OF SAFETY. The Contractor shall designate a responsible member of his or her organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Owner. The Superintendent of Safety shall be responsible for the maintenance of traffic control devices and personnel in accordance with the Manual on Uniform Traffic Control Devices (M.U.T.C.D.) for

work zone safety. Weekly "Sign and Barricade Reports" are to be submitted by the Superintendent of Safety.

6.12. EMERGENCIES. In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer or Owner, is obligated to act, at the Contractor's discretion, to prevent threatened damage, injury or loss. The Contractor shall give the Engineer prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved. If the Contractor believes that additional work done by the Contractor in an emergency which arose from causes beyond the Contractor's control entitles the Contractor to an increase in the Contract Price or an extension of the Contract Time, the Contractor may make a claim therefore.

6.13. INDEMNIFICATION. The Contractor shall indemnify and hold harmless the Owner and Engineer and their agents and employees from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense: is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable regardless of whether or not it is caused in part by a party indemnified hereunder. In any and all claims against the Owner or Engineer or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts. The indemnification obligations of the Contractor shall not extend to the liability of the Engineer, the Engineer's agents or employees arising out of: the preparation of maps, drawings, opinions, reports, surveys, Change Orders, designs, or specifications or the giving of or the failure to give directions or instructions by the Engineer, his or her agents or employees, provided such giving or failure to give is the primary cause of injury or damage.

7.00. WORK BY OTHERS.

The Owner may perform additional work related to the Project by its own forces, or the Owner may let other direct contracts therefore which shall contain General Conditions similar to these. The Contractor shall afford the other contractors who are parties to such direct contracts (or the Owner, if Owner is performing the additional work) reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate the Contractor's Work with theirs.

If any part of the Contractor's Work depends for proper execution or results upon the work of any such other contractor (or Owner), the Contractor shall inspect and promptly report to the Engineer in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results. The Contractor's failure to so report shall constitute an acceptance of the other work as fit and proper for the relationship of the Contractor's Work except as to defects and deficiencies which may appear in the other work after the execution of the Contractor's Work.

The Contractor shall do all cutting, fitting, and patching of the Contractor's Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of the Engineer and of the other contractors whose work will be affected.

If the performance of additional work by other contractors or the Owner is not noted in the Contract Documents prior to the execution of the contract, written notice thereof shall be given to the Contractor prior to starting any additional work. If the Contractor believes that the performance of any such additional work by the Owner or others involves the Contractor in additional expense or entitles the Contractor to an extension of the Contract Time, the Contractor may make a claim therefore.

8.00. OWNER'S RESPONSIBILITIES.

The Owner shall issue all communications to the Contractor through the Engineer.

In case of termination of the employment of the Engineer, the Owner shall appoint an engineer against whom the Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer. Any dispute in connection with such an appointment shall be subject to arbitration.

The Owner shall furnish the data required of the Owner under the Contract Documents promptly and shall make payments to the Contractor promptly after they are due.

In addition to the Owner's rights to request changes in the Work, the Owner shall be obligated to execute Change Orders.

9.00. ENGINEER'S STATUS DURING CONSTRUCTION.

9.01. OWNER'S REPRESENTATIVE. The Engineer will be the Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of the Engineer as the Owner's representative during construction are set forth in these General Conditions and shall not be extended without the written consent of the Owner and the Engineer.

9.02. CLARIFICATIONS AND INTERPRETATIONS. The Engineer will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as the Engineer may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If the Contractor believes that a written clarification and interpretation entitles the Contractor to an increase in the Contract Price, the Contractor may make a claim therefore.

9.03. REJECTING DEFECTIVE WORK. The Engineer will have authority to reject Work which is "defective" (which term is hereinafter used to describe Work that is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Specifications, or has been damaged prior to the Engineer's recommendation of final payment). The Engineer will also have authority to require special inspection or special testing of the Work whether or not the Work is fabricated, installed or completed.

9.04. DECISIONS ON DISAGREEMENTS. The Engineer will be the interpreter of the requirements of the Contract Documents and the judge of the performance hereunder. In the Engineer's capacity as interpreter and judge he/she will exercise his/her best efforts to insure faithful performance by

both Owner and Contractor. He or she will not show partiality to either and will not be liable for the result of any interpretation or decision rendered in good faith. Claims, disputes, and other matters relating to the execution and progress of the Work or the interpretation of or performance under the Contract Documents shall be referred to the Engineer for decision, which the Engineer will render in writing within a reasonable time.

9.05. ARBITRATION. Either the Owner or the Contractor may demand arbitration with respect to any such claim, dispute, or other matter that has been referred to the Engineer, except any which have been waived by the making or acceptance of final payment, such arbitration to be in accordance with these General Conditions. However, no demand for arbitration of any such claim, dispute, or other matter shall be made until the earlier of (a) the date on which the Engineer has rendered his/her decision or (b) the tenth day after the parties have presented their evidence to the Engineer if he/she has not rendered his/her written decision before that date. No demand for arbitration shall be made later than thirty (30) days after the date on which the Engineer rendered his/her written decision in respect to the claim, dispute or other matter as to which arbitration is sought; and the failure to demand arbitration within said thirty (30) day period shall result in the Engineer's decision being final and binding upon the Owner and the Contractor. If the Engineer renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but shall not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned.

9.06. LIMITATIONS ON THE ENGINEER'S RESPONSIBILITIES. Neither the Engineer's authority to act under this article or elsewhere in the Contract Documents nor any decision made by the Engineer in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any material, manufacturer, fabricator, supplier or any of their agents or employees or any other person performing any of the Work.

The Engineer will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, and the Engineer will not be responsible for the Contractor's failure to perform the Work in accordance with the Contract Documents.

The Engineer will not be responsible for the acts or omissions of the Contractor, or any Subcontractors, or any of Contractor's or their agents or employees or any other persons at the site or otherwise performing any of the Work.

10.00. CHANGES IN THE WORK.

Without invalidating the Agreement, the Owner may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders and initiated through a Field Order or Work Change Directive from the Engineer or Owner. Upon receipt of a Change Order, the Contractor shall proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in these General Conditions on the basis of a claim made by either party.

The Engineer may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order or Work Change Directives. If the Contractor believes that any minor change or alteration authorized

by the Engineer entitles Contractor to an increase in the Contract Price, the Contractor may make a claim therefore.

Additional work performed by the Contractor without authorization of a Change Order will not entitle him or her to an increase in the Contract Price or an extension of the Contract Time, except as otherwise provided herein.

The Owner shall execute appropriate Change Orders prepared by the Engineer covering changes in the Work to be performed as provided herein and any other claim of the Contractor for a change in the Contract Time or the Contract Price which is confirmed by the Engineer.

It is the Contractor's responsibility to notify his or her Surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable Bonds shall be adjusted accordingly.

11.00. CHANGE OF CONTRACT PRICE.

The Contract Price constitutes the total compensation payable to the Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the Contractor shall be at the Contractor's expense without change in the Contract Price.

The Contract Price may only be changed by a Change Order. Any claim for an increase in the Contract Price shall be based on written notice delivered to the Owner and Engineer within twenty (20) days of the occurrence of the event giving rise to the claim. Notice of the amount of the claim with supporting data shall be delivered within forty-five (45) days of such occurrence unless the Engineer allows an additional period of time to ascertain accurate cost data. All claims for adjustments in the Contract Price shall be determined by the Engineer if the Owner and the Contractor cannot otherwise agree on the amount involved. Any change in the Contract Price resulting from any such claim shall be incorporated in a Change Order. All changes requested by the Engineer or Owner must be submitted to the Contractor in the form of a Field Order, at which time, the contractor shall provide in return a request for a change order with the prices for said requested work detailed by item and quantity for the Engineer and Owner to review for acceptance and so they can issue a Change Order for the approved work.

The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.

By mutual acceptance of a lump sum.

On the basis of the Cost of the Work plus a Contractor's Fee for overhead and profit (determined in accordance with the following paragraphs).

11.01. COST OF THE WORK. The term "Cost of the Work" means the sum of all costs necessarily incurred and paid by the Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by the Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, and shall include only the following items:

Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications set forth in the Wage Scale Determination. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of

fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Sunday or legal holidays shall be included in the above to the extent authorized by the Owner.

The cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to the Contractor unless the Owner deposits funds with the Contractor with which to make payments, in which case the cash discounts shall accrue to the Owner. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to the Owner, and the Contractor shall make provisions so that they may be obtained.

Payments made by the Contractor to the Subcontractors for Work performed by the Subcontractors. If required by the Owner, the Contractor shall obtain competitive bids from Subcontractors acceptable to the Owner and shall deliver such bids to the Owner, who will then determine with the advice of the Engineer which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as the Contractor's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

Costs of special consultants (including, but not limited to, engineers, architects, testing laboratories, surveyors, lawyers and accountants) employed for services specifically related to the Work.

11.02. SUPPLEMENTAL COSTS include the following:

The proportion of necessary transportation, traveling and subsistence expenses of the Contractor's employees incurred in discharge of duties connected with the Work.

The cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of the Contractor.

Rentals of all construction equipment and machinery and the parts thereof whether rented from the Contractor or others in accordance with the rental agreements approved by the Owner with the advice of the Engineer, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with the terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

Sales, use or similar taxes related to the Work, and for which the Contractor is liable, imposed by any governmental authority.

Deposits lost for causes other than the Contractor's negligence, royalty payments and fees for permits and licenses.

Losses, damages and expenses, not compensated by insurance or otherwise, sustained by the Contractor in connection with the execution of, and to, the Work, provided they have resulted from causes other than the negligence of the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of the Owner. No such losses,

damages and expenses shall be included in the Cost of the Work for the purpose of determining the Contractor's fee. If, however, any such loss or damage requires reconstruction and the Contractor is placed in charge thereof, the Contractor shall be paid for the Contractor's services a fee proportionate to that stated under Contractor's Fee.

The cost of utilities, fuel and sanitary facilities at the site.

Minor expenses such as telegrams, long distance phone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

The cost of premiums for additional bonds and insurance required because of changes in the Work.

11.03 The term "**COST OF THE WORK**" shall *not* include any of the following:

Payroll costs and other compensation of the Contractor's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by the Contractor, whether at the site or in the Contractor's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications - all of which are to be considered administrative costs covered by the Contractor's Fee.

Expenses of the Contractor's principal and branch offices other than the Contractor's office at the site.

Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work and charges against the Contractor for delinquent payments.

Cost of premiums for all bonds and for all insurance policies whether or not the Contractor is required by the Contract Documents to purchase and maintain the same (except as otherwise provided above).

Costs due to the negligence of the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

Other overhead or general expense costs of any kind not specifically and expressly included in the Cost of the Work.

11.04. CONTRACTOR'S FEE. The Contractor's Fee which includes the Contractor's overhead and profit shall be determined as follows:

A mutually acceptable fee; or, if none can be agreed upon,

A fee based on the following percentages of the various portions of the Cost of the Work:

for payroll costs and the cost of all materials and equipment included in the Work, the Contractor's Profit shall be ten percent.

for payments to Subcontractors, the Contractor's Profit shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to the Subcontractor as a fee for overhead and profit shall be ten percent, and

no fee shall be payable on the basis of costs of special consultants or supplemental costs.

11.05. CREDIT. The amount of credit to be allowed by the Contractor to the Owner for any such change which results in a net decrease in cost, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

Whenever the cost of any Work is to be determined pursuant to preceding paragraphs, the Contractor will submit in form prescribed by the Engineer an itemized cost breakdown together with supporting data.

11.06. UNIT PRICE WORK. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the approximate quantity of each item as indicated in the Agreement.

The approximated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.

Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order.

12.00. CHANGE OF CONTRACT TIME.

The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Owner and Engineer within twenty (20) days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five (45) days of such occurrence unless the Engineer allows an additional period of time to ascertain more accurate data. All claims for adjustment in the Contract Time shall be determined by the Engineer if the Owner and the Contractor cannot otherwise agree. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order. Computation of Contract time shall be in accordance with the contract agreement and not that of the Indiana Department of Transportation (INDOT).

The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if the Contractor makes a claim therefore as provided in the preceding paragraph. A claim for an extension of the Contract Time otherwise allowable under the Contract Documents, shall be granted only to the extent the time lost exceeds the float, using Critical Path analysis as called for in Section 2.08 above, for a delayed activity at the time of the event giving rise to the Claim. Float, whether expressly disclosed or implied in any manner, is jointly owned by the project participants. Such delays shall include, but not be restricted to, acts or neglect by any separate contractor employed by the Owner, fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

All time limits stated in the Contract Documents are of the essence of the Agreement. The Contractor agrees to make no monetary claim for delays, interferences or hindrances of any kind in the performance of this Contract occasioned by any act or omission to act of the Owner or any other party, and agrees that

any such claim shall be fully compensated for by an extension of time to complete performance of the work where Critical Path analysis shows such an extension of time is warranted.

13.00. LIQUIDATED DAMAGES.

Liquidated damages shall be paid to the Owner in accordance with the Agreement. If no provision is made in the Agreement, liquidated damages shall be paid as follows:

In the event the Contractor fails to satisfactorily complete the entire Work contemplated and provided for under this contract on or before the date of completion as determined and described elsewhere herein, the Owner shall deduct from the amount due the Contractor the sum of One Thousand Dollars (\$1,000.00) for each calendar day of delay, which sum is agreed upon not as a penalty, but as a fixed and liquidated damage for each day of such delay, to be paid in full and subject to no deduction, it being understood and agreed that timely completion is of the essence. If the monies due the Contractor are less than the amount of such liquidated damages, then the Contractor or the Contractor's surety shall pay the balance to the Owner.

14.00. WARRANTY AND GUARANTEE: TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK.

14.01. WARRANTY AND GUARANTEE. The Contractor warrants and guarantees to the Owner and Engineer that all materials and equipment will be new unless otherwise specified and that all Work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents and of any inspections, tests or approvals referred to in the Tests and Inspection paragraph. All unsatisfactory Work, all faulty or defective Work, and all Work not conforming to the requirements of the Contract Documents at the time of acceptance thereof or of such inspections, tests or approvals, shall be considered defective. Prompt notice of all defects shall be given to the Contractor. All defective Work, whether or not in place, may be rejected, corrected, or accepted as provided herein.

14.02. TESTS AND INSPECTIONS. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested, or approved by some public body, the Contractor shall assume full responsibility therefore, pay all costs in connection therewith and furnish the Engineer the required certificates of inspection, testing, or approval. All other inspections, tests, or approvals required by the Contract Documents shall be performed by organizations acceptable to the Owner and the Contractor and the costs thereof shall be borne by the Owner unless otherwise specified.

The Contractor shall give the Engineer timely notice of readiness of the Work for all inspections, tests or approvals. If any such Work required so to be inspected, tested or approved is covered without written concurrence of the Engineer, it must, if requested by the Engineer, be uncovered for observation, and such uncovering shall be at the Contractor's expense unless the Contractor has given the Engineer timely notice of the Contractor's intention to cover such Work and the Engineer has not acted with reasonable promptness in response to such notice. This timeframe of notification shall be no less than 2 hours, and occur during normal working hours of the City of Bloomington (Monday through Friday – 8:00a.m. to 5:00p.m.) Requests for inspection during all other hours shall receive 48 hours' notice.

Neither observations by the Engineer nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his/her obligations to perform the Work in accordance with the Contract Documents.

14.03. ACCESS TO WORK. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.04. UNCOVERING WORK. If any Work is covered contrary to the written request of the Engineer, it must, if requested by the Engineer, be uncovered by the Contractor for the Engineer's observation and replaced at the Contractor's expense.

If any Work has been covered which the Engineer has not specifically requested to observe prior to its being covered, or if the Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be defective, the Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction if the Contractor makes a claim therefore.

14.05. OWNER MAY STOP THE WORK. If the Work is defective, or the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor fails to make prompt payment to Subcontractors or for labor, materials or equipment, the Owner may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other party.

14.06. CORRECTION OR REMOVAL OF DEFECTIVE WORK. If required by the Engineer prior to his/her recommendation of final payment, the Contractor shall promptly, without cost to the Owner and as specified by the Engineer, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Engineer, remove it from the site and replace it with non-defective Work. If the Contractor does not correct such defective Work within a reasonable time, all as specified in a written notice from the Engineer, the Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services, shall be paid by the Contractor, and an appropriate deductive Change Order shall be issued. The Contractor shall also bear the expenses of making good all Work of others destroyed or damaged by the Contractor's correction, removal or replacement of his/her defective Work.

14.07. CORRECTION PERIOD. If, after final payment and prior to the expiration of one year after the date of Substantial Completion (unless a longer period is set forth in the Supplementary Conditions) or such longer period as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Owner's written instructions, either correct such defective Work or, if it has been rejected by the Owner, remove it from the site and

replace it with non-defective Work. If the Contractor does not promptly comply with the terms of such instructions, the Owner may have the defective Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by the Contractor.

14.08. ACCEPTANCE OF DEFECTIVE WORK. If, instead of requiring correction or removal and replacement of defective Work, the Owner (and, prior to final payment, the Engineer) prefers to accept it, the Engineer or Owner may do so. In such case, if acceptance occurs prior to final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price; or, if the acceptance occurs after final payment, an appropriate amount shall be paid by the Contractor to the Owner.

14.09. NEGLECTED WORK BY THE CONTRACTOR. If the Contractor should fail to prosecute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, the Owner, after seven (7) days written notice to the Contractor may, without prejudice to any other remedy the Owner may have, make good such deficiencies and the cost thereof (including compensation for additional professional services) shall be charged against the Contractor if the Engineer agrees with such action, in which case a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract Price. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

15.00. PAYMENTS AND COMPLETION.

15.01. APPLICATION FOR PROGRESS PAYMENT. The Contractor may, no more frequently than every thirty (30) days make an estimate of the value of the Work completed, and submit an Application for Payment. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 11.06. The estimated cost of repairing, replacing, or rebuilding any part of the Work or replacing materials which do not conform to the Contract Documents will be deducted from the estimated value. The Application for Payment shall be submitted to the Engineer for review and approval.

15.01.01. At least twenty (20) days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

15.01.02. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation *establishing full payment by Contractor for the materials and equipment*; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

15.01.03. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor

have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

15.01.03. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

15.02. CONTRACTOR'S WARRANTY OF TITLE. The Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to the Owner at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens").

15.03. REVIEW OF APPLICATION FOR PAYMENT. The Contractor shall furnish to the Engineer such detailed information as the Engineer may request to aid in the review and approval of such Estimates. The Engineer will, within five (5) working days after receipt of each Application for Payment, either recommend payment and present the Application to the Owner, or return the Application to the Contractor indicating in writing the Engineer's reasons for refusing to recommend payment. In the latter case, the Contractor may make the necessary corrections and resubmit the Application. The Owner will pay to the Contractor within forty-five (45) days after receipt of Application. The escrow agent, Owner, and Contractor shall enter into a written escrow agreement. Under that agreement, the Owner shall withhold five percent (5%) of the dollar value of all work satisfactorily completed until the Contract work is complete. Upon substantial completion of the work, any amount retained may be paid to the Contractor. When the work has been substantially completed except for the work which cannot be completed due to weather conditions, lack of materials or other reasons which in the judgment of the Owner are valid reasons for non-completion, the Owner may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the work still to be completed. Such Applications for Payment are processed on a regular biweekly schedule, which will be provided to the Contractor.

15.04. FINAL INSPECTION. When the Work has been substantially completed and at a time mutually agreeable to the Owner, Engineer, and Contractor, the Engineer and Contractor shall make a final walk-through inspection of the Work. The Engineer shall report to the Owner his/her findings as to the acceptability and completeness of the Work.

15.05. APPLICATION FOR FINAL PAYMENT. Upon written notice from the Engineer that Work is completed and acceptable as provided in the Supplementary Conditions, the Contractor shall make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all other documentation called for in the Contract Documents and such other data and schedules as the Engineer may reasonably require.

15.06. FINAL PAYMENT. If, on the basis of the Engineers observation and review of the Work during construction, his/her final inspection and his/her review of the final Application for Payment, all as required by the Contract Documents, the Engineer is satisfied that the Work has been completed and the Contractor has fulfilled all of his/her obligations under the Contract Documents, the Engineer will, within ten (10) days after receipt of the final Application for Payment, present the Application to the Owner for Payment. Thereupon the Engineer will give written notice to the Contractor that the Work is acceptable subject to the provisions of the paragraph regarding waiver of claims. Otherwise, the Engineer will return the Application to the Contractor, indicating in writing his/her reasons for refusing to recommend final payment, in which case the Contractor shall make

the necessary corrections and resubmit the Application. The Owner shall, within forty-five (45) days of presentation to the Owner of the final Application for Payment, pay the Contractor the entire sum found to be due after deducting all amounts to be retained under any provision of the Contract Documents.

15.07. CONTRACTOR'S CONTINUING OBLIGATION. The Contractor's obligation to perform the Work and complete the Project in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the Engineer, nor the issuance of a certificate of Substantial Completion, nor any payment by the Owner to the Contractor under the Contract Documents, nor any use or occupancy of the Project or any part thereof by the Owner, nor any act of acceptance by the Owner nor any failure to do so, nor any correction of defective Work by the Owner shall constitute an acceptance of Work not in accordance with the Contract Documents.

15.08. WAIVER OF CLAIMS. The making and acceptance of final payment shall constitute:

a waiver of all claims by the Owner against the Contractor other than those arising from unsettled Liens, from defective Work appearing after final inspection or from failure to comply with the requirements of the Contract Documents or the terms of any special guarantees specified therein, and a waiver of all claims by the Contractor against the Owner other than those previously made in writing and still unsettled.

16.00. SUSPENSION OF WORK AND TERMINATION.

16.01. OWNER MAY SUSPEND WORK. The Owner may, at any time and without cause, suspend the Work or any portion thereof for a period of ninety (90) days by notice in writing to the Contractor, which shall fix the date on which Work shall be resumed. The Contractor shall resume the Work on the date so fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the Contractor makes a claim therefore as provided in these General Conditions.

16.02. OWNER MAY TERMINATE. If the Contractor is adjudged a bankrupt or insolvent, or if the Contractor makes a general assignment for the benefit of his/her creditors, or if a trustee or receiver is appointed for the Contractor or for any of his/her property, or if the Contractor files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws, or if the Contractor repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment or if the Contractor disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if the Contractor disregards the authority of the Engineer, or if he or she otherwise violates any provision of the Contract Documents, then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and the Contractor's Surety seven (7) days' written notice, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, and finish the Work by whatever method the Owner may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excesses shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. Such costs incurred by the Owner shall be incorporated in a Change Order.

Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any rights of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from liability.

Upon seven days written notice to the Contractor, the Owner may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Agreement. In such case, the Contractor shall be paid for all Work executed and any expense sustained plus a reasonable profit.

16.03. CONTRACTOR MAY STOP WORK OR TERMINATE. If, through no act or fault of the Contractor, the Work is suspended for a period of more than ninety (90) days by the Owner or under an order of court or other public authority, or the Engineer fails to act on any Application for Payment within thirty (30) days after it is submitted, or the Owner fails to pay the Contractor any sum recommended by the Engineer or awarded by arbitrators within thirty (30) days of its approval and presentation, then the Contractor may, upon seven (7) days' written notice to the Owner and Engineer, terminate the Agreement and recover from the Owner payment for all Work executed and any expense sustained plus a reasonable profit. In addition and in lieu of terminating the Agreement, if the Engineer has failed to act on an Application for Payment or the Owner has failed to make any payment as aforesaid, the Contractor may upon seven (7) days' notice to the Owner and Engineer stop the Work until the Contractor has been paid all amounts then due.

17.00. ARBITRATION.

17.01 As a condition precedent to the commencement of judicial action for resolution of Claims, disputes, and other matters in question arising out of, or relating to, the Agreement, including any disagreement with Engineer's decisions, either Owner or Contractor shall file a written demand for arbitration of the dispute with the other party.

17.02 No demand for arbitration of any Claim, dispute, or other matter that is required to be referred to Engineer initially for decision in accordance with Paragraph 10.00, 11.00 and 12.00 of the General Conditions may be made until the earlier of (a) the date on which Engineer has rendered a written decision or (b) thirty (30) days after the parties have presented their evidence to Engineer if a written decision has not been rendered by Engineer before that date. No demand for arbitration of any such Claim, dispute, or other matter may be made later than thirty (30) days after the date on which Engineer has rendered a written decision in respect thereof; and the failure to demand arbitration within said thirty (30) day period shall result in Engineer's decision being final and binding upon Owner and Contractor. If Engineer renders a decision after arbitration or judicial proceedings have been initiated, such decision may be entered as evidence but will not supersede such proceedings, except where the decision is acceptable to the parties concerned.

17.03 In all other cases, the demand for arbitration shall be made within a reasonable time after the Claim, dispute, or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such Claim, dispute, or other matter in question would be barred by the applicable statute of limitations.

17.04 If the party upon whom the demand for arbitration is made rejects arbitration, or fails to give a written response within thirty (30) days after receiving the demand, the other party may commence judicial action on the merits of the dispute. If the party upon whom the demand for arbitration is

made accepts arbitration, the other party may commence arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining. The agreement to arbitrate entered into in accordance herewith will be specifically enforceable under the prevailing law of any court having jurisdiction.

17.05 If a Claim, dispute, or other matter in question between Owner and Contractor involves the work of a Subcontractor, either Owner or Contractor may join such Subcontractor as a party to the arbitration between Owner and Contractor. Contractor shall include in all subcontracts a specific provision whereby the Subcontractor consents to being joined in an arbitration between Owner and Contractor involving the Work of such Subcontractor. Nothing in this paragraph nor in the provision of such subcontract consenting to joinder shall create any Claim, right, or cause of action in favor of Subcontractor and against Owner, Engineer, or Engineer's Consultants that does not otherwise exist

17.06 The award rendered by the arbitrators will be final, and judgment may be entered upon it in any court having jurisdiction.

18.00. ENVIRONMENTAL REQUIREMENTS.

The Contractor, when constructing a project involving trenching and/or other related earth excavation, shall comply with the following environmental constraints and be required to install appropriate erosion control devices as determined by the City of Bloomington, which may include, but not be limited to the placement of inlet protection, silt fencing, check dams, temporary seeding and/or mulching. All costs for this work shall be included in the cost of the base Bid with work performed by the contractor to ensure that all erosion is contained on site.

18.01. WETLANDS. The Contractor, when disposing of excess, spoil, or other related earth construction materials on public or private property, shall not fill in or otherwise convert wetlands.

18.02. FLOODPLAINS. The Contractor, when disposing of excess, spoil, or other related earth construction materials on public or private property, shall not fill in or otherwise convert 100 year flood plain areas delineated on the latest FEMA Floodplain Maps.

18.03. HISTORIC PRESERVATION. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the City Engineer's Office. Construction shall be temporarily halted pending the notification process and further directions issued by the City after consultation with the State Historic Preservation Office (SHPO).

18.04. ENDANGERED SPECIES. The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species or their critical habitat be brought to the attention of the contractor, the contractor shall immediately report this evidence to the City Engineer. Construction shall be temporarily halted pending the notification process and further directions issued by the OWNER after consultation with the U.S. Fish and Wildlife Service.

18.05 Rule 5 Permit. The Contractor shall comply with all applicable requirements of the Rule 5 Permit for erosion control utilizing applicable Best Management Practices (B.M.P.'s) prior to the commencement of work.

19.00. MISCELLANEOUS.

- 19.01. GIVING NOTICE.** Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to be validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by first class, registered or certified mail, postage prepaid, to the business address provided on the Contractual Agreement, or by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.
- 19.02. COMPUTATION OF TIME.** Computation of time shall be set forth by the number of calendar days allowed for in the contract agreement. Calendar days shall consist every day shown on the calendar.
- 19.03. ADDITIONAL SPECIFICATION REQUIREMENTS.** Areas of work not covered under Special Conditions will be required to meet specifications covered in applicable sections of Indiana Department of Transportation Specifications 2018 Edition (or latest edition and supplements at time of Bid) for the installation and placement of materials to ensure quality workmanship. INDOT Specifications shall not be interpreted to contradict current Public Works or Bloomington Utility Specifications, which shall override and supersede INDOT Specifications.
- 19.04. MAINTENANCE OF TRAFFIC.** For all maintenance of traffic, including pedestrian routes, the Contractor shall follow the current Indiana Manual on Uniform Traffic Control Devices (MUTCD) with regard to all signage and signage placement used during the project for both vehicular, bicycle and pedestrian traffic travelling through the project limits. The Contractor shall install and maintain any temporary pedestrian routes in accordance with the Draft Public Right of Way Accessibility Guidelines (PROWAG) and must be approved by the Department of Planning and Transportation.
- 19.05. LIMITATION OF DAMAGES.** With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.
- 19.06. NO WAIVER.** A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.
- 19.07. SURVIVAL OF OBLIGATIONS.** All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

SECTION VII

SPECIAL CONDITIONS
SUPPLEMENTARY CONDITIONS

Special Conditions

Contractor shall maintain local access for all residents and local businesses within the limits of the project during construction.

Contractor shall limit his/her operations to within the project site. Contractors using any property outside the public right of way shall have an agreement in writing from each respective property owner of said property on file with the City of Bloomington Project Representative prior to usage. No verbal agreements are permitted.

Contractor is responsible for securing the construction site at all times.

DESIGN BUILD CURB RAMP

The Contractor shall design and reconstruct the existing curb ramp in the south east corner of 17th and N. Grant Street. The curb ramp shall comply with current City and PROWAG standards.

The Contractor shall submit working drawings to the Engineer a minimum of two weeks ahead of curb ramp construction. The drawings shall provide adequate detail to enable the construction of the ramp.

No utility conflicts are anticipated at the curb ramp location, however the Contractor shall coordinate and verify with Utilities prior to construction of the curb ramp after working drawings are prepared.

The cost of the curb ramp and all associated work shall be included in the lump sum cost of Design Build Curb Ramp.

COORDINATION WITH ADJACENT CONTRACT

Indiana University is anticipated to be constructing a trail project along the east side of Dunn Street north of 17th Street in the Summer of 2021. The Contractor shall coordinate activities in accordance with 105.07 as applicable.

Project Contact Information:

Brock Ridgway, P.E.
Eagle Ridge Civil Engineering Services, LLC
(317) 370-9672
bridgway@eagleridgecivil.com

CITY OF BLOOMINGTON UTILITIES (WATER)

The City of Bloomington has existing 16" and 20" water mains along 17th Street that will remain in place. The existing facilities shall be located and depths verified in the field prior to construction near the water mains by the Contractor through coordination with the City of Bloomington Utilities. The City of Bloomington Utilities shall be notified a minimum of two weeks ahead of any work near their existing facilities. A City of Bloomington Utility representative shall be onsite during excavation and construction of Structures 26, 29, and 31.

Proposed storm sewer Structures No. 26, 29, and 31 shall cross the existing watermains as shown on the plans. Caution shall be exercised near the existing lines and all precautions necessary, including but not limited to shoring up of the existing water main, shall be completed to keep the integrity of the existing line as is. The cost of the protective measures and coordination shall not be paid for directly rather included in the cost of the storm sewer pay items.

SUBGRADE FOUNDATION IMPROVEMENT

Subgrade foundation improvement is required in locations of new mainline pavement construction where foundation soils exhibit unstable conditions. The subgrade foundation improvement shall consist of the excavation of the existing ground and the placement of Geotextile for Pavement Type IB and Compacted Aggregate No. 53 as specified herein.

As directed by the Engineer, after preparation of the original ground in accordance with 203, the existing ground shall be over excavated and a granular layer consisting of 12 in. compacted aggregate No. 53 shall be placed on Geotextile for Pavement Type IB. This granular method for ground stabilization shall only be used after all other options have been exhausted by the Contractor to dry or bridge the subgrade in accordance to standard construction practices.

The cost of Compacted Aggregate No. 53 and Geotextile for Pavement Type IB shall be paid for in accordance with the Specifications. The cost of the excavation and all other labor and incidentals required to complete the ground stabilization shall not be paid for directly rather is included in the cost of the other pay items associated with the work.

HMA PAVEMENT

The Indiana Department of Transportation (INDOT) Standard Specifications, Section 402 - Hot Mix Asphalt, HMA, Pavement dated 2020, shall apply with the modifications as noted herein.

Description

This work shall consist of one or more courses of Hot Mix Asphalt (HMA) base, intermediate, surface mixtures or other miscellaneous HMA application.

Quality Control

HMA shall be supplied from a Certified HMA Plant in accordance with *Indiana Test Method (ITM) 583 - Certified Volumetric Hot Mix Asphalt Producer Program*. HMA shall be transported and placed according to a Quality Control Plan (QCP) prepared by the Contractor in accordance with *ITM 803 - Contractor Quality Control Plan for HMA Pavement*. The QCP shall be submitted to the Contracting Agency five calendar days prior to commencing HMA paving operations.

Materials

PG binders for HMA shall be supplied by an INDOT approved supplier in accordance with *ITM 581 - Asphalt Supplier Certification (ASC) Program* and shall meet the requirements of Section 902.01.

Aggregate materials for HMA mixtures shall be supplied by an INDOT Certified Aggregate Producer (CAPP). The aggregates shall meet the requirements of Section 904.

The HMA fine aggregate materials shall meet the requirements of Section 904.02(b), except the fine aggregate angularity table shall be modified as follows:

FINE AGGREGATE ANGULARITY

Type	Depth from Surface	
	≤ 4 inches*	> 4 inches
A		
B	40	40
C	45	40
*Note: For 4.75 mm mixtures, the fine aggregate angularity shall be 40 for Type A and 45 for Type B and C.		

The HMA coarse aggregate materials shall meet the requirements of 904.03(b), except the coarse aggregate angularity table shall be modified as follows:

COARSE AGGREGATE ANGULARITY		
Type	Depth from Surface	
	≤ 4 inches	> 4 inches
A	55	
B	75	50
C	85/80*	60
*Note: Denotes two faced crushed requirements.		

HMA coarse aggregates for surface mixtures shall meet the requirements of Section 904.03(d), except they may be modified as follows when the design speed or posted speed limit is equal to or less than 45 mph.

Coarse Aggregate Type	Traffic ESALs		
	< 3,000,000	< 10,000,000	≥ 10,000,000
Air-Cooled Blast Furnace Slag	Yes	Yes	Yes
Steel Furnace Slag	Yes	Yes	Yes
Sandstone	Yes	Yes	Yes
Crushed Dolomite	Yes	Yes	Yes
Polish Resistant Aggregates	Yes	Yes	Yes
Crushed Stone	Yes	Yes	*
Gravel	Yes	Yes	*
*Note: Crushed Stone or gravel may be used in accordance with ITM 221.			

Design Mix Formula and Mixture Type

The design mix formula (DMF) shall be prepared by an INDOT approved Mix Design Laboratory in accordance with Section 401.05 and submitted to the Contracting Agency in an acceptable format one week prior to use. The DMF shall be based on the mixture type (design ESAL) and mixture designation of the following tables.

Mixture Type	Type A*	Type B*	Type C*
Design ESAL	<300,000	300,000 to <3,000,000	≥3,000,000
AADT (Average Annual Daily Traffic)***	<4,000	4,000 - 15,000	15,000 - 30,000
AADTT (Average Annual Daily Truck Traffic)***	<50	50 - 1700	>1700
Commercial Residential & Application***	Passenger car parking with <500 stalls and <20 heavy	Parking Lots with 20-300 heavy trucks** per day	Heavy commercial parking lots with 150-300 heavy trucks** per day

	<i>trucks** per day, residential driveways</i>		
Mixture Type	Type A*	Type B*	Type C*
Surface			
Nominal Maximum Aggregate Sizes	4.75 mm 9.5 mm 12.5 mm	4.75 mm 9.5 mm 12.5 mm	4.75 mm 9.5 mm 12.5 mm
Recommended PG Binder Grade	64-22	64-22	70-22
Intermediate			
Nominal Maximum Aggregate Sizes	9.5 mm 12.5 mm 19.0 mm 25.0 mm	9.5 mm 12.5 mm 19.0 mm 25.0 mm	9.5 mm 12.5 mm 19.0 mm 25.0 mm
Recommended PG Binder Grade	64-22	64-22	64-22
Base			
Nominal Maximum Aggregate Sizes	19.0 mm 25.0 mm	19.0 mm 25.0 mm	19.0 mm 25.0 mm
Recommended PG Binder Grade	64-22	64-22	64-22

* A higher category mix may be used for a lower category application at no additional cost to the agency.

** Heavy trucks are commercial vehicles with normally 2 axles, six tires or larger.

*** This information is provided as an approximate comparison only.

Asphalt binder grades are recommended in the above table based on mixture type and designation. Adjustments to the binder grades may be required based on the amount of recycled materials used. Guidelines are contained in HMA.08. The plant discharge temperature for any mixture shall not be more than 315°F whenever PG 58-28, PG 64-22, PG 64-28, or PG 70-22 binders are used and not more than 325° F whenever PG 70-28 or PG 76-22 binders are used. HMA mixtures may be produced by using a water injection foaming device or additives as specified and according to the manufactures recommendations.

Volumetric Mix Design

Design Mix Formula (DMF) shall be determined for each mixture from a volumetric mix design by a design laboratory selected from INDOT's list of Approved Mix Design Laboratories. A volumetric mixture shall be designed in accordance with Section 401.05 and AASHTO R 35 with the following tables and exceptions. All loose mixture shall be conditioned for four hours in accordance with AASHTO R 30 prior to testing. Material Adjustment Factor (MAF) shall not apply.

GYRATORY COMPACTION EFFORT					
Mix Type	N _{ini}	N _{des}	N _{max}	Max. % G _{mm} @ N _{ini}	Max. % G _{mm} @ N _{max}
A	6	50	75	91.5	98.0
B	7	75	115	90.5	98.0
C	8	100	160	89.0	98.0

VOIDS FILLED WITH ASPHALT, VFA, CRITERIA @
N_{des}

Type	VFA %
A	70-80
B	65-78
C	65-75

Mix Criteria

HMA wedge and leveling mixtures shall consist of surface or intermediate mixtures in accordance with HMA.04. Aggregate requirements of 904.03(d) do not apply when the wedge and leveling mixture is covered by a surface or intermediate mixture.

Temporary HMA mixtures shall be the type specified in accordance with HMA.04. A MAF in accordance with 402.05 will not apply.

HMA curbing mixes shall be HMA surface type B in accordance with 402 except 402.05 shall not apply and RAP shall not be used. The binder content shall be 7.0% and the gradations shall meet the following:

HMA Curbing Gradations	
Sieve Size	Percent Passing
1/2 in. (12.5 mm)	100.0
3/8 in. (9.5 mm)	80.0 - 100.0
No. 4 (4.75 mm)	73.0 ± 5.0
No. 30 (600 µm)	20.0 - 50.0
No. 200 (75 µm)	6.0 - 12.0

Recycled Material

Recycled Materials shall meet the requirements of Section 401.06.

MAXIMUM BINDER REPLACEMENT PERCENTAGE							
Mix Type	Base and Intermediate				Surface		
	Dense Graded				Dense Graded		
	25.0 mm	19.0 mm	12.5 mm	9.5 mm	12.5 mm	9.5 mm	4.75 mm
A	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*
B	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*
C	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0/40.0*	25.0*	25.0*	25.0*

*Note: The contribution of RAS to any HMA mixture shall be ≤ 3.0% by total mass of mixture and ≤ 15.0% binder replacement.

IMPORTANT NOTE: The above table gives the designer the option to specify a maximum binder replacement of either 25.0% or 40.0% for all dense graded asphalt mixtures, excluding Type C surfaces. In 2016, INDOT revised their specifications to reduce the maximum allowable binder replacement percentage from 40.0% to 25.0% for all dense graded asphalt mixtures. However, higher RAP/RAS mixtures are more sustainable and economical. It is NAPA (National Asphalt Pavement Association) and APAA's positions that higher binder replacement percentages can be utilized without compromising durability and longevity of the asphalt pavement when properly designed. The Departments of Transportation for some surrounding states allow for higher binder replacement percentages than 25.0%. For asphalt projects using this Guide Specification, the Agency/Owner should use proper engineering judgement on a project-by-project basis to select the maximum binder replacement in the table above.

HMA Mixtures with a binder replacement greater than 25.0% and less than or equal to 40.0% by weight of total binder content utilizing RAP or a blend of RAP and RAS shall use a binder grade with the upper and lower temperature classification reduced by 6° C from the specified binder grade as shown below.

Specified Binder Grade for Binder Replacement ≤ 25.0%	Specified Binder Grade for Binder Replacement >25.0% and ≤40.0%
PG 64-22	PG 58-28
PG 70-22	PG 64-28
PG 76-22	PG 70-28

Acceptance of Mixtures

Acceptance will be on the basis of a Type D Certification in accordance with Section 916(d). The HMA Certification shall be the quality control test representing the material and shall include air voids at N_{design} and binder content for material supplied to the project. Type D Certification shall be submitted to the Contracting Agency's representative each day in which material is received.

The Minimum Testing Frequency for Type D Certification.

Base and Intermediate One sample for each 1,000 ton
 Surface One sample for each 600 ton

CONSTRUCTION REQUIREMENTS

General

Shall be in accordance with Section 402.10.

Preparation of Surfaces to be Overlaid

Milling of an existing surface shall be in accordance with Section 306. Surfaces on which a mixture is placed shall be free from objectionable or foreign materials at the time of placement.

PCCP, milled asphalt surfaces and asphalt shall be tacked according to Section 406. Contact surfaces of curbing, gutters, manholes and other structures shall be tacked in accordance with Section 406.

Weather Limitations

HMA courses less than 110 lb/syd are to be placed when the ambient and surface temperatures are 60° F or above. HMA courses equal to or greater than 110 lb/syd but less than 220 lb/syd are to be placed when the ambient and surface temperatures are 45° F or above. HMA courses equal to or greater than 220 lb/syd are to be placed when the ambient and surface temperatures are 32° F or above. Mixture shall not be placed on a frozen subgrade. However, HMA courses may be placed at lower temperatures provided the density of the HMA course is in accordance with Section 402.16 or if approved by the Contracting Agency's representative.

Spreading and Finishing

Shall be in accordance with Section 402.13.

Joints

Shall be in accordance with Section 402.14.

Compaction

The HMA mixture shall be compacted with equipment in accordance with 409.03(d) immediately after the mixture has been spread and finished. A roller application is defined as one pass of the roller over the entire mat. Compaction operations shall be completed in accordance with the following table or by the Low Temperature Compaction Requirements in HMA.16.

NUMBER OF ROLLER APPLICATIONS							
Rollers	Courses < 440 lb/syd					Courses > 440 lb/syd	
	Option 1	Option 2	Option 3	Option 4	Option 5	Option 1	Option 2
Three Wheel	2		4			4	
Pneumatic Tire	2	4				4	
Tandem	2	2	2			4	
Vibratory				6			8
Oscillatory					6		

Rollers shall not cause undue displacement, cracking, or shoving. A reduced number of applications on a course may be approved if detrimental results are being observed.

Low Temperature Compaction Requirements

Shall be in accordance with Section 402.16. Density test reports shall be furnished to the Contracting Agency.

Shoulder Corrugations

Shall be in accordance with Section 402.17.

Pavement Smoothness

Shall be in accordance with Section 402.18.

Method of Measurement

Shall be in accordance with Section 402.19, except the Material Adjustment Factor (MAF) shall not apply.

Basis of Payment

The accepted quantities for this work will be paid for at the contract unit price per ton for HMA of the type and Nominal Maximum Aggregate Size (NMAS) specified, complete in place.

Payment will be made under:

Pay Item	Pay Unit Symbol
HMA Surface Type B.....	TON
HMA Intermediate Type B.....	TON
HMA Base Type B.....	TON

HAND RAIL, PEDESTRIAN

Description

This work shall consist of furnishing and installing pedestrian hand rail as shown on the plans.

The Contractor shall submit working drawings in accordance with 105.02. Drawings shall indicate sizes of members, dimensions and weld connections.

Contractor shall submit manufacturer's technical data, specifications and installation instructions for the pedestrian hand rail.

The Contractor shall field verify the wall for fit with the pedestrian hand rail prior to constructing.

Materials

The Contractor may fabricate the pedestrian hand rail from Galvanized Steel or Aluminum in accordance with 604. All members shall be fabricated from new materials.

All galvanized steel tubes shall be in accordance with ASTM A500, Grade A thru D.

Aluminum Railing materials shall be in accordance with 604.02 as well as the following:

Rails Pickets & Posts: Structural Tube, Pipe and Bar shall be in accordance with ASTM B 221 or ASTM B 429, Alloy 6061-T6 or 6063-T6.

Post Caps: Base Plates and Post Cap plates shall be in accordance with ASTM B 209, Alloy 6061-T6 or 6063-T6.

All pedestrian hand rail members shall be powder coated black, Federal Color Number 37038. The Contractor shall provide a two year warranty against fading, chipping, peeling and cracking and all other failures of the coating not caused by intentional or accidental damage to the rail.

Construction Requirements

The dimensions of the railings as shown on the plans may vary based upon the specifications of the pedestrian hand rail manufacturer. Expansion joints shall be spaced at a maximum of 50 ft. Field splices similar to the expansion joint detail may be approved by the Engineer to facilitate handling, but railing shall be continuous across a minimum of two posts.

The Contractor may propose details which will facilitate fabrication or erection as long as it meets to the geometry criteria set forth in the contract plans and design specifications. If there are deviations from the contract plans that affect the structural members of the rail or if the Contractor chooses to manufacture the railing using Aluminum, the Contractor shall submit design computations stamped and signed by a professional engineer in the Engineer. Connecting materials shall be chosen to ensure there are no adverse chemical reactions. Working drawings shall be in accordance with 105.02.

Posts and End Rails shall be fabricated and installed plumb, ± 1 " tolerance when measured at 4'-0" above the ground. Pickets shall be fabricated parallel to the posts. Corners and changes in tangential longitudinal alignment shall be made continuous or terminate at adjoining section with mitered end sections. For changes in tangential longitudinal alignment greater than 45°, posts shall be positioned at a maximum distance of 2'-6" each side of the corner and shall not be located at the corner apex.

Aluminum Welding shall be in accordance with the American Welding Society Structural Welding Code (Aluminum) ANSI/AWS D1.2 (Current Edition) and 803.

Galvanized steel welds shall be in accordance with 711.32.

The contractor shall weld around and ground smooth all fixed joints. All pickets shall be connected with the 1/8" fillet welds all around. All horizontal rail members shall be connected with 3/16" fillet welds all around.

Final acceptance of the pedestrian hand rail will be based upon visual inspections and check measurements.

Method of Measurement

Pedestrian Hand Rail will be measured by the liner foot installed in accordance with the dimensions shown on the plans or as directed. Measurements will be made from end to end of the railing along the centerline of rail.

Basis of Payment

The accepted quantities of Pedestrian Hand Rail will be paid for at the contract unit price per linear foot, complete in place.

Payment will be made under:

Pay Item	Pay Unit Symbol
Hand Rail, Pedestrian.....	LFT

The costs of furnishing and installing the materials, labor, equipment and all necessary incidentals required to properly install the railing shall be included in the cost of the pay item.

TREE SPECIES

The Contractor shall plant at least two species of trees from the list provided in the plans. The Contractor shall not plant more than three of the same tree species.

MODULAR BLOCK GRAVITY WALL

The Standard Specifications are revised as follows:

SECTION 732, DELETE LINE 45 AS FOLLOWS:

~~The maximum modular block wall unit face area shall be 1 sq ft.~~

SECTION 732, DELETE LINE 401 AS FOLLOWS:

~~Common Excavation will be paid for in accordance with 230.28.~~

SECTION 732, BEGIN LINE 433, INSERT AS FOLLOWS:

The cost of common excavation shall be included in the cost of the pay items in this section.

PLUG EXISTING DRAINAGE PIPES

Description

This work shall consist of plugging existing drainage pipes that are to be abandoned in place.

Materials

Materials shall be Concrete, Class A in accordance with 702.02.

Construction Requirements

Plugging of existing pipes shall be in accordance with 720.05 and as follows:

Pipes designated to be plugged shall be clear of all debris prior to the commencement of the work. Plugging of existing pipes shall occur only after the structure is no longer used for existing drainage or pump-around practices that may be required at the specific location.

Existing pipes which are to be abandoned but shall remain in place at the completion of construction shall have a concrete bulkhead constructed at both the upstream and downstream ends unless otherwise shown on the plans.

The existing pipe shall be removed to a minimum 12 in. below grade before plugging, and shall be accomplished in accordance with the applicable portions of 202. Each concrete bulkhead shall extend 3 ft into the existing pipe and be the full diameter of the existing pipe in order to completely plug the pipe.

Method of Measurement

Plugs for existing pipes will be measured by the number of pipe ends plugged.

Basis of Payment

The accepted quantities of plugs for existing pipes will be paid for at the contract unit price per each, complete in place.

Payment will be made under:

Pay Item	Pay Unit Symbol
Pipe, Plug Existing.....	EACH

Concrete, excavation and pipe removal below grade shall be included in the cost of the pay item.

MAINTENANCE OF TRAFFIC

The Contractor shall provide a construction sequencing and staging plan indicating planned operations for traffic control. The plan shall be provided to the Engineer a minimum of two weeks prior to start of construction.

The cost of preparing the construction sequencing and staging plan shall

be included in the cost of Maintenance of Traffic.

The following conditions shall apply for maintaining traffic:

Full intersection closure will not allowed before May 10th, 2021.

The intersection shall not be closed for more than 60 total calendar days.

Single lane daytime closures will be allowed.

The intersection shall be open to vehicular traffic, open to pedestrian traffic, and the traffic signal fully functioning on or before August 8, 2021.

Full closure of the intersection as shown in the maintenance of traffic plans shall be coordinated with the Engineer and affected property owners a minimum of 2 weeks prior to closure.

Road Closure Advance Notice Signs shall be installed two weeks prior to the closing of a road, listing the date of closure.

Access to property owners shall be maintained at all times in accordance with 107.08.

MAINTAINING PEDESTRIAN ACCESSIBILITY DURING CONSTRUCTION

Pedestrian accessibility shall be maintained during the construction of this project where existing sidewalk and curb ramps exist. The pedestrian access shall be maintained by means of temporary accommodations within the intersection or with pedestrian detours.

Temporary accommodations may include, but not be limited to, the use of temporary curb ramps, temporary construction mats, temporary pavement markings, and temporary pedestrian channelizers. At a minimum the Contractor shall provide similar accommodations to current conditions.

Pedestrian detours shall consist of, but not be limited to, sidewalk closed signs, sidewalk detour signs, and barricades.

Maintaining pedestrian access within the intersection is not required during the full closure of the intersection.

The Engineer shall approve the final layout of the temporary pedestrian accessibility at each location prior to closing the existing sidewalk and ramp.

The cost of maintaining pedestrian access shall be included in the cost of Maintenance of Traffic.

STAGES OF CONSTRUCTION

The proposed traffic signal related work tasks shall be conducted under two stages of Construction, as generally described below:

Stage 1

The purpose of Stage 1 work tasks is to provide power to the existing traffic signal system after Duke Energy removes the existing power pole located in the northwest quadrant, which is where the existing traffic signal is currently being powered from. As a part of their work, Duke Energy will also be installing a new power pole with transformer in the northeast quadrant, generally where shown in the plans. It is assumed this new power pole with transformer that will be installed in the northeast quadrant by Duke Energy is where electrical power will be provided to the existing traffic signal during Stage 1, as well as the proposed traffic signal during Stage 2.

Proposed work tasks to be completed by the signal Contractor during Stage 1 shall consist of installing a new metered electrical signal service on a metal pedestal pole assembly in the northeast quadrant; installing new conduit, power cabling, and a new handhole, where shown in the plans; and modifying the existing traffic signal controller cabinet and foundation located in the northwest quadrant to accommodate new signal service cabling from the new signal service pedestal being installed in the northeast quadrant.

Stage 2

The purpose of Stage 2 work tasks is to install the proposed traffic signal and pedestrian related equipment and materials, as shown in the plans, to accommodate the proposed roadway and pedestrian related improvements along 17th Street and Dunn Street.

Proposed work tasks to be completed by the signal Contractor during Stage 2 shall consist of installing all proposed traffic signal and pedestrian related equipment and materials, as shown in the plans; installing new conduit, power cabling, and providing connection from the new metered electrical signal service pedestal pole assembly to the proposed traffic signal cabinet in the northeast quadrant; and removing all existing traffic signal equipment and materials that will not be utilized in the final installation.

202-T-161 REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

(Adopted 11-30-06)

The following existing traffic signal installations shall be removed. The removal shall be in accordance with 105.03 and shall include the partial removal of existing traffic signal foundations in accordance with 805.03 that are not to be utilized in the finished project.

LOCATIONS

17th Street and Dunn Street

805-T-123 VIDEO VEHICLE DETECTOR SYSTEM

The video vehicle detector system is comprised of CCD video image sensors (cameras) and a machine vision processor as separate units. The system shall be

capable of monitoring vehicles on a roadway via processing of video images and shall provide detector outputs to a traffic signal controller.

The video vehicle detector system shall include a minimum of 4 CCD video image sensors (cameras), the machine vision processor, set-up and operating software, all connectors, *all cables*, and miscellaneous equipment necessary for the installation and operation of the system.

The video vehicle detector system shall be compatible with Econolite traffic signal controllers. The system shall be installed and maintained during all construction phases at each intersection. The Contractor shall be required to adjust the detection zones as necessary for each phase of construction.

A 10 year operational warranty or standard manufacturer's warranty, whichever is longer, shall be provided for each Machine Vision Processor.

A 5 year operational warranty or standard manufacturer's warranty, whichever is longer, shall be provided for each CCD Video Image Sensor.

The effective date for the beginning of the warranty shall be the traffic signal turn-on date as noted on Traffic Signal Completion Report Form (IC 636A). A written copy of the warranty shall be presented to the Engineer prior to final acceptance of the contract.

The warranty shall service all defects in material or workmanship of the equipment. The manufacturer shall not be responsible for damage caused by negligence, severe weather acts such as lightning, flood, etc., or use of the equipment in a manner not originally intended. Temperatures between -30°F and +165°F will not be considered severe weather acts. The vendor or manufacturer shall be responsible, during the warranty period, for transportation costs of items requiring warranty service to and from the Operations Support Division, Highway Support Section. A maximum turn-around time for service of all defects in material and workmanship of equipment shall be no longer than 60 calendar days. Continued failure, repeated malfunctions, or exceeding the maximum turn-around time for warranty service will be cause to remove that model from the Department's list of approved models.

The system will be measured and paid for at the contract unit price per each for video vehicle detector system, complete in place.

The CCD video image sensors (cameras), machine vision processor, set-up and operating software, all connectors, *all cables*, miscellaneous equipment necessary for the installation and operation of the system, and the warranty shall be included in the cost of the video vehicle detector system. *The cost of detection zone adjustments during construction shall be included in the cost of the video vehicle detector system.*

~~The coaxial lead in cable and the mounting structure~~ will be measured in accordance with 805.15 and paid for in accordance with 805.16.

Payment will be made under:

Pay Item	Pay Unit Symbol
Video Vehicle Detection System.....	EACH

SIGNAL CANTILEVER STRUCTURE, SPREAD FOOTING FOUNDATION, C

The proposed traffic signal cantilever foundations shall be constructed in accordance with INDOT Standard Drawing E-805-TSCS-18, with the following exceptions:

- (1) The proposed anchor bolt sizing and bolt circle patterns shall be based upon the example traffic structures related shop drawings that have been prepared by Techlite Corporation. A copy of the current example shop drawings for the proposed traffic structures have been included in these bid documents.

The signal Contractor shall coordinate with Techlite Corporation to confirm the accuracy of the example traffic structures shop drawing information, and obtain updated drawings and/or specifications, if necessary, prior any work activities related to construction of the proposed traffic signal cantilever foundations taking place.

Below is contact information for Techlite Corporation:

Mr. Steve Bates
Vice President of Sales
Techlite Corporation
7718 Loma Court
Fishers, IN 46038
317-578-2626 (o)
317-506-0706 (c)
317-578-2727 (f)
steveb@techlitecorp.com

The cost of all material, manufacturing, transportation, labor, equipment, and all necessary incidentals to perform this work shall be included in the cost of the following pay item:

Pay Item	Pay Unit Symbol
Signal Cantilever Structure, Spread Footing, Foundation, C.....	EACH

ACCESSIBLE PEDESTRAIN SIGNAL (APS) UNITS

Description

Accessible Pedestrian Signal (APS) units with pushbuttons with built-in signage (R10-3EL or R10-3ER, depending upon crossing orientation for proposed pushbutton) will be required at all intersections where pedestrian pushbutton locations are shown on the plans, and shall meet the requirements of the current editions for the Manual on Uniform Traffic Control Devices (MUTCD) and Public Rights-of-Way Accessibility Guidelines (PROWAG). All APS units shall be similar to Polara® iNavigator, or approved equivalent.

Equipment

APS Unit Housing

All APS unit components shall be weatherproof and of sturdy design, and in complete accordance with manufacturer specifications. The entire assembly shall be weather tight, secure against electrical shock, and able to withstand continuous frequent usage.

Color

Each APS unit housing shall be black, and mounting hardware/brackets shall be painted black to match the traffic signal pedestal poles.

Extension Brackets

Each APS unit shall be located with a 10 in. side reach from a level (i.e., maximum 2% slopes in all directions) landing area. Where pole placement is limited, a 6 in. or 12 in. pushbutton assembly extension may be used to meet the side reach requirements.

Walk Indications

Each APS unit shall have both audible and vibrotactile walk indications.

Vibrotactile

Vibrotactile walk indications shall be provided by a tactile arrow on the pushbutton that vibrates during the walk interval. Tactile arrow shall be located on the pushbutton that vibrates during the walk interval. Tactile arrow shall be located on the pushbutton, have high visual contrast (light on dark or dark on light), and shall be aligned parallel to the direction of travel on the associated crosswalk.

Performance Requirements**Audible Features**

Each APS unit shall be equipped with an audible locator tone that tells the pedestrian that the intersection is equipped with APS and where it is. Pushbutton locator tones shall have duration of 0.15 seconds or less, and shall repeat at 1-second intervals. Pushbutton locator tones shall be intensity responsive to ambient sound, and be audible 6 to 12 feet from the pushbutton, or to the building line. The locator tone shall operate during the DON'T WALK and flashing DON'T WALK intervals only and shall be deactivated when the pedestrian signal is not operative.

Per MUTCD requirements, where two accessible pedestrian pushbuttons are separated by at least 10 ft., the walk indication shall be an audible percussive tone. Based on the current layout of the proposed traffic signal equipment, all APS units within each quadrant shall provide audible percussive tones for the pedestrian walk intervals. The audible percussive tones shall repeat at a rate of at least 8 to 10 ticks per second with a dominant frequency of 880 Hz.

See Recurring Special Provision 805-T-202 ("Accessible Pedestrian Signals with Speech Walk Messages") for further information.

Should it be necessary to modify the locations of the proposed APS units due to unforeseen circumstances (e.g., underground utility conflicts), thereby causing them to be located less than 10 ft. apart, or on the same pole, the signal Contractor shall notify the City immediately and ensure that APS units with audible verbal speech walk messages be implemented. In the event that APS units with audible verbal speech walk messages are implemented, the signal Contractor shall ensure that each APS unit's verbal wait messages and verbal walk messages are programmed using correct street name information for each applicable crossing, and in complete compliance with MUTCD requirements.

Volume

Automatic volume adjustment in response to ambient traffic sound level will be provided up to a maximum volume of 100 dB. The units shall be responsive to ambient noise level changes up to no more than 5 dB louder than ambient sound. Tone or voice volume measured at 36 inches from the unit shall be 2dB minimum and 5dB maximum above ambient noise level. At installation, signal system is to be adjusted to be audible at no more than 5 to 12 feet from the system.

Documentation and Support

Two copies of the operation and maintenance manuals for each station shall be included. The City shall be furnished with a certification from the equipment manufacturer stating that the equipment furnished under this specification complies with all provisions of this specification. If there are any items that do not comply with this specification, then a list of those exceptions must be detailed on the certification.

Construction Requirements

Construction requirements shall conform to the traffic signal design plans, INDOT Standard Drawings E 604-SWCR for sidewalk curb ramps, as well as INDOT Design Memorandum No. 18-26 for pedestrian pushbutton and ADA plan details.

As shown in the traffic signal design plans, one APS unit shall be attached to each of the proposed signal pedestal poles. The pushbutton device of each APS unit shall be mounted between 42 in. and 48 in. above the adjacent pedestrian path, and be accessible within a maximum unobstructed side-reach distance of 10 in. from a level landing area (i.e., maximum 2% slopes in all directions). If the 10 in. side-reach distance from a level landing area cannot be met, a 6 in. or 12 in. pushbutton assembly extension may be used to meet the side reach. There will be no direct payment for installing an APS extension bracket.

Based on the current layout of the proposed traffic signal equipment, pushbutton assembly extensions will be required for APS units in the northwest and southeast quadrants of the 17th Street and Dunn Street intersection.

The signal Contractor shall be responsible for programming each APS unit to the satisfaction of the City and the Engineer.

The City reserves the right to modify any and all volume settings based upon field conditions, within specified limitations outlined in the MUTCD and PROWAG. During the programming and installation of the proposed APS units, the signal Contractor shall ensure that a representative of the City is present to approve the volume settings of each APS unit.

Payment will be made under:

Pay Item	Pay Unit Symbol
Pedestrian Push Button, APS.....	EACH

PHOTOCELL

The Standard Specifications are revised as follows:

SECTION 807, AFTER LINE 693, INSERT AS FOLLOWS:

Photo cell shall be twist lock type; button control will not be accepted. Shall meet or exceed ANSI C136.10-2006 except as modified herein. Turn-on shall be instantaneous and set at 1.56 0.5 ftc. Turn-off shall be a 2-5 second delay and set at 1.5 times greater than the turn-on light level. Failure mode shall be Fail-On. Photosensitive device shall be a sealed silicon sensor. The housing cover shall be high impact, opaque, and constructed of UV resistant material. The housing shall be clearly and permanently marked with the month and year of installation, serial number, voltage range, and loading rating. Photo cell shall be UL listed and be provided with a four year warranty.

Photosensitive device shall be mounted to face north unless site conditions or manufacturers recommendations dictate otherwise.

Payment will be made under:

Pay Item	Pay Unit Symbol
Photocells.....	EACH

TRAFFIC SIGNAL CONTROL EQUIPMENT

The Standard Specifications are revised as follows:

SECTION 922, BEGIN LINE 9, INSERT AS FOLLOWS:

Models shall be Econolite Cobalt TS2 selected from the Department's list of approved Traffic Signal and ITS Control Equipment, unless otherwise specified.

TRAFFIC SIGNAL CONTROLLER PROGRAMMING AND TIMING IMPLEMENTATION

This work shall consist of performing all traffic signal controller programming and timing implementation services relative to the proposed traffic signal controller.

The City of Bloomington will develop the proposed traffic signal timing plan data, and then provide said traffic signal timing plan data to the Contractor for implementation. The Contractor will then be responsible for all field programming and implementation services related to the proposed traffic signal controller.

The cost of all material, transportation, labor, equipment, and all necessary incidentals to perform this work shall not be paid for directly, but rather included in the cost of the Controller.

UNINTERRUPTIBLE POWER SUPPLY

The power supply unit shall be capable of handling surges and spikes present in normal utility power. Battery backup of up to 12 hours should be provided for power outages. The power supply unit shall have remote monitoring capabilities. The power supply unit and battery backup shall be housed in a

separate cabinet mounted to the side of the traffic signal cabinet. An automatic transfer switch shall be included.

All equipment shall be compatible with the Econolite Cobalt TS2 controller. The cost of any additional equipment or labor to install this equipment shall be included in the cost of the following pay item:

Pay Item	Pay Unit Symbol
Controller and Cabinet, P1, w/ UPS Attached to Cabinet.....	EACH

SIGNAL PEDESTAL FINISHING

All signal pedestal poles on the project shall be painted black. The paint application process shall be in accordance with 909, the applicable portions of 805.04, and per manufacturer recommendations.

The cost of all material, manufacturing, transportation, packaging, labor, equipment, and all necessary incidentals to perform this work shall be included in the cost of the signal pole pedestal listed below, in accordance with 805.

Payment will be made under:

Pay Item	Pay Unit Symbol
Signal Pole, Pedestal, 4 FT., Painted Black.....	EACH

SIGNAL POLE POWDER COATING

All traffic signal cantilever arms, signal poles, luminaire arms, and mounting brackets shall be hot-dip galvanized both inside and outside, then powder coated black. This work shall not be measured for payment.

The cost of all material, manufacturing, transportation, packaging, labor, equipment, and all necessary incidentals to perform this work shall be included in the cost of the pay item listed below:

Pay Item	Pay Unit Symbol
Signal Cantilever Structure, Single Arm, Combination Arm 35 ft., w/ 15 ft. Luminaire Arm, 35 FT EMH.....	EACH

SIGNAL CANTILEVER STRUCTURE, COMBINATION ARM 35 FT.,
W/ 15 FT. LUMINAIRE ARM, 35 FT EMH

Description

This work shall consist of installing the proposed combination arm signal cantilever structure assemblies at locations shown in the plans. Each combination arm signal cantilever structure assembly includes the signal pole,

anchor bolts, 35 ft. signal cantilever arm, all necessary signal mounting brackets/hardware, 15 ft. luminaire bracket arm, and luminaire. This work shall be performed in accordance with 805 and 807.

Materials

Materials shall be in accordance with 805.02 and 807.02, as well as INDOT Standard Drawing E-805-TSCS-14, with the following exceptions:

- (1) The proposed combination arm signal cantilever assembly shall be based upon the example traffic structures related shop drawings that have been prepared by Techlite Corporation. A copy of the current example shop drawings for the proposed traffic structures have been included in these bid documents.

The signal Contractor shall coordinate with Techlite Corporation to confirm the accuracy of the example combination arm signal cantilever assembly shop drawing information, and obtain updated drawings and/or specifications, if necessary, prior any work activities related to ordering or installation of the proposed combination arm signal cantilever assemblies takes place.

Below is contact information for Techlite Corporation:

Mr. Steve Bates
Vice President of Sales
Techlite Corporation
7718 Loma Court
Fishers, IN 46038
317-578-2626 (o)
317-506-0706 (c)
317-578-2727 (f)
steveb@techlitecorp.com

- (2) Luminaires shall be GE Evolve ERLH013C340DBLCK, or approved equivalent.

Construction Requirements

Construction and installation requirements of combination arm signal cantilever assemblies shall be in accordance with 805 and 807.

- (1) The Contractor is advised of the potential that the 15 FT luminaire arms in the northeast and southeast quadrants may not be able to be installed as a part of this project, due to an upcoming Duke Energy Transmission project that could pose overhead conflicts with these luminaire arms at the present time. The City requests that the signal Contractor procure the proposed luminaire arms as a part of this project, but tentatively plan to defer installation of the northeast and southeast luminaire arms until the aforementioned Duke Energy Transmission project is completed.
- (2) The Contractor is advised that the 1c/10 power cable quantities relative to the northeast and southeast luminaires have been included in the summary of quantities presented in the bidding documents. The 1c/10 luminaire power cable quantities were included under the assumption that the signal Contractor would install the 1c/10 luminaire power cables, along with all other necessary signal related cabling, within the proposed conduit segments to the respective cantilever mast arm foundations as shown in the plans. The 1c/10 power cables relative

to the proposed northeast and southeast cantilever mast arm foundations, where the proposed luminaire arms may not be able to be installed as a part of this project, could then be coiled within the adjacent handholes until such time that the luminaire arms are installed; at which time the 1c/10 power cables could be connected to the respective luminaire arms.

Payment will be made under:

Pay Item	Pay Unit Symbol
Signal Cantilever Structure, Single Arm, Combination Arm 35 ft., w/ 15 ft. Luminaire Arm, 35 FT EMH.....	EACH

SIGNAL SERVICE

This work shall consist of providing a new metered electrical signal service assembly, which shall be mounted to a metal pedestal pole structure, at the location shown in the plans. This work shall be performed in accordance with 805 and 807.

As shown in the plans, the proposed signal service on metal pedestal pole assembly shall be utilized to provide power to the existing traffic signal system during Stage 1, as well as provide power to the proposed traffic signal system during Stage 2.

The signal Contractor shall contact Duke Energy prior to installation of the proposed signal service assembly, as well as any work tasks associated with transferring power from the existing traffic signal system to the proposed traffic signal system, so as to ensure proper coordination and timing of all proposed work.

Below is contact information for Duke Energy:

Mr. Presley Page
 Engineering Technologist III / Distribution Design Engineer
 Duke Energy
 1100 West 2nd Street
 Bloomington, Indiana 47403
Presley.Page@Duke-Energy.com
 (812) 337 3038 office
 (812) 320 4561 cell

The cost of all material, transportation, labor, equipment, and all necessary incidentals to perform this work, and to ensure a fully functional signal service throughout the entire course of construction, to the satisfaction of the Engineer, shall be included in the cost of the following pay item:

Pay Item	Pay Unit Symbol
Signal Service.....	EACH

The cost of proposed 2-IN conduit segments and 3c/8 power cabling between the proposed metered electrical signal service assembly and existing and/or proposed traffic signal controller cabinets shall be paid for separately, and therefore is not included within this "Signal Service" special provision.

MODIFY EXISTING SIGNAL CABINET AND FOUNDATION, P1

This work shall consist of completing all necessary interior and exterior modifications to the existing traffic signal controller cabinet and foundation (currently located in the northwest quadrant) to accommodate new signal service cabling and conduits from the new metered electrical signal service assembly (which will be located in the northeast quadrant) during Stage 1 construction activities. This work shall be performed in accordance with 805 and 807.

As shown in the plans, it appears interior and exterior modifications to the existing traffic signal controller cabinet and foundation will be required to accommodate new signal service cabling and conduits from the new metered electrical signal service assembly. This is due to the fact that there is currently no handhole immediately adjacent to the existing traffic signal controller cabinet, and therefore no apparent access point for direct interior connection to the inside of the traffic signal cabinet from outside the cabinet foundation.

Consequently, in order to complete this work, it appears the signal Contractor will be required to:

- (1) Intercept the proposed 2-IN underground conduit, originating from the new metered electrical signal service pedestal assembly in the northeast quadrant, near the base of the existing traffic signal cabinet foundation with a 90-degree RMC coupling.
- (2) From the new RMC coupling, install 2-IN conduit up and along the exterior of the existing traffic signal foundation to a point on the existing traffic signal cabinet deemed most logical by the signal Contractor to drill an access hole into the side of the signal cabinet;
- (3) Drill an access hole into the side of the existing traffic signal cabinet;
- (4) Attach a 90-degree RMC coupling to the 2-IN conduit installed along the exterior of the traffic signal cabinet foundation, and angled toward the interior of the cabinet;
- (5) Install water proof gasket and/or other sealing device between the 90-degree coupling and exterior and interior sides of the traffic signal cabinet, to ensure no water can penetrate into the existing signal cabinet;
- (6) Install 3c/8 power cables within the newly installed 2-IN conduit along the exterior side of the existing traffic signal cabinet foundation and into the signal cabinet;
- (7) Perform all necessary cabinet wiring modifications to ensure the existing traffic signal remains operational throughout the course of Stage 1 construction activities.

The cost of all material, labor, equipment, and all necessary incidentals to perform this work, and to ensure the existing traffic signal

remains fully operations throughout the course of Stage 1, to the satisfaction of the Engineer, shall be included in the cost of the following pay item:

Pay Item	Pay Unit Symbol
Modify Existing Signal Cabinet and Foundation, P1.....	LS

The cost of proposed 2-IN conduit segments and 3c/8 power cabling between the proposed metered electrical signal service assembly and existing and/or proposed traffic signal controller cabinets shall be paid for separately, and therefore is not included within this "Modify Existing Signal Cabinet and Foundation, P1" special provision.

AI-500-085-02 SERIES GLANCE PRE-EMPT & PRIORITY VIDEO
FIELD MONITORING UNIT (FMU2) SYSTEM

This work shall consist of installing and ensuring full functionality of a new complete Applied Information (AI) Field Monitoring Unit (FMU2) system. The AI-500-085 Glance Pre-empt & Priority Video FMU2 system shall provide cellular remote access to Ethernet traffic signal controller, priority & preemption, video streaming, as well as capability of monitoring traffic an intersection's status and health.

The unit shall include a built-in high speed Cellular, GPS and 900MHz radio for easy to configure and simple set up.

The 19-inch rack mounted device shall be capable of remotely switching NEMA 5-15 power outlets inside the ITS cabinets, and designed for extreme temperature applications.

The FMU2 shall include a built in 4-port Ethernet switch, Cellular Modem, GPS and 900MHz radio.

All units shall come with multiple digital and analog I/O as well as eight (8) relay contacts to send pre-emption commands to the traffic signal controller.

The FMU2 shall be capable of Connected Vehicle operations and sending priority requests directly to the traffic controller using ethernet communications.

The FMU2 shall work in conjunction with the Glance Platform, providing connectivity to the cloud-based Glance solution.

The FMU2 shall include connectivity and support through December 31st of the following year of installation.

The signal Contractor shall coordinate with Traffic Control Corporation prior to the procurement of the proposed AI FMU2 system to ensure all necessary equipment, materials, installation, programming, connectivity requirements are understood and included in the AI FMU2 system bid item.

Below is contact information for Traffic Control Corporation:

Ms. Anne Maloberti
Outside Sales Representative - Indiana
Traffic Control Corporation
10435 Argonne Woods Drive
Woodridge, IL 60517
317-414-1797 (c)
amaloberti@trafficcontrolcorp.com

The cost of all material, transportation, labor, equipment, and all necessary incidentals to perform this work, and to ensure a fully functional AI FMU2 system to the satisfaction of the Engineer, shall be included in the cost of the following pay item:

Pay Item	Pay Unit Symbol
AI-500-085-02 Series Glance Pre-empt & Priority Field Monitoring Unit (FMU2)System.....	EACH

100-C-166 AS-BUILT TRAFFIC SIGNAL PLANS

(Revised 08-15-07)

The Contractor shall prepare two sets of as-built plans for the traffic signal portion of the contract. The as-built traffic signal plans shall be submitted to the Engineer no later than the date the signal is placed into operation.

Traffic signal as-built plans shall include a copy of the project title sheet and the plan sheets that show the traffic signal related work. The plans shall indicate the as-built location of steel strain poles, signal cantilevers, electrical service, signal controller, loop detectors, conduit runs, and traffic signal handholes.

The cost of as-built traffic signal plans shall be included in the cost of the traffic signal items.

100-C-188 STANDARD SPECIFICATIONS

(Revised 05-02-19)

Wherever in the contract documents the 2010, 2012, 2014, 2016, or 2018 Standard Specifications are referenced, it shall be interpreted to mean the 2020 Standard Specifications.

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL
RIGHT-OF-WAY, AND ENCROACHMENTS

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 767, INSERT AS FOLLOWS:

107.26 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments

Such existing conditions are as described below.

(a) Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as known at the time this contract was prepared.

The facilities of AT&T exist within the project limits. The utility will be able to complete its involvement with the contract when Duke Distribution has completed their relocation work. It is anticipated that the utility will take approximately 20 calendar days to adjust its facilities in such area. If questions arise, Russell Owen of the utility may be contacted at 812-606-2973.

The facilities of Comcast exist within the project limits. The utility will be able to complete its involvement with the contract when Duke Distribution has completed their relocation work. It is anticipated that the utility will take approximately 14 calendar days to adjust its facilities in such area. If questions arise, Rhonda Dalton of the utility may be contacted at 317-275-6350.

The facilities of City of Bloomington Utilities exist within the project limits. The utility will be able to complete its involvement with the contract when the back of curb and walk at approx. Sta. 15+79 Line "S-1-B" Lt has been staked. It is anticipated that the utility will take approximately 17 calendar days to adjust its facilities in such area. See special provisions for special considerations. If questions arise, Jane Fleig of the utility may be contacted at 812-349-3660.

The facilities of Duke Energy Distribution exist within the project limits. The utility will be able to complete its involvement with the contract when the Contractor has completed staking and clearing the R/W in the location of the distribution work such that the utility may adjust its facilities. It is anticipated that the utility will take approximately 90 calendar days to adjust its facilities in such area if the intersection is closed. but are not expected to be affected by the proposed construction. If questions arise, Chris Yax of the utility may be contacted at 989-213-6847.

The facilities of Indiana University Utilities exist within the project limits but are not expected to be affected by the proposed construction. If questions arise, Mark Menefee of the utility may be contacted at 812-855-7248.

The facilities of Smithville Fiber exist within the project limits. The utility will be able to complete its involvement with the contract when Duke Distribution has completed their

relocation work. It is anticipated that the utility will take approximately 18 calendar days to adjust its facilities in such area. If questions arise, Joe Bryniarski of the utility may be contacted at 812-320-9317.

The facilities of Vectren Gas Distribution exist within the project limits. The utility will be able to complete its involvement with the contract when the Contractor has completed staking the R/W and construction staking at the proposed drainage structures in the location of the distribution work such that the utility may adjust its facilities. It is anticipated that the utility will take approximately 7 calendar days to adjust its facilities in such area if the intersection is closed. If questions arise, Shawn Williams of the utility may be contacted at 317-790-8475.

The facilities of Zayo Bandwidth exist within the project limits. The utility will be able to complete its involvement with the contract when Duke Distribution has completed their relocation work. It is anticipated that the utility will take approximately 21 calendar days to adjust its facilities in such area. If questions arise, Waylon Higgins of the utility may be contacted at 765-341-1199.

(b) Right-of-Way

All additional right-of-way requirements for the contract have been cleared.

(c) Encroachments

There is no involvement of encroachments for the contract.

(d) Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the prosecution and progress of the contract.

(e) Preconstruction Conference Notification

The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.26(a) through 107.26(d) above. Otherwise, notification shall be provided as required in 105.06. Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 105 IAC 11-3-7.

108-C-093 FAILURE TO COMPLETE ON TIME FOR ROAD CLOSURE

(Revised 09-19-19)

The Standard Specifications are revised as follows:

SECTION 108, AFTER LINE 590, INSERT AS FOLLOWS:

The work specified shall be arranged and prosecuted such that 17th & Dunn Intersection is closed to traffic for not longer than 60 total calendar days as shown on the Proposal sheet. The road shall not be closed before May 10th, 2021.

If the necessary work is not completed and 17th & Dunn Intersection is not reopened to traffic within 60 total calendar days for closure, \$2,500 will be assessed as liquidated damages, not as a penalty, but as damages sustained for each calendar day for which 17th & Dunn Intersection remains closed to traffic in excess of 60 calendar days.

Extension of contract time, if required, shall be in accordance with 108.08.

108-C-095 FAILURE TO COMPLETE ON TIME FOR CALENDAR COMPLETION DATE

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 108, DELETE LINES 580 THROUGH 582.

SECTION 108, AFTER LINE 582, INSERT AS FOLLOWS:

If the contract is not completed on or before the contract completion date of August 8th, 2021, \$1,000 will be assessed as liquidated damages, not as a penalty, but as damages sustained, for each calendar day that the contract is not complete.

Extension of contract time, if required, shall be in accordance with 108.08.

200-R-401 RECYCLED FOUNDRY SAND

*(Revised 06-18-15)***Description**

Recycled foundry sand, RFS, consists of a mixture of residual materials used from ferrous or non-ferrous metal castings and natural sands. The Contractor shall have the option of incorporating RFS into applicable operations in accordance with 105.03.

Materials

RFS sources are to be selected from the Department's list of approved Foundry Sand Sources. RFS may be substituted for B borrow or Borrow upon the approval of the Office of Geotechnical Services.

The Contractor shall provide a copy of the Indiana Department of Environmental Management's, IDEM, waste classification certification for Type III or IV residual sands prior to use. The IDEM certification shall clearly identify the stockpiles with regard to their extent and geographical location.

The Contractor shall provide the Engineer with a type A certification in accordance with 916 for RFS prior to use of the materials. The type A certification shall consist of applicable laboratory tests results of gradation. Consultants on the Department's list of approved Geotechnical Consultants shall perform the testing of RFS materials.

RFS use is restricted to the following additional requirements:

1. RFS derived from Type III residual sand shall not be allowed within 100 ft, horizontally, of a stream, river, lake, reservoir, wetland or any other protected environmental resource area.
2. RFS derived from Type III or Type IV residual sand shall not be placed within 150 ft, horizontally, of a well, spring, or other ground source of potable water.
3. RFS shall not be allowed adjacent to metallic pipes, or other metallic structures.
4. RFS shall not be used as encasement material.
5. RFS shall not be used in MSE wall applications.
6. RFS placement shall be at least 2 ft above ground water elevation.

If RFS is used in embankment, excavation and replacement operations as a replacement for B borrow or borrow, the following additional restrictions will be required.

1. Borrow: RFS shall be in accordance with 203.
2. B borrow: RFS shall be in accordance with 211.

Construction Requirements

RFS shall be transported in a manner that prevents the release of fugitive dust and loss of material. Adequate measures shall be taken during construction operations to control fugitive dust from RFS. RFS shall not be applied when wind conditions result in problems in adjacent areas or result in a hazard to traffic on any adjacent roadway. The spreading of RFS shall be limited to an amount that shall be encased within the same workday. If weather causes stoppage of work

or exposes the RFS to washing or blowing, additional RFS may be spread when the work resumes. Spraying with water, limewater, or other sealing type sprays will be considered to be acceptable methods for dust control.

When RFS is used as borrow or B borrow, the lift thickness and compaction of the materials shall be in accordance with 203.23. The dynamic cone penetrometer, DCP, criteria will be determined by a test section in accordance with ITM 514. The DCP testing will be performed in accordance with ITM 509. The moisture content shall be controlled in accordance with 203.23. The test section shall be constructed in the presence of a representative of the Office of Geotechnical Services. When RFS is used as B borrow, the DCP criteria for the granular soils shall be used in accordance with 203.23. Nuclear density testing of RFS will not be allowed.

When RFS is used in embankment construction, the sideslopes of the RFS shall be encased with 1.5 ft of non-RFS borrow materials. All RFS shall be encased with a minimum of 1 ft of non-RFS borrow materials prior to the completion of construction operations in a calendar year. The encasement materials shall be placed and compacted concurrently with the RFS lifts. Encasement materials not meeting the AASHTO M 145 Classifications of A-6 and A-7 shall be submitted to the Office of Geotechnical Services for approvals.

Method of Measurement

RFS applications will be measured in accordance to the respective uses for borrow or B borrow.

Basis of Payment

RFS will be paid for at the contract unit price in accordance with the respective uses for borrow or B borrow.

No payment will be made for the transportation, handling, or any special construction requirements such as alternative compaction means or encasement activities, when using RFS materials.

The cost of the use of water, limewater, sprays, or other activities necessary for dust control, shall be included in the cost of the respective pay item.

The cost of geotechnical testing for the use of RFS materials shall be included in the cost of the respective pay item.

RECYCLED FOUNDRY SAND SOURCE APPROVAL CRITERIA

The following procedures covers the requirements for Foundry Sand source approvals or otherwise prescribed subject matter to be added, maintained and removed from a Department's approved list.

The procedures for approval may involve hazardous materials, operations, and equipment. These procedures do not purport to address all of the safety problems associated with the use of the product. The source's responsibility is to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

General Requirements

1. A source, requesting approval for addition to the Department's list, shall provide to the Office of Materials Management the following:

- (a) Name and location of source or manufacturer,
- (b) List of material and specification reference for the material that the approval is being requested,
- (c) Average monthly production of the material by size, type or grade,
- (d) Name, address, and telephone number of responsible contact person,
- (e) Facility layout or production process of the material,
- (f) Quality parameters of the material,
- (g) Raw material sampling and testing frequency,
- (h) Procedures for conforming materials which provides a positive linkage between the furnished materials and the quality control test data,
- (i) Procedures for non-conforming materials,
- (j) Procedures for marking and tracking materials,
- (k) Procedures for documentation maintenance,
- (l) Finished material sampling and testing frequency,
- (m) Procedures for reviewing and updating the source operations,
- (n) Testing laboratory quality system,
- (o) Names, titles and qualifications of sampling and testing personnel,
- (p) Location and telephone number of the laboratory testing office,
- (q) Sample management describing procedures for samples identification, maintenance of the samples prior to testing, sample retention and disposal of samples,
- (r) Testing report procedures,
- (s) Methods used to identify improper test results and procedures followed when testing deficiencies occur,
- (t) Statistical analysis of test results, and
- (u) Maintenance of test records

The application shall be signed and dated by the source's or manufacturer's representative at the time the application is submitted for acceptance. The application shall be maintained to reflect the current status and revisions shall be provided to the Department in writing.

2. Testing may be required which will be performed outside the Department's laboratories. A recognized laboratory shall be the following:

- (a) A State transportation agency testing laboratory,
- (b) A testing laboratory regularly inspected by the AMRL, or
- (c) A testing facility approved by the Department.

Approval Requirements

In addition to the general requirements, the source shall also submit the following to the Office of Materials Management.

- (a) Name of Testing Facility
- (b) Dates samples were obtained
- (c) Dates samples were tested

Attachment A

RECYCLED FOUNDRY SAND (RFS) SOURCE CERTIFICATION

This is to certify recycled foundry sand (RFS) stockpiles geographically located as follows:

RFS _____

RFS was produced by the _____ Company located in _____ (City), and _____ (State) and was shipped for use on Indiana Department of Transportation projects is Type _____ (III or IV) material according to the IDEM's restricted waste criteria. If any metal concentration exceeds 80% of the allowable limits for a Type III material the foundry shall provide the Department with an acceptable indemnification clause. The _____ RFS source also agree that processes and stockpiles associated with the production of such RFS may be inspected and sampled at regular intervals by properly identified representatives of the Department or a duly assigned representative.

_____ (Date of Signing) _____ (RFS Producer)

_____ (Title)

_____ (Signature)

State of _____ SS: County of _____

Subscribed and sworn to before me by _____

of the firm of _____ this _____ day of _____ 20__

_____ Notary Public

My Commission Expires: _____

This certification has been reviewed and approved by:

(INDOT Representative) Date

Attachment B

RECYCLED FOUNDRY SAND (RFS) INDEMNIFICATION CLAUSE

_____ RFS producer shall indemnify, defend, exculpate, and hold harmless the State of Indiana, its officials, and employees from any liability of the State of Indiana for loss, damage, injury, or other casualty of whatever kind or to whomever caused, arising out of or resulting from a violation of the federal or Indiana Occupational Safety and Health Acts (OSHA), the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or any other environmental law, regulation, ordinance, order or decree (collectively referred to hereinafter as "Environmental Laws"), as a result of the supply, testing, and

application of residual sand or other materials supplied under this Contract by _____ source, whether due in whole or in part of the negligent acts or omissions of: (1) _____ Foundry, its agents, officers, or employees, or other persons engaged in the performance of the contract; or (2) the joint negligence of them and the State Of Indiana, its officials, agents, or employees.

This contract shall include, but not be limited to, indemnification from: (1) any environmental contamination liability due to the supply, testing, and application of residual sand in road base, embankments, or other projects designated by the Department as agreed to by the parties, and (2) any liability for the clean up or removal of residual sand, or materials incorporating such sand, pursuant to any Environmental Law.

The RFS producer also agrees to defend any such action on behalf of the State of Indiana, to pay all reasonable expenses and attorneys fees for such defense, and shall have the right to settle all such claims. Provided, however, that no liability shall arise for any such fees or expenses incurred prior to the time that _____ Foundry shall have first received actual and timely written notice of any claim against the State which is covered by this Indemnification Agreement. If timely written notice of any claim hereunder is not received by _____ Foundry, and _____ Foundry is thereby prejudiced in its ability to defend or indemnify, then to the extent of such prejudice, this Indemnification Agreement shall be void.

This Indemnification Agreement does not create any rights in any third party, and is solely for the benefit of the State of Indiana and its agents, officials, and employees.

201-C-052 INITIAL PAYMENT FOR CLEARING RIGHT-OF-WAY

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 201, AFTER LINE 147, INSERT AS FOLLOWS:

The initial payment for clearing right-of-way will be limited to 1% of the original total bid. If the contract lump sum price for clearing right-of-way is greater than 1% of the original total bid, the amount over 1% will be paid when the contract work is 50% complete, or when the clearing work is complete, whichever is later.

202-R-705 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

(Adopted 10-17-19)

The Standard Specifications are revised as follows:

SECTION 202, BEGIN LINE 92, INSERT AS FOLLOWS:

202.03 Removal of Bridges, Culverts, and Other Drainage Structures

Bridges, culverts, and other drainage structures in use by traffic shall not be removed in whole or in part until satisfactory arrangements have been made to accommodate traffic. Any excavation adjacent to the structure or to its approaches shall be shored adequately to avoid damage to them or to traffic.

When a reinforced concrete arch bridge is to be removed, either in whole or in part, the work shall include the removal of miscellaneous items within the limits of the structure, which must be removed prior to or in conjunction with the removal of the structure. These miscellaneous items shall include but shall not be limited to: concrete and asphalt pavements; concrete and asphalt sidewalks; and fill within the arches regardless of content.

For all painted or coated structural steel including beams, girders, diaphragms, cross frames, plates, and all other structural steel items that become the property of the Contractor through either a complete bridge removal in accordance with 202.03(a) or the removal of portions of a bridge in accordance with 202.03(b), the Contractor shall either:

- 1. take the steel to a recycling facility for proper disposal, or*
- 2. take ownership of the steel.*

For structures shown in the contract documents as being built before 1995, the Contractor shall assume that the existing coating contains hazardous materials and that mill scale exists on the steel.

If the Contractor elects to take the steel to a recycling facility, a receipt from the facility shall be provided. The receipt from the recycling facility shall show the name of the facility that accepted the material, address, city, state, zip code, contract number, bridge number, date material was received from the Contractor, weight of the material accepted by the recycling facility, and detailed description of the items given to the recycling facility.

If the Contractor elects to take ownership of the steel, the steel shall be cleaned in accordance with 619.14 prior to its removal from the project.

SECTION 202, BEGIN LINE 519, INSERT AS FOLLOWS:

Removal of present structure or portions thereof will not be measured for payment.

For steel that the Contractor elects to take to a recycling facility, handling, hauling, and all other activities involved with removing and properly disposing of existing steel at a recycling facility will not be measured for payment.

For steel that will become the property of the Contractor, required cleaning of existing steel, removal of mill scale, testing, disposal of the waste stream, containment, and

all other items involved with removing and properly disposing of the existing coating will not be measured for payment.

Pavement removal will be measured by the square yard of the area removed.

SECTION 202, BEGIN LINE 749, INSERT AS FOLLOWS:

The cost of all handling of the product, removal of the product from the tank, disposal, all required packaging, and transportation shall be included in the cost of underground storage tank, liquid waste disposal.

All necessary cleanup of spills caused by the Contractor will not be paid for.

For steel that the Contractor elects to take to a recycling facility, the cost of handling, hauling, and all other costs involved with removing and properly disposing of existing steel at a recycling facility shall be included in the cost of present structure remove, or present structure remove, portions pay item. The Department will withhold a payment equal to 50% of the present structure remove, or present structure remove, portions pay item until the Contractor presents a receipt from the recycling facility indicating that the recycling facility is now in possession of the steel.

For steel that will become the property of the Contractor, the cost of cleaning existing steel, removal of mill scale, testing, disposal of the waste stream, containment, and all other costs involved with removing and properly disposing of the existing coating shall be included in the cost of present structure remove, or present structure remove, portions pay item. The Department will withhold payment of 50% of the present structure remove, or present structure remove, portions pay item until the Contractor presents a receipt from the facility where the waste stream disposal occurred.

203-R-685 METHOD OF MAKING STRENGTH, STIFFNESS AND DENSITY TESTS

(Revised 02-20-20)

The Standard Specifications are revised as follows:

SECTION 203, BEGIN LINE 1125, DELETE AND INSERT AS FOLLOWS:

203.24 Method of Making Strength, Stiffness and Density Tests

The strength of *chemically modified or* compacted soils will be determined by DCP in accordance with ITM 509. ~~and~~ The stiffness of *chemically modified soils or* aggregates will be determined by the ~~Light Weight Deflectometer, LWD~~; in accordance with ITM 508. The *density of soils and aggregates, as a percent of compaction, shall* will be based on the maximum dry densities unless otherwise specified or directed. ~~DCP~~ field compaction tests will be performed in accordance with 203.23. *LWD and density field compaction tests will be performed in accordance with this section.* ~~and~~ The required compaction *shall be* obtained before additional material is placed.

(a) Laboratory

The DCP criteria will be established on representative soils by performing ASTM D 1140, AASHTO T 88, AASHTO T 89, AASHTO T 90, and AASHTO T 99 using Method A for soils and Method C for granular materials.

The optimum moisture content, maximum dry density, and gradation of aggregates will be determined by performing AASHTO T 99 Method C, AASHTO T 11, and AASHTO T 27 on representative samples of the aggregates.

(b) Field

The soil strength of compacted soils or compacted chemically modified soils will be determined by DCP in accordance with ITM 509 and the stiffness of chemically modified soils or aggregates will be determined by LWD in accordance with ITM 508. The moisture content will be determined in accordance with ITM 506 *or AASHTO T 255.*

~~The~~ *As an alternative, in situ field density determination shall be made* may be determined in accordance with AASHTO T 191, ~~or~~ *except as listed below. The maximum dry density of the soil will be determined by ITM 512* ~~except as follows:~~

1. If AASHTO T 191 is used, the sand used for the test shall be silica sand in accordance with the gradation as follows:

Passing the No. 20 (850 µm) sieve - 98 to 100%
 Passing the No. 40 (425 µm) sieve - 0 to 35%
 Passing the No. 70 (212 µm) sieve - 0 to 2%

Sand such as Wedron Silica Sand No. 4075 or Ottawa 2.8 Blasting Sand has been found to be acceptable.

2. If particles larger than those that can pass through a No. 4 (4.75 mm) sieve for soil and a 3/4 in. (19 mm) sieve for granular material are encountered, corrections shall be made so that the density obtained is for the minus No. 4 (4.75 mm) or 3/4 in.

(19 mm) only. After the densities are determined, the degree of compaction shall be computed by the following formula:

$$\text{Percent Compaction} = \frac{\text{In Place Density, pcf}}{\text{Maximum Density, pcf}} \times 100$$

3. Other approved types of field density tests may be used for control purposes after density values corresponding to those obtained by either of the methods set out above have been established.
4. All references to soils in these methods of tests shall be interpreted to mean either or both soil and granular materials.

~~The compaction. Acceptance testing of chemically modified soils and coarse aggregates will be determined by LWD testing in accordance with ITM 508. The moisture content will be determined in accordance with AASHTO T 255 or ITM 506. The allowable deflection will be determined from a test section or will be specified. Test sections shall be constructed in accordance with ITM 514 in the presence of a representative of the Office of Geotechnical Services for other materials not included in the Tables to determine the maximum allowable deflection. The compaction procedures shall be in accordance with 203.23, 215, 301, 302, and 303. Compaction of aggregate shall not occur if the moisture content of the aggregate is greater than 6.0%. Proofrolling of compacted aggregate shall be performed in accordance with 203.26.~~

~~The maximum allowable deflection will be determined from a test section or will be specified. Acceptance testing with a LWD will be in accordance with ITM 508. The optimum moisture content and gradation will be determined by performing AASHTO T 99 Method C, AASHTO T 11, and AASHTO T 27 on representative samples of the aggregates.~~

~~The moisture content of the aggregate shall be between 4% and the optimum moisture content when the aggregate is delivered to the project. Water shall not be added to the aggregate on the grade. Samples for moisture content testing will be taken on the grade from the first truck of the day. The frequency of the moisture content test for aggregates will be a minimum of one test for each day of aggregate placement.~~

The ~~maximum~~ allowable average deflection and maximum deflection for chemically modified soils and aggregate over chemically modified and untreated soils shall be in accordance with the following:

Table 1. Allowable Average Deflection and Maximum Deflection for Chemically Modified Soils and Aggregate over Chemically Modified Soils

Material Type	Maximum Allowable Average Deflection (mm)	Maximum Deflection at a Single Test Location (mm)
Lime Modified Soil	≤ 0.30	0.35
Cement Modified Soil	≤ 0.27	0.31

Aggregate over Lime Modified Soil	≤ 0.30	0.35
Aggregate over Cement Modified Soil	≤ 0.27	0.31

Table 1

Table 2. Aggregate over Untreated Soils:
Where Proofrolling Can Be Performed

Material Thickness	Allowable Average Deflection (mm)	Maximum Deflection at a Single Test Location (mm)
6 in. Thick Coarse Aggregate No. 53	≤ 0.51	0.57*
12 in. Thick Coarse Aggregate No. 53	≤ 0.34	0.40**
18 in. Thick Coarse Aggregate No. 53	≤ 0.31	0.35**
* When deflection exceeds this value, the area shall be recompact or undercut as directed. The failed area will be delineated prior to excavation. Deflection will be measured based on the top 6 in. thick coarse aggregate No. 53 material placed for undercut.		
** The Contractor shall recompact the coarse aggregate No. 53 in accordance with 301.06.		

Table 3. Aggregate over Untreated Soils:
Where Proofrolling Cannot be Performed

Material Thickness	Allowable Average Deflection (mm)	Maximum Deflection at a Single Test Location (mm)
6 in. Thick Coarse Aggregate No. 53	≤ 0.60	0.65*
12 in. Thick Coarse Aggregate No. 53	≤ 0.47	0.52**
18 in. Thick Coarse Aggregate No. 53	≤ 0.44	0.49**
* When deflection exceeds this value, the area shall be recompact or undercut as directed. The failed area will be delineated prior to excavation. Deflection will be measured based on the top 6 in. thick coarse aggregate No 53 material placed for undercut.		
** The Contractor shall recompact the coarse aggregate No. 53 in accordance with 301.06.		
<u>Note:</u> The Engineer will perform the moisture test on in-situ soils prior to placement of coarse aggregate. If the result of the moisture test is >13%, the Engineer will contact the Geotechnical Section.		

~~Test sections shall be constructed in accordance with ITM 514 in the presence of a representative of the Office of Geotechnical Services for other materials not included in Table 1 to determine the maximum allowable deflection.~~

Acceptance of the compaction of chemically modified soils or aggregate will be determined by averaging three LWD tests obtained at a random station determined in accordance with ITM 802, for each ~~1,500 ft length~~ 1,400 cu yds of chemically modified soil ~~for each two-lane pavement section~~, or for each 800 t of compacted aggregate. Where the construction area is 8 ft wide or more, the location of the three tests will be at 2 ft from each edge of the construction area and at 1/2 of the width of the construction area. Where the construction area is less than 8 ft wide, the location of the three LWD tests will be spaced at 1/2 of the width of the construction area and spaced 5 ft apart in the longitudinal direction. The average deflection shall be equal to or less than the maximum allowable deflection allowed in the Tables ~~above~~ or determined by the test section.

~~If the average deflection is not equal to or less than the maximum deflection for aggregates, a sample of the aggregate shall be obtained in accordance with AASHTO T 2 and a moisture content test shall be performed in accordance with AASHTO T 255 to determine if the moisture content is within the acceptable limits. If the moisture content is not within the acceptable limits, additional LWD tests may be taken at the same locations after 24 h if the moisture content is within the acceptable limits at the time of testing. The aggregate will be accepted if the LWD tests are equal to or less than the maximum deflection.~~

205-R-706 STORMWATER MANAGEMENT

(Revised 01-16-20)

The Standard Specifications are revised as follows:

SECTION 101, BEGIN LINE 95, DELETE AND INSERT AS FOLLOWS:

NOI Notice of ~~Intend~~*Intent*

SECTION 101, AFTER LINE 186, INSERT AS FOLLOWS:

101.10.1 Concrete Wastewater

Wastewater associated with liquid waste from concrete, grout, mortar, stucco and other similar construction materials resulting from concrete washout, hydrodemolition, saw cutting, coring, or dewatering operations contaminated by concrete pours or similar activities.

SECTION 101, AFTER LINE 306, INSERT AS FOLLOWS:

101.29.1 Land-disturbing Activity

Any man-made action to the land surface that exposes the underlying soil including clearing, grading, excavation operations, cutting and filling, or the movement and stockpiling of top soils.

SECTION 101, AFTER LINE 512, INSERT AS FOLLOWS:

101.71.1 Wastewater

Water containing waste residue from paint, form release oils, curing compounds and other construction debris, as well as soaps, detergents or solvents used in vehicle, equipment and structure washing, or other material defined as illicit discharge in accordance with 327 IAC 15-13-5(28) including untreated sediment-laden stormwater.

SECTION 108, DELETE LINES 119 THROUGH 147.

SECTION 108, BEGIN LINE 119, INSERT AS FOLLOWS:

For those contracts not requiring waterway permits, or a Construction Stormwater General Permit, or a 327 IAC 15-5 permit, the Contractor shall submit a written site plan to the Engineer describing the following:

- 1. A description of the contract site.*
- 2. The locations of all equipment storage areas, fueling locations, construction trailers, batch plants, and designated concrete truck washout locations.*
- 3. A material handling and spill prevention plan.*

The site plan shall be submitted for acceptance seven calendar days prior to the start of any construction activity. Construction activities shall not begin until the written site plan has been approved by the Engineer.

The cost of preparation of the site plan described above shall be included in the cost of other items of the contract. The cost of the stormwater management implementation of the site plan will be paid for in accordance with 205.11.

For contracts not requiring waterway permits but having a Stormwater Management Budget, the Contractor shall locate, install, maintain and remove temporary stormwater, sediment, and erosion control BMPs, for land-disturbing activity areas in accordance with 205. An SWQCP will not be required for these contracts.

For contracts requiring waterway permits, a Construction Stormwater General Permit, or a 327 IAC 15-5 permit, an SWQCP shall be developed and submitted to the Engineer for review, in accordance with 205.03.

Borrow and disposal sites shall be in accordance with 203.08. When required by a Construction Stormwater General Permit or 327 IAC 15-5, stockpile and storage sites shall have their own permit. The Contractor shall submit an NOS to the Engineer prior to the beginning of operations at those locations. An NOI with an IDEM time stamp 48 h prior to the beginning of operations at these locations shall also meet these requirements.

SECTION 205, DELETE LINE 1 THROUGH 774.

SECTION 205, BEGIN LINE 1, INSERT AS FOLLOWS:

SECTION 205 – STORMWATER MANAGEMENT

205.01 Description

This work shall consist of furnishing, installing, inspecting, maintaining, and removing BMPs in accordance with 105.03, the Department’s Design SWPPP, the submitted and accepted SWQCP or an approved written site plan developed by the Contractor.

MATERIALS

205.02 Materials

Materials shall be in accordance with the following:

<i>Coarse Aggregate, Class F or Higher.....</i>	<i>904</i>
<i>Fertilizer.....</i>	<i>914.03</i>
<i>Filter Sock.....</i>	<i>914.09(h)</i>
<i>Geotextile.....</i>	<i>918.02</i>
<i>Grass Seed, Temporary.....</i>	<i>914.02</i>
<i>Manufactured Surface Protection Products.....</i>	<i>205.04(c)</i>
<i>Metal End Sections.....</i>	<i>908.06</i>
<i>Mulch.....</i>	<i>914.05(a)</i>
<i>Pipe Drains.....</i>	<i>715.02(d)</i>
<i>Plastic Net.....</i>	<i>914.09(g)</i>
<i>Revetment Riprap.....</i>	<i>904*</i>
<i>Stakes.....</i>	<i>914.09(b)</i>
<i>Staples.....</i>	<i>914.09(f)</i>
<i>Top Soil.....</i>	<i>914.01</i>

Water 914.09(a)

* The minimum depth does not apply.

CONSTRUCTION REQUIREMENTS

205.03 General Requirements

For contracts requiring waterway permits, a Construction Stormwater General Permit, or a 327 IAC 15-5 permit, an SWQCP shall be developed and submitted to the Engineer for review.

The Contractor shall furnish, install, inspect, maintain, and remove BMPs for land-disturbing activity areas, and develop an SWQCP in accordance with the Construction Stormwater General Permit or 327 IAC 15-5. The Contractor’s SWQCP shall be a required contract specific component to the Department’s Design SWPPP. The submitted and accepted Contractor’s SWQCP shall interrelate with the Department’s Design SWPPP in order to satisfy the requirements of the Construction Stormwater General Permit, or 327 IAC 15-5.

(a) Stormwater Quality Control Plan Development

The Contractor’s SWQCP shall be developed by a professional engineer who holds a current CPESC certification or approved equivalent. The SWQCP developer shall be familiar with the project site and be able to develop the SWQCP in accordance with the site conditions. In the event of conflict between requirements, pollution control laws, rules, or regulations of other Federal, State or local agencies, the Contractor’s SWQCP shall adhere to the more restrictive laws, rules, or regulations. The SWQCP developer shall issue clarifications, correct errors and omissions, and revise the SWQCP as required. The Contractor’s SWQCP shall be signed and sealed by the SWQCP developer, as defined above.

The Contractor shall develop the SWQCP in accordance with the Construction Stormwater General Permit, 327 IAC 15-5, the IDEM “Indiana Storm Water Quality Manual”, ITM 803, and all other applicable contract documents.

(b) Stormwater Quality Control Plan Content

The Contractor’s SWQCP shall include the processes and procedures of how the Contractor intends to meet the requirements outlined in this section and in accordance with ITM 803.

The Contractor may elect to prepare and submit the SWQCP in multiple phases. The first phase shall show the location, installation, and maintenance of BMPs for the existing topography of the project and identify the total number of proposed construction phases for the contract. Additional phases shall be submitted for review prior to land-disturbing activities for those phases and shall show the progression from the existing topography to final grade. Each phase of the SWQCP shall be modified to meet existing field conditions as needed.

Any individual phase of the SWQCP shall be submitted to the Engineer for review a minimum of 14 calendar days prior to commencing land-disturbing activities for that

phase. Upon receipt, the Engineer will perform a review of the submitted phase of the SWQCP within 14 calendar days for acceptance.

At a minimum, the SWQCP shall include the following:

- 1. Description of the site.*
- 2. Locations of all proposed soil stockpiles.*
- 3. Locations of all proposed equipment storage areas, fueling locations, construction trailers, batch plants, and designated concrete truck washout areas.*
- 4. Proposed construction sequence and phasing of BMPs including plans for installation, inspection, maintenance, and removal of BMPs. The total number of proposed construction phases shall also be specified.*
- 5. Locations of offsite areas that drain onto project limits. The SWQCP shall include BMPs properly sized and placed to accommodate runoff from outside of the project limits and from within the project limits.*
- 6. Locations of all construction entrances where vehicles and equipment will enter and exit the site.*
- 7. An updated stormwater management budget including a complete list of all proposed BMPs with price calculations based upon the established unit prices or contract prices. If the total proposed budget exceeds the original stormwater management budget pay item, the Contractor shall submit a Change Order Request form, in accordance with 109.05, to provide an explanation and justification for the additional BMPs. Proposed BMPs and costs will be reviewed by the Engineer. If accepted, the changes shall be included into the SWQCP. Additional accepted costs will be included in the contract in accordance with 109.05.*
- 8. Material handling and spill prevention plan. A plan for the collection, storage, and disposal of concrete washout wastewater shall be in accordance with 205.03(d).*
- 9. Statements that the BMPs for the project shall, at a minimum, be inspected each calendar week and by the end of the next work day following every 1/2 in. rain event.*
- 10. Provisions to ensure that pollutants such as fuels, lubricants, asphalt, sewage, wash water, wastewater, or waste from*

concrete mixing operations, and other harmful materials shall not be discharged into existing bodies of water.

11. *Provisions to ensure that all applicable regulations and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.*

When Waters of the United States, wetlands, or other protected resources are identified in the plans within or adjacent to the project limits the following shall also be addressed in the SWQCP:

1. *The location of protected resource fencing, or protected resource signs. These measures shall be used to provide clear delineation for protected resources that have the potential to be impacted by construction operations.*
2. *A method for conducting work located in or adjacent to bodies of water and protected resources. The method shall indicate how the work in these locations shall be conducted to comply with all conditions of the project permits.*

The Contractor's SWQCP shall incorporate all narrative information, plan sheets, and implementation information necessary for stormwater management utilized for the project. The SWQCP shall include any revisions to the Department's Design SWPPP and the plans. The revisions shall comply with all known permit requirements applicable to the construction phase of the project including waterway permits, or a Construction Stormwater General Permit, or a 327 IAC 15-5 permit, and those required by the Contractor in accordance with 107.01 and 205.03(c). Electronic files of any plan sheets and narratives included as part of the SWQCP submittal shall be provided in PDF format.

On projects requiring an SWQCP, an updated field copy of the SWQCP shall be retained in the office of the Engineer or at a mutually agreed upon location. Any accepted revisions shall be annotated in the field copy of the SWQCP and initialed and dated by the SWQM and the Engineer.

A copy of the Contractor's offsite operations permits for items such as offsite stockpiles, borrow sites, waste sites, or storage areas shall be submitted to the Engineer prior to any land-disturbing activities at those sites.

Revisions to the SWQCP shall be submitted and signed and sealed by the SWQCP developer, for items that are hydraulically sized or calculated such as sediment basins or other similar measures. The SWQM may submit revisions for items that are not hydraulically sized or calculated. Adjustments to the BMPs shall be subject to the Engineer's acceptance.

If a governmental agency or a local governmental authority finds a violation of NPDES or other surface water permits provided in the contract documents, if any BMPs are incomplete, or the Contractor's SWQCP is incomplete, full responsibility shall be

borne by the Contractor to make the necessary corrections. In addition, if an assessment, damage judgment or finding, agreed order, fine, or any other expense for a violation of the contract requirements is leveled against the Department, the Contractor shall reimburse the State for that amount within 30 days. The Contractor agrees to indemnify and hold harmless the Department and will reimburse the Department for any assessments, damage judgments or finding, fine, penalty, or other expense relating to this portion of the contract. The Department may withhold the amount owed from the Contractor's subsequent pay estimates. Delays caused by stop work orders from regulatory agencies, suspension of work orders from the Department, or any other delays caused by inadequate submittals or implementation will be considered Non-Excusable Delays in accordance with 108.08(c).

(c) Stormwater Quality Manager

On contracts requiring an SWQCP, the Contractor shall designate one person as the contract SWQM. The name of the SWQM shall be furnished to the Engineer at, or prior to, the pre-construction conference. If the designated individual is replaced during the contract, the replacement shall be designated, and notification given to the Engineer within 24 h. The designated individual shall be trained as a level 1 or level 2 SWQM as specified within the contract documents. The SWQM training level shall meet or exceed the level required within the contract documents.

1. Level 1 SWQM

A level 1 SWQM shall have successfully completed the Department's Construction Stormwater Training course and hold a current training verification document for that course.

2. Level 2 SWQM

A level 2 SWQM shall meet the requirements of 205.03(c)1, and hold a current certification as a CESSWI, or a CISEC, or a CPESC, or an approved equivalent.

3. SWQM Responsibilities

The SWQM shall attend the pre-disturbance meeting, in accordance with 205.03(d). The SWQM shall attend at least one meeting with the Contractor, relevant Subcontractors, and the Engineer per calendar month in any month in which weekly and post-event inspections are being completed and work is ongoing. The requirement to attend these meetings may be waived entirely or in part upon written approval from the Engineer.

The SWQM shall be responsible for ensuring that the Contractor's SWQCP has been submitted for review prior to implementation. Implementation of stormwater management shall include installation, inspection, maintenance, and removal of all BMPs. The SWQM shall also be in responsible charge of inspecting the implementation of the Contractor's SWQCP or the contract site plan. The SWQM shall be in responsible charge of the weekly and post-event inspections. Anyone performing inspections under the responsible charge of the SWQM shall, at a minimum, meet the training requirements of a level 1 SWQM.

The SWQM shall accompany personnel from IDEM or other regulatory or governmental agencies, as required, during site visits by those agencies.

(d) Pre-Disturbance Meeting

On contracts requiring an SWQCP, a pre-disturbance meeting shall be held on-site prior to beginning land-disturbing activities. The meeting invitees shall include the SWQM, the Contractor, the SWQCP Developer, appropriate Department field staff, the District Erosion Control Specialist, District Environmental Section Manager, Ecology and Waterway Permitting Specialist, and all relevant subcontractors for the work being performed. The pre-disturbance meeting shall be held not more than 30 days prior to the start of land-disturbing activities. The following shall be reviewed:

- 1. Stormwater management implementation including phasing and sequencing.*
- 2. Permit conditions and authorized impacts.*
- 3. Relevant Unique and Recurring Special Provisions.*
- 4. Relevant commitments.*

If requested in writing, pre-disturbance meeting requirements may be waived in part or in full subject to the approval by the Engineer. No land-disturbing activity shall begin until this meeting has occurred or until written approval to waive the meeting has been received.

(e) Temporary BMPs

Incoming and outgoing drainage areas impacting a work location shall have temporary BMPs installed as soon as practicable and prior to land-disturbing activities at those locations. Pipe end sections and anchors shall be installed when the structure is installed. If the pipe end sections or anchors cannot be placed at the same time, temporary riprap splashpads shall be placed at the outlets of the pipes until end sections or anchors can be installed.

Adjustments of the BMPs shall be made to satisfy field conditions and shall be subject to the Engineer's approval. Adjustments made to meet field conditions shall be made as soon as practicable, shall be maintained as necessary, and shall be noted in the SWQCP.

The Contractor shall provide a stable construction entrance at the points where construction traffic will enter onto an existing road. Where there is insufficient space for a stable construction entrance, other measures shall be taken to prevent the tracking of sediment onto the pavement. These temporary entrances shall be the responsibility of the Contractor to completely install, inspect, maintain, and remove.

A copy of the current manufacturer's installation and maintenance recommendations shall be provided prior to installation of manufactured BMPs. Shipping, handling, storage, and installation of manufactured BMPs shall be in accordance with the manufacturers' recommendations or as directed. In the event of conflict between the Department's specifications and the manufacturer's recommendations, the Contractor shall adhere to the more restrictive regulation or as directed.

Within the SWQCP, the Contractor shall provide a written plan for the collection, storage, and disposal of concrete wastewater that is adequate for the size of the concrete

pour, the environmental conditions of the job site, and in accordance with 327 IAC 15-5-7(2) and 327 IAC 15-13-17(2)(F). An emergency concrete washout container shall be available, be part of the material handling and spill prevention plan, and available on-site during concrete pours. Straw bale washout pits will not be allowed. Concrete washout wastewater may either be recycled back into the truck, washed out into an adequately sized and lined roll off container or lined in-ground pit, an approved manufactured product, or taken back to the batch plant. Lining shall consist of a minimum of one sheet of 10 mil plastic, be continuous with no over lapping, and shall be free of leaks.

Concrete washout capacity shall not be exceeded. Concrete wastewater shall not be allowed to leak onto the ground, run into storm drains, or into any body of water. Where concrete wastewater leaks onto the ground, all contaminated soils shall be excavated and disposed of in accordance with 202.08 except that all costs associated with excavation and disposal shall be the responsibility of the Contractor.

The installation of BMPs shall include those necessary or required by permits at off-site locations such as borrow and disposal areas, field office sites, batch plants, locations where the Contractor's vehicles enter and leave public roads, and other locations where work pertaining to the contract is occurring. The Contractor's SWQM shall be responsible for the installation, inspection, maintenance, and removal of these measures.

The Contractor shall employ dust control measures in accordance with 107.08(b).

(f) Posting Requirements

On contracts requiring a Construction Stormwater General Permit, or a 327 IAC 15-5 permit, directions to the updated field copy of the SWQCP, a copy of the NOI, and a copy of the NOS shall be posted and maintained so they are legible and visible at an agreed upon and publicly accessible location for the contract. In lieu of posting the NOI and NOS, an NOI with an IDEM time stamp 48 h prior to the beginning of operations shall also meet the posting requirements. On contracts requiring waterway permits the Contractor shall follow the posting requirements of those permits.

(g) Inspections

Inspections shall be required on all work areas associated with any waterway permit, a Construction Stormwater General Permit, or a 327 IAC 15-5 permit. This shall include drainage areas within contract limits leading to BMPs, areas of land-disturbance, and areas with impacts or potential impacts to protected resources. For contracts that have multiple work sites, inspections shall only be required for areas operating under a Construction Stormwater General Permit, or 327 IAC 15-5 permit, or a waterway permit.

On contracts requiring waterway permits and not requiring a Construction Stormwater General Permit or a 327 IAC 15-5 permit, inspections shall be conducted at a minimum of once per calendar week. Inspections for these contracts shall stop once the Engineer has accepted, in writing, that the disturbed areas are permanently stabilized and that all temporary measures have been removed.

On contracts requiring a Construction Stormwater General Permit or 327 IAC 15-5 permit, inspections shall be performed at a minimum of once per calendar week and also

by the end of the next work day following every 1/2 in. or greater rain event. A single inspection performed after a rain event shall satisfy the requirement for both the rain event and the weekly inspection. Inspections for these contracts shall stop once all disturbed areas are permanently stabilized, all temporary measures have been removed, and the NOT has been obtained.

Inspection reports shall be submitted by the SWQM within 24 h of the day of the inspection. The inspection reports shall be documented and submitted electronically using the current version of the Department's stormwater inspection management report which is available on the Department's website. A paper inspection form shall only be used in the event that the electronic inspection form is out of service or as directed. Inspections shall begin when the installation of BMPs start, when land disturbing activities begin, or if potential impacts to protected resources will occur, whichever is earliest.

On contracts not requiring a Construction Stormwater General Permit or 327 IAC 15-5 permit, and if requested in writing, the Engineer may temporarily waive the requirement to complete weekly inspections during the winter months, or when the prosecution of work is temporarily discontinued, or when the inspection areas are stabilized to minimize the potential for off-site sedimentation.

(h) Permanent BMPs

Permanent BMPs shall be incorporated into the work at the earliest practicable time.

205.04 Temporary Surface Stabilization

Non-vegetated areas shall be temporarily stabilized if the area remains inactive for more than seven days. The area will be considered inactive when no meaningful work toward accomplishing a pay item has been performed at a site of land-disturbing activity. Stabilization methods shall be in accordance with the SWQCP, or as directed.

(a) Seed

Temporary seeding shall be placed on disturbed areas that are expected to be inactive for more than seven days, or as agreed to by the Contractor and the Engineer. Seed shall be placed either by drilling in, spraying in a water mixture, or by use of a mechanical method which places the seed in direct contact with the soil. Where inaccessible to mechanical equipment, or where the area to be seeded is small, a hand operated cyclone seeder or other approved equipment may be used. Seed shall not be covered more than 1/2 in. Seed shall be distributed utilizing approved methods which allow for even distribution of the seed. If as a result of a rain event, the prepared seed bed becomes rutted, crusted or eroded, or depressions exist, the soil shall be reworked until it is smooth. Reworked areas shall be re-seeded. All seeded areas shall be mulched within 24 h after seeding.

Temporary seed shall be used for surface stabilization and temporary ground cover. Temporary cover mixtures shall be placed and be subject to seasonal limitations as defined herein. This mixture is not intended to be used as a permanent seed mixture. This mixture shall not be used to satisfy the requirements of the warranty bond. The mix shall

be spray mulched where the slope is steeper than 3:1. From June 16 through August 31, mulching alone shall be used to stabilize the soil.

1. Spring Mix

Spring mix shall be used from January 1 through June 15. This mixture shall be applied at the rate of 150 lb/ac. The mix shall consist of oats.

2. Fall Mix

Fall mix shall be used from September 1 through December 31. This mixture shall be applied at the rate of 150 lb/ac. This mix shall consist of winter wheat.

Unless otherwise specified in the SWQCP or the contract site plan, fertilizer shall be spread uniformly over the area to be seeded and shall be applied at 1/2 the rate shown in 621.05(a). Fertilizer shall only be applied during the active growing season March through November.

(b) Mulch

Mulch shall be applied uniformly in a continuous blanket at the rate of 2.5 t/ac. If areas are seeded, mulch shall be placed within 24 h after seeding. The percent of moisture in the mulch shall be determined in accordance with 621.14(c). Mulch shall be placed in accordance with one of the following types or as directed.

On a slope flatter than 3:1, or where specified, type A shall be used. On a slope of 3:1 or steeper but flatter than 2:1, or where specified, type B or type C may be used. On a slope of 2:1 or steeper, or where specified, a manufactured surface protection product, in accordance with 205.04(c), shall be used.

1. Type A

Mulch shall be punched into the soil so that it is partially covered. The punching operation shall be performed parallel to the contour of the slope. The tools used for punching purposes shall be disks that are notched and have a minimum diameter of 16 in. The disks shall be flat or uncupped. Disks shall be placed a minimum of 8 in. apart. Shaft or axle sections of disks shall not exceed 8 ft in length.

The disk for punching shall be constructed so that weight may be added or hydraulic force may be used to push puncher into the ground. An even distribution of mulch shall be incorporated into the soil.

2. Type B

The mulch shall be held in place by means of commercially produced water borne mulch binder product. The product shall be manufactured and used in accordance with all applicable State and Federal regulations and shall be applied in accordance with the manufacturer's written instructions. A copy of the written instructions shall be supplied to the Engineer prior to the seeding work. The product shall include a coverage indicator to facilitate visual inspection for evenness of application. If the mulch fails to stay in place, the Contractor shall repair all damaged areas.

3. Type C

The mulch shall be held in place with a polymeric plastic net. The plastic net shall be unrolled such that it lays out flat, evenly, and smoothly, without stretching the material. The plastic net shall be held in place by means of staples. The staples shall be driven at a 90° angle to the plane of the soil slope. Staples shall be spaced not more than 4 ft apart with rows alternately spaced. The plastic net shall be secured along the top and bottom of the soil slope with staples spaced not more than 1 ft on center. The ends and edges of the plastic net shall be overlapped approximately 4 in. and stapled. Overlaps running parallel to the slope shall be stapled 1 ft on center and overlaps running perpendicular to the slope shall be stapled at least 3 ft on center. The plastic net shall be placed with the length running from top of slope to toe of slope, or the plastic net shall be placed with the length running horizontally or parallel to the contour.

(c) Manufactured Surface Protection Products

Prior to placing a manufactured surface protection product, the area to be covered shall be free of all rocks or clods of over 1 1/2 in. in diameter, and all sticks or other foreign material, which prevent the close contact of the blanket with the seed bed.

After the area has been properly shaped, fertilized, and seeded, the manufactured surface protection product shall be laid out flat, evenly, and smoothly, without stretching the material.

Manufactured surface protection products may be used for covering an area that has not been seeded. Soil cover shall not be used to cover seeded areas.

1. Excelsior Blanket

An excelsior blanket may be used as mulch for seeding where seeding is specified or where erosion control blanket is specified. Excelsior blankets shall be placed within 24 h after seeding operations have been completed. Excelsior blankets shall be installed in accordance with the manufacturer's recommendations.

2. Straw Blanket

A straw blanket may be used as mulch for seeding where mulched seeding is specified or where erosion control blanket is specified. Straw blankets shall be placed within 24 h after seeding. The straw blanket shall be unrolled over the designated area so that the plastic mesh is on top and the straw fibers are snugly and uniformly in contact with the soil surface. The rolls shall be butted together and stapled in place. The staples shall be driven through the blanket at a 90° angle to the plane of the ground surface. Each staple shall anchor the plastic mesh. The staples shall be spaced in accordance with the manufacturer's recommendations.

For placement on a slope, the straw blankets shall be placed with the length running from the top of slope to the toe of slope and shall extend a minimum of 3 ft over the crown of the slope. The blanket shall be stapled in accordance with the manufacturer's recommendations.

For placement in ditch lines, the straw blanket shall be unrolled parallel to the centerline of the ditch. The blanket shall be placed so that there are no longitudinal seams within 24 in. of the bottom centerline of the ditch. In a ditch line, the blanket shall be stapled

in accordance with the manufacturer's recommendations with a minimum of six staples across the upstream end of each roll.

3. Rolled Erosion Control Products

The Contractor shall use degradable RECPs including netting, open weave textile, and erosion control blankets.

Seed shall be applied in accordance with 621 unless soil infilling is required.

If soil infilling is required, RECP shall be first installed and then seed applied and brushed or raked 1/4 to 3/4 in. of topsoil into voids in the RECP filling the full product thickness. Staples of at least 6 in. in length shall be used to secure the RECP. The RECP shall be unrolled parallel to the primary direction of flow and placed in direct contact with the soil surface. The RECP shall not bridge over surface inconsistencies. Edges of adjacent RECP shall be overlapped by 2 to 4 in. Staples shall be placed to prevent seam separation in accordance with the manufacturer's recommendations.

4. Geotextile

Disturbed soil shall be covered with geotextile. The covering shall be placed over the exposed soil in a shingle like fashion with a 2 ft minimum overlap covering all loose or disturbed soil. The geotextile, if new, shall be in accordance with 918.02. The geotextile used for soil covering need not be new but shall not have holes or unrepaired rips or tears. All repairs shall be made in accordance with the manufacturer's recommendation.

205.05 Concentrated Flow Protection

(a) Check Dam

Check dams and modified check dams shall be constructed as shown on the plans. Geotextile for check dams shall be in accordance with 616 unless otherwise specified. Temporary revetment riprap shall be in accordance with 616. No. 5 and No. 8 filter stone shall be in accordance with 904.

(b) Check Dam, Traversable

Traversable check dams shall be composed of 8 in. minimum diameter socks filled with straw, ground wood chips, shredded bark, or other approved material for site specific conditions. Rolls and socks may be stacked in a triangle pattern as shown on the plans. Check dams shall be staked as shown on the plans or as specified by the manufacturer.

(c) Diversion Interceptors

Grading for diversion interceptors shall be in accordance with 203 with the exception that compaction requirements will not apply. The Contractor shall identify the construction areas which shall utilize diversion type A or B. Slope drains shall be provided at the low points of the diversion interceptor. Perimeter diversion, type C shall be installed prior to earth moving activities and shall be immediately stabilized. Type A or B shall be stabilized if anticipated to be left in place for more than seven calendar days.

(d) Sediment Traps

Sediment traps shall be constructed with revetment riprap, filter stone and geotextile.

(e) Sediment Basins

Embankment construction shall be in accordance with 203. Temporary revetment riprap used for overflow protection shall be in accordance with 904, unless otherwise specified in the SWQCP. Sediment basins shall be constructed as shown on the plans, or as specified in the SWQCP. Sediment basins shall be designed to provide a minimum storage volume to contain the runoff from a 10 year 24 h storm event. When required, water shall be withdrawn from the top of the water column. Basin slopes shall be stabilized upon achieving design grades. Outfalls shall be stabilized within 24 h of installation of the basin outlet.

(f) Slope Drains

Slope drain pipes shall be lengthened as required due to the construction of the embankment.

(g) Vegetative Filter Strips

Designated vegetative filter strips shall not be disturbed. Rills that form shall be repaired. Fertilizer shall be applied as specified in the SWQCP.

(h) Splashpads

Splashpads shall be constructed using revetment riprap on geotextile, or other approved material for site specific conditions and shall be sized to prevent erosion or scour.

(i) Inlet Protection

All inlets shall have sediment control measures installed when the drainage area contributing to the inlet is affected by land-disturbing activity, adjacent to hauling operations, adjacent to disturbed areas, or as directed. A copy of the current manufacturer's installation and maintenance recommendations shall be provided prior to installation of manufactured inlet protection in accordance with 205.03(e). All inlet protection devices shall provide a means of emergency overflow. Geotextile wrapped under or over a grate shall not be used.

205.06 Perimeter and Resource Protection

(a) Silt Fence

Shipping, handling and storage shall be in accordance with the manufacturer's recommendations. Silt fence material shall be in accordance with 918.02(d). The silt fence material will be rejected if it has defects, tears, punctures, flaws, deterioration, or damage incurred during manufacture, transportation, storage, or installation. Each roll shall be labeled or tagged to provide product identification.

Joints shall be made from the ends of each section of fence wrapped around a wood stake and joined together or other method recommended by the manufacturer. Copies of all current manufacturer manuals shall be provided prior to installation. Silt fence shall

not be used in conveyance channels, areas prone to flooding, or areas of concentrated flow.

(b) Filter Sock

Filter sock shall be designed for filtration or diversion depending on its intended use. Filter sock shall be installed, secured and overlapped in accordance with the standard drawings. The manufacturer's specifications for installation may be substituted with the approval of the Engineer. Filter sock shall be in accordance with 914.09 (h).

(c) Filter Berm

Filter berms shall be constructed of filter sock, or a combination of riprap or No. 5 and No. 8 filter stone.

(d) Protected Resource Fence

Protected resource fence shall be a commercially available material marketed as snow fencing, have a minimum height of 4 ft and be made of high density polyethylene. All protected resource fence shall be orange in color. Protected resource fence shall be installed using T-posts spaced no more than 10 ft apart and secured with plastic fence ties. Pull posts and corner posts will not be required. T-posts shall be buried to 1/3 of their height.

(e) Protected Resource Signs

Within areas prone to flooding, or concentrated flow "Do Not Disturb" signs in accordance with 622.20 may be accepted in lieu of fencing, if requested and accepted in writing prior to installation. If "Do Not Disturb" signs are used in lieu of fencing, they shall be spaced at a distance of 25 ft apart to delineate the entire length of concern. At a minimum, two signs shall be used.

205.07 Maintenance

BMPs shall be inspected in accordance with 205.03(g). If conditions do not allow the Contractor access to the location of the BMPs using normal equipment and maintenance, the Contractor shall submit to the Engineer an acceptable written alternate schedule, within 48 h, to bring the BMPs back into compliance.

(a) Filter Sock

Accumulated sediment shall be removed once it reaches 1/2 of the height of the filter sock when used for perimeter protection and 1/3 the height when used for inlet protection. The filter sock shall be inspected to ensure that it is holding its shape and allowing adequate flow. Eroded and damaged areas shall be repaired.

(b) Silt Fence

If the fence fabric tears, starts to decompose, or becomes ineffective, the affected portion shall be replaced. Deposited sediment shall be removed once it reaches 1/3 the height of the fence at its lowest point. Once the contributing drainage area has been stabilized, the Contractor shall remove the fence and sediment deposits, grade the site to blend with the surrounding area, and stabilize the graded area.

(c) Filter Berm

Accumulated sediment shall be removed once it reaches 1/4 of the height of the filter berm. The filter berm shall be inspected to ensure that it is holding its shape and allowing adequate flow. Eroded and damaged areas shall be repaired.

(d) Inlet Protection

Accumulated sediment shall be removed once identified and after each storm event. Flushing with water will not be allowed. The sediment shall not be allowed to re-enter the paved area or storm drains. Manufactured inlet protection shall be maintained in accordance with the manufacturer's recommendations.

(e) Check Dams

Sediment shall be removed once it reaches 1/2 the height of the check dam. Sediment shall be removed and disposed of in accordance with 201.03 and 203.08. The Contractor shall rebuild or repair each damaged check dam to maintain the design height, cross section, and control function.

(f) Sediment Traps

Following each rain event, the Contractor shall repair slope erosion and piping holes as required. Sediment shall be removed once it has accumulated to 1/2 design volume. The Contractor shall replace the coarse aggregate filter stone if the sediment pool does not drain within 72 h following a rain event.

(g) Sediment Basin

Sediment shall be removed once it has accumulated to 1/2 the design volume. The filter stone around the riser pipe shall be replaced if the sediment pool does not drain within 72 h following a rain event.

(h) Concrete Washout

The containment system shall be inspected for leaks, spills, and tears, and shall be repaired or replaced as necessary. The Contractor shall ensure that each containment system maintains adequate capacity. Solidified waste concrete shall be disposed of in accordance with 202.

(i) Protected Resource Fence

Protected resource fence shall be maintained in an upright position with no tears or missing sections.

(j) Protected Resource Signs

Protected resource signs and posts shall be maintained in an upright and legible condition.

205.08 Stormwater BMP Deficiencies

If the Engineer documents deficient BMPs at any time during a contract, including the time during seasonal suspension, written notification of the deficiency will be provided to the Contractor.

a) Emergency Deficiencies

Emergency deficiencies shall include:

1. *Discharge of wastewater into a drainage structure, jurisdictional waterway, or similar environmental resource.*
2. *Failure to comply with the conditions and commitments of the contract waterway permits and regulations.*
3. *Beginning land-disturbing activities without the Engineer's acceptance of a submitted SWQCP or prior to the pre-disturbance meeting, if not waived by written permission.*

Corrective actions for emergency deficiencies must be completed no later than 24 h after notification, including weekends or holidays.

b) General Deficiencies

General deficiencies shall include:

1. *Failure to install, construct, or maintain BMPs as shown on the plans or the accepted SWQCP.*
2. *Failure to perform a site inspection as required by 205.03(g).*
3. *Deficiencies as listed in 205.08(c).*

Corrective actions for general deficiencies shall be completed within 48 h of notification or as directed.

For unresolved emergency or general deficiencies, the Engineer may suspend work on the contract except for that work necessary to correct the deficiencies, for traffic maintenance, and for the protection of life and property until the deficiencies are corrected. Delays caused by these deficiencies will be considered non-excusable delays in accordance with 108.08(c).

c) Quality Adjustments

If emergency deficiencies are not remedied within 24 h after notification, or within 48 h after notification for general deficiencies, the Contractor may be assessed quality adjustments. When an alternate schedule is accepted by the Engineer, in accordance with 205.07, and that schedule is not met, the Contractor may be assessed quality adjustments.

In accordance with 109, the Contractor may be assessed quality adjustments of \$200 for each deficiency per calendar day, or part thereof, that the deficiency remains uncorrected after the initial notification period. No quality adjustments will accrue without prior written notification from the Engineer of the deficiency.

Permit postings will be considered deficient and subject to quality adjustments if they do not meet the requirements of the permitting agency or the requirements listed in 205.03(f).

Each contiguous 100 ft section, or portion thereof, of silt fence will be considered deficient and subject to quality adjustments if the fence material has a cut or tear exceeding 1 ft in length, or a seam has separated, or the retained sediment exceeds 1/2 of the height of the fence, or the fence is not installed as shown in the Standard Drawings.

Each contiguous 50 ft section, or portion thereof, of filter sock will be considered deficient and subject to quality adjustments if it is not installed and maintained in accordance with the Standard Drawings and the manufacturer's recommendations.

Each check dam, sediment basin, or sediment trap will be considered deficient and subject to quality adjustments if stormwater circumvents the measure, or the retained sediment exceeds 1/2 of the design volume, or they are not installed in accordance with the accepted SWQCP, as shown on the plans, or the contract site plan.

Inlet protection devices will be considered deficient and subject to quality adjustments if stormwater circumvents the measure, or they are not installed and maintained in accordance with the manufacturer's recommendations, or they do not provide a means of emergency overflow lower than the adjacent roadway, or the accumulated sediment exceeds 1/2 of the capacity of the device.

Manufactured BMPs will be considered deficient and subject to quality adjustments if stormwater circumvents the measure, or they are not installed and maintained in accordance with the manufacturer's recommendations.

Other BMPs will be considered deficient and subject to quality adjustments if they are not installed in accordance with the accepted SWQCP, as shown on the plans, the contract site plan, or they are not maintained adequately to perform their intended function.

For any specific deficiency, quality adjustments will cease accruing when that specific deficiency is corrected. Site inspection quality adjustments will cease accruing when the next acceptable inspection is performed.

205.09 Removal

BMPs shall be removed as soon as an area becomes stable. All BMPs shall be removed prior to application for the NOT. The Contractor shall remove and dispose of all excess silt accumulations, dress the area, and reestablish vegetation to all bare areas in accordance with the contract requirements. Use or disposal of the BMPs shall be as specified in the SWQCP.

205.10 Method of Measurement

Temporary silt fence and traversable check dams will be measured by the linear foot.

Protected resource fence will be measured by the linear foot, installed and removed. Measurement will be made along the top of the fence from outside to outside of end posts for each continuous run of fence.

Protected resource signs, temporary sediment basins, standard metal end sections, and temporary inlet protection will be measured by the number of complete units installed.

Temporary revetment riprap check dams, temporary revetment riprap, temporary sediment traps, splashpads, temporary filter stone, temporary mulch, No. 2 stone for stable construction entrances, and fertilizer will be measured by the ton.

Temporary mulch stabilization, manufactured surface protection products, and temporary geotextile will be measured by the square yard.

Temporary seeding will be measured by the pound.

Removal of sediment will be measured by the cubic yard.

Temporary slope drains will be measured by the linear foot. Measurement will be made for the maximum footage in place at one time, per drain location regardless of the number of times the material is moved.

Temporary filter berms and filter sock will be measured by the linear foot complete in place. Overlapping sections of filter sock will not be measured for payment.

Revetment riprap and filter stone used in sediment basins will be measured by the ton.

Excavation for detention ponds, temporary sediment traps and temporary sediment basins will be measured as common excavation in accordance with 203.27.

Diversion interceptors type A and B, and interceptor ditches will not be measured for payment. Diversion interceptors type C will be measured by the linear foot.

Mobilization and demobilization for surface stabilization will be measured by each trip as provided in the submitted and accepted SWQCP.

Weekly inspections will be measured by the number of specified weekly inspections conducted after the original contract completion date.

SWQCP Preparation and Stormwater Management Implementation will not be measured for payment.

BMPs used at the off-site locations in accordance with 205.03 and concrete washouts will not be measured for payment.

205.11 Basis of Payment

The accepted quantities of diversion interceptors type C, protected resource fence, silt fence, and traversable check dams will be paid for at the established unit price per linear foot.

Protected resource signs, temporary sediment basins, standard metal end sections, and temporary inlet protection will be paid for at the established unit price per each unit installed.

Temporary revetment riprap check dams, temporary revetment riprap, temporary sediment traps, splashpads, temporary filter stone, temporary mulch, No. 2 stone for stable construction entrances, and fertilizer will be paid for at the established unit price per ton.

Temporary mulch stabilization, manufactured surface protection products, and temporary geotextile will be paid for at the established unit price per square yard.

Temporary seeding will be paid for at the established unit price per pound.

Removal of sediment will be paid for at the established unit price per cubic yard.

Temporary slope drains, temporary filter berms, and filter sock will be paid for at the established unit price per linear foot. No additional payment will be made for any required overlapping sections of filter sock.

Revetment riprap and filter stone used in sediment basins will be paid for at the established unit price per ton.

The accepted quantities of excavation for detention ponds, temporary sediment traps, and temporary sediment basins will be paid for as common excavation in accordance with 203.28.

Payment for mobilization and demobilization for surface stabilization will be paid for at the established unit price per each and will be made for the initial movement to the project site, and for each occurrence as specified in the submitted and accepted SWQCP, or as directed.

Weekly inspections will be paid for at the established unit price per each for inspections conducted after the original contract completion date. No payment will be made for inspections during the time when liquidated damages, in accordance 108.09, are assessed.

The Department will include the pay item Stormwater Management Budget, with an established dollar amount, in the proposal to pay for BMP work. This established amount is the Department's estimate of the total cost of the BMP work required to be performed for the contract. The established amount shown in the proposal is included in the total bid amount. The Department will pay for those items installed and listed with established prices for the quantities installed as specified in the submitted and accepted SWQCP. If the BMP work exceeds the Department's estimated amount, the additional BMPs shall be explained and submitted as a revision to the SWQCP. The additional work will be reviewed for acceptance in accordance with 104.03 except that the additional BMP work will be paid for at the pre-determined established prices shown.

The Department will pay to replace BMPs that have failed due to differing site conditions or significant changes in the character of work in accordance with 104.02, if those BMPs have been installed and maintained in accordance with the accepted SWQCP, as shown on the plans, or the contract site plan.

The Department will pay to replace BMPs that have failed after exceeding the lifespan of the BMP, as specified in the manufacturer’s guidelines, if those BMPs were installed and maintained in accordance with the accepted SWQCP, as shown on the plans, or the contract site plan. Payment will be at the established prices shown in 205.11 and may occur no more than once per year.

The item SWQCP Preparation will be paid for based on the highest total number of construction phases for the contract. The highest total number of phases will be based on either the number of phases established within the original contract documents or the number of phases proposed in the SWQCP. The initial submitted and accepted SWQCP shall list the number of construction phases. Payments on the item will be made after a SWQCP phase has been reviewed and accepted. Item payments will be made in accordance with:

$$SWQCP \text{ payment} = 1.00 - \left(1.00 - \left(\frac{(P_{sa})}{(P_t)} \right) \right)$$

Where:

P_{sa} = Submitted and accepted phases of the SWQCP.

P_t = Highest total number of construction phases established for the contract.

The item Stormwater Management Implementation will be paid for as specified in the contract documents. After the initial phase of the SWQCP or the contract site plan has been submitted and accepted, 25% of the Stormwater Management Implementation bid price will be paid. The balance will be paid as the plan is implemented over the life of the contract. Stormwater Management Implementation shall include any costs beyond the established prices associated with the inspection, installation, maintenance, and removal including mobilization and demobilization of all temporary BMPs. Items shown with an established price will be paid for at the prices shown. If any of the following items are shown in the schedule of pay items, the bid item and price will prevail over the established prices shown.

Payment will be made under:

Pay Item	Pay Unit Symbol	Established Price
Diversion Interceptor Type C	LFT.....	\$22.50
Fertilizer	TON.....	\$775.00
Filter Sock.....	LFT.....	\$5.50
Manufactured Surface Protection Product.....	SYS	\$1.35

Mobilization and Demobilization for

<i>Surface Stabilization</i>	<i>EACH</i>	<i>\$700.00</i>
<i>No. 2 Stone</i>	<i>TON</i>	<i>\$30.00</i>
<i>Protected Resource Fence</i>	<i>LFT</i>	<i>\$2.00</i>
<i>Protected Resource Sign</i>	<i>EACH</i>	<i>\$80.00</i>
<i>Sediment, Remove</i>	<i>CYS</i>	<i>\$22.00</i>
<i>Splashpad</i>	<i>TON</i>	<i>\$60.00</i>
<i>Standard Metal End Section</i>	<i>EACH</i>	<i>\$365.00</i>
<i>Stormwater Management Budget</i>	<i>DOL</i>	
<i>Stormwater Management Implementation</i>	<i>LS</i>	
<i>SWQCP Preparation</i>	<i>LS</i>	
<i>Temporary Check Dam, Revetment Riprap</i>	<i>TON</i>	<i>\$65.00</i>
<i>Temporary Check Dam, Traversable</i>	<i>LFT</i>	<i>\$16.00</i>
<i>Temporary Filter Berm</i>	<i>LFT</i>	<i>\$16.00</i>
<i>Temporary Filter Stone</i>	<i>TON</i>	<i>\$45.00</i>
<i>Temporary Geotextile</i>	<i>SYS</i>	<i>\$2.75</i>
<i>Temporary Inlet Protection</i>	<i>EACH</i>	<i>\$110.00</i>
<i>Temporary Mulch Stabilization</i>	<i>SYS</i>	<i>\$0.30</i>
<i>Temporary Mulch</i>	<i>TON</i>	<i>\$425.00</i>
<i>Temporary Revetment Riprap</i>	<i>TON</i>	<i>\$60.00</i>
<i>Temporary Sediment Basin</i>	<i>EACH</i>	<i>\$3,200.00</i>
<i>Temporary Sediment Trap</i>	<i>TON</i>	<i>\$42.50</i>
<i>Temporary Seed</i>	<i>LBS</i>	<i>\$2.75</i>
<i>Temporary Silt Fence</i>	<i>LFT</i>	<i>\$2.15</i>
<i>Temporary Slope Drain</i>	<i>LFT</i>	<i>\$21.50</i>
<i>Weekly Inspection</i>	<i>EACH</i>	<i>\$425.00</i>

The cost for revisions or amendments to permits required due to the Contractor's means and methods shall be included in the cost of SWQCP Preparation.

The cost for any future revisions to the SWQCP due to the Contractor's means and methods shall be included in the cost of SWQCP Preparation.

The costs for trenching, backfilling, posts, fencing, and all necessary incidentals shall be included in the cost of temporary silt fence.

The costs for protected resource fence shall include all materials, placement, removal, maintenance, and all necessary incidentals.

The costs for protected resource signs shall include all materials, placement, removal, maintenance, and all necessary incidentals.

The cost for stakes, trenching, backfilling, posts, and all necessary incidentals shall be included in the cost of temporary check dams, traversable.

The payment for temporary sediment basin shall include all costs involved with construction of the basin except for excavation, revetment riprap, and filter stone.

The payment for temporary sediment trap shall include all costs involved with construction of the trap except for excavation.

Temporary entrances utilized by the Contractor for borrow and waste areas will not be paid for directly.

The costs for diversion interceptor types A and B and interceptor ditches shall be included in the cost of other earth moving items.

The cost for anchors and all incidentals necessary to perform the work shall be included in the cost of temporary slope drains.

The costs of materials, installation, inspection, maintenance, and removal of BMPs at off-site locations designated in 205.03 will not be measured for payment.

The payment for BMPs specified herein shall include materials, installation, maintenance, removal and proper disposal, except for the removal of sediment.

The costs associated with sediment removal due to BMP maintenance shall be included in the cost of sediment removal.

The costs associated with the replacement of temporary filter stone due to BMP maintenance will be paid for as temporary filter stone.

The costs of constructing, maintaining, and removal of the construction entrance, other than those constructed by the Contractor for borrow and waste sites, shall be included in No. 2 stone. No direct payment will be made for construction entrances for borrow and waste sites.

The costs associated with concrete washout will not be paid for directly but shall be included in the costs of other concrete pay items.

All costs associated with the weekly and post-event inspections, including inspections required by regulatory agencies, and all other inspections conducted prior to the original contract completion date, shall be included in the cost of Stormwater Management Implementation.

207-R-687 SUBGRADE TREATMENT

(Revised 02-20-20)

The Standard Specifications are revised as follows:

SECTION 207, BEGIN LINE 9, DELETE AND INSERT AS FOLLOWS:

207.02 Materials

Materials shall be in accordance with the following:

Chemical Modifiers..... 215.02
 Coarse Aggregate, Class D or Higher,
 Size No. 5, 8, 43, 53, or 73 904
 Geogrid, Type IB 918.05
 Geocell Confining System 214
Geotextile for Pavement and Subgrade..... 918.02(c)
 Water 913.01

Air-cooled blast furnace slag shall not be used for subgrade treatment Types ID, IV, and IVA.

~~Soils containing greater than 3% by dry weight organic material, or with a maximum dry density of less than 100 pcf, or with liquid limit of greater than 50, or with a soluble sulfate content greater than 1,000 ppm, will not be allowed within the specified thickness of the subgrade treatment in cut sections and will not be allowed within 24 in. of the finished subgrade elevation in fill sections. Density will be determined in accordance with AASHTO T 99 or ITM 512 and organic content will be determined in accordance with AASHTO T 267. Liquid limits will be determined in accordance with AASHTO T 89. Sulfate content will be determined in accordance with ITM 510.~~

<i>Soil Property</i>	<i>Test Method</i>	<i>Requirements</i>
<i>Dry Weight Organic Material</i>	<i>AASHTO T 267</i>	$\leq 3\%$
<i>Max Dry Density</i>	<i>AASHTO T 99</i>	≥ 100 pcf
<i>Liquid Limit</i>	<i>AASHTO T 89</i>	≤ 50
<i>Soluble Sulfate</i>	<i>ITM 510</i>	≤ 1000 ppm
<i>Note:</i> <i>Only soils meeting these requirements will be allowed within the specified thickness of the subgrade treatment in cut sections. Only soils meeting these requirements will be allowed within 24 in. of the finished subgrade elevation in fill sections.</i>		

CONSTRUCTION REQUIREMENTS

207.03 Construction Requirements

(a) Subgrade Construction Methods

The subgrade shall be constructed uniformly transversely across the width of the pavement including shoulders or curbs unless shown otherwise on the plans, by one of the following methods:

- (a) chemical modification in accordance with 215;
- (b) aggregate No. 53 in accordance with 301;
- (c) geogrid in accordance with 214 placed under aggregate No. 53 in accordance with 301, or
- (d) soil compaction to 100% of maximum dry density;
- (e) *geotextile in accordance with 214 placed under aggregate No. 5, 8, and 53 in accordance with 301.*

Longitudinally, the treatment may vary depending on the method of construction.

SECTION 207, BEGIN LINE 71, DELETE AND INSERT AS FOLLOWS:

207.04 Subgrade Treatment Types

The subgrade treatment type shall be as specified on the contract plans. If required, the subgrade foundation shall be corrected as directed by the Engineer prior to subgrade treatment.

Type	Subgrade Description
I	24 in. of soil compacted in accordance with 203.23
IA	[blank]
IBC	14 in. chemical soil modification <i>using cement</i>
IBL	<i>14 in. chemical soil modification using lime</i>
IC	12 in. coarse aggregate No. 53 in accordance with 301
ID	<i>12 in. coarse aggregate with Type 2B geotextile in accordance with 918.02(c)</i>
II	6 in. coarse aggregate No. 53 in accordance with 301
IIA	8 in. chemical soil modification
III	In-place compaction in accordance with 203.23
IV	12 in. coarse aggregate No. 53 with Type IB geogrid in accordance with 214
IVA	12 in. coarse aggregate with Geocell confining system in accordance with 214
V	3 in. of subgrade excavated and replaced with 3 in. coarse aggregate No. 53

Type ID subgrade treatment shall be constructed with 9 in. of coarse aggregate No. 53 over 3 in. of coarse aggregate No. 5 or No. 8. Geotextile Type 2B in accordance with 918.02(c) shall be placed above and below the layer of No. 5 or No. 8 coarse aggregate.

In areas where shallow utilities are encountered or chemical modification is not allowed, the Contractor may submit a request to the Engineer to substitute Type IC for Type IBC or Type IBL.

SECTION 207, BEGIN LINE 104, DELETE AND INSERT AS FOLLOWS:

Proofrolling shall be performed in accordance with 203.26. ~~The proof rolling shall cover the entire subgrade surface. The maximum allowable deflection or rutting in subgrade shall not be greater than 1/2 in.~~

207.05 Method of Measurement

Subgrade treatment will be measured in both cut and fill areas by the square yard per type. Chemicals for *soil* modification *using cement or lime*, excavation, aggregates, *geotextile*, and geogrid materials will not be measured.

The undercutting of rock, where encountered, will be measured in accordance with 203.27(b).

207.06 Basis of Payment

The accepted quantities of subgrade treatment will be paid for at the contract unit price per square yard per type, complete in place. In areas where shallow utilities are encountered or the Contractor elects to use Type IC for Type IBC *or Type IBL*, payment will be made at the price of Type IBC *or Type IBL*.

The undercutting of rock, where encountered, will be paid for in accordance with 203.28.

Payment will be made under:

Pay Item	Pay Unit Symbol
Subgrade Treatment, Type _____SYS

The cost of subgrade treatments including testing, sampling, aggregates, chemicals for *soil* modification *with cement or lime*, geogrid, geotextile and geocell confining system, coarse aggregate for subgrade Type IC, *Type ID*, Type II, Type IV, Type IVA, Type V, water, and the excavation required, shall be included in the cost of the pay item.

The cost of excavation and grading of existing railroad ballast and railroad bed material shall be included in the cost of subgrade treatment, Type V.

Where conditions exist below the specified subgrade compaction depth that prevent achieving the specified compaction, payment for correcting such conditions will be made based on the directed method of treatment.

301-R-688 AGGREGATE BASE

(Revised 07-16-20)

The Standard Specifications are revised as follows:

SECTION 301, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 301 – AGGREGATE BASE

301.01 Description

This work shall consist of placing coarse aggregate on a prepared subgrade in accordance with 105.03.

MATERIALS

301.02 Materials

Materials shall be in accordance with the following:

- Coarse Aggregate, Class D or Higher904
- ~~Geotextile~~Geosynthetic Materials.....918.02

ACBF shall not be used for subgrade treatment Types ID, IV, and IVA.

CONSTRUCTION REQUIREMENTS

301.03 Preparation of Subgrade

Subgrade shall be ~~compacted~~*prepared* in accordance with 207.04. ~~In areas of 500 ft or less in length, or for temporary runarounds, proofrolling will not be required.~~ Proofrolling will not be required in trench sections *and other areas* where proofrolling equipment cannot be used.

301.04 Temperature Limitations

Aggregate shall not be placed when the air temperature is less than 35°F. Aggregate shall not be placed on a frozen subgrade. Frozen aggregate shall not be placed.

301.05 Spreading

The moisture content of ~~dense graded~~*the* aggregate shall be between 4% and the optimum moisture content ~~prior to placement~~ when the aggregate is delivered to the project. Unless otherwise directed, water shall not be added to the aggregate on the grade. The aggregate shall be spread in uniform lifts with a spreading and leveling device approved by the Engineer. The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. The compacted depth of each lift shall be a minimum of 3 in. and a maximum of 6 in. The aggregate shall be handled and transported to minimize segregation and the loss of moisture. In areas inaccessible to mechanical equipment, *each lift shall be 3 in. and an* approved hand spreading methods may be used.

301.06 Compacting

Dense graded aggregate shall be compacted to achieve the ~~maximum~~ allowable average deflection as determined with ~~the Light Weight Deflectometer~~, LWD; testing in

~~accordance with ITM 508203.24(b). Compaction shall not occur if the moisture content of the aggregate is greater than 6.0%. The maximum allowable deflection will be determined from a test section or will be specified. Test sections shall be constructed in accordance with ITM 514 for other materials not included in Table 1 to determine the maximum allowable deflection. The optimum moisture content will be determined in accordance with 203.24(a).~~

~~Samples for moisture content testing shall be taken on the grade from the first truck of the day. The frequency of the moisture content test for aggregates will be one test for each day of aggregate placement. The maximum allowable average deflection for aggregate over the chemically modified soils and untreated soils shall be in accordance with the following: Tables shown in 203.24(b).~~

Material Type	Maximum Allowable Deflection (mm)
Aggregate over Lime Modified Soil	0.30
Aggregate over Cement Modified Soil	0.27

Table 1

~~Acceptance of the compaction of aggregates will be determined by averaging three LWD tests obtained at a random station determined in accordance with ITM 802. The location of the three tests will be at 2 ft from each edge of the construction area and at 1/2 of the width of the construction area. The average deflection shall be equal to or less than the maximum allowable deflection allowed in Table 1 or determined by the test section. The frequency of the LWD testing will be three tests for each 800 t for compacted aggregate.~~

~~As an alternate, aggregates shall be compacted to a minimum of 100% of the maximum dry densities in accordance with AASHTO T 99. In situ density will be determined in accordance with 203.24(b). The aggregate shall meet the compaction requirements at the time subsequent courses are placed. In areas inaccessible to compaction equipment such as private drives, mailbox approaches, and temporary runarounds, the compaction requirements may be accepted by visual inspection.~~

Coarse graded aggregates shall be compacted in accordance with 203.25.

In areas inaccessible to compaction equipment, such as private drives and mailbox approaches, the compaction requirements may be accepted by visual inspection.

All displacement or rutting of the aggregate shall be repaired prior to placing subsequent material.

~~Coarse graded aggregates shall be compacted in accordance with 203.25. When specified, geotextiles shall be installed in accordance with 616.11.~~

301.07 Checking and Correcting Base

The top of each aggregate course shall be checked transversely to the cross section and all deviations in excess of 1/2 in. shall be corrected. If additional aggregate is required, the course shall be remixed and re-compacted.

301.08 Priming

A prime coat, when required, shall be in accordance with 405.

301.09 Method of Measurement

Compacted aggregate base will be measured by the cubic yard based on the theoretical volume to the neat line as shown on the plans. Geotextiles will be measured in accordance with 616.12.

301.10 Basis of Payment

The accepted quantities of compacted aggregate base will be paid for at the contract unit price per cubic yard, complete in place. Geotextiles will be paid for in accordance with 616.13.

Payment will be made under:

Pay Item	Pay Unit Symbol
Compacted Aggregate, No. 2.....	CYS
Compacted Aggregate, No. 5.....	CYS
Compacted Aggregate, No. 8.....	CYS
Compacted Aggregate, No. 53.....	CYS

The cost of placing, compacting, water, aggregate placed outside neat lines as shown on the plans, and necessary incidentals shall be included in the cost of the pay item.

Payment will not be made for material placed outside of a 1:1 slope from the planned typical section.

Replacement of pavement damaged by the Contractor’s operations shall be at no additional payment.

306-R-686 MILLING

(Adopted 06-20-19)

The Standard Specifications are revised as follows:

SECTION 306, BEGIN LINE 228, DELETE AND INSERT AS FOLLOWS:

306.09 Transition Milling

Transition milling shall consist of cutting a wedge at the beginning and ending of projects, and paving exceptions. The existing pavement shall be cut to provide a nearly vertical face of 1 1/2 in. *or the minimum finished thickness of a course in accordance with 401.14, whichever is greater*, for the termini of each overlay lift of base, intermediate, and surface. The existing pavement shall be milled at a rate of 720:1 or as directed to achieve the specified cut where the pavement transition overlay lifts differ from cut depth. The transverse vertical cut face shall be transitioned by HMA, CMA or prefabricated materials at a rate of 24:1 or as approved.

Automatic control devices will not be required on surface milling equipment used for transitions cut off the traveled way. Cutting shall not damage any pavement that is to remain in place.

402-R-702 HMA PAVEMENT

(Revised 12-19-19)

The Standard Specifications are revised as follows:

SECTION 402, AFTER LINE 38, INSERT AS FOLLOWS:

A Type D mixture may be used in lieu of a Type C or a Type B mixture and a Type C mixture may be used in lieu of a Type B mixture.

SECTION 402, BEGIN LINE 99, DELETE AND INSERT AS FOLLOWS:

402.09 Acceptance of Mixtures

Acceptance of mixtures will be in accordance with the Frequency Manual on the basis of a type D certification in accordance with 916. The test results shown on the certification shall be the quality control tests representing the material supplied and include air voids and binder content. Air voids tolerance shall be $\pm 1.52.0\%$ and binder content tolerance shall be $\pm 0.7\%$ from DMF.

SECTION 402, BEGIN LINE 176, INSERT AS FOLLOWS:

The temperature of each mixture at the time of spreading shall be less than 315°F whenever PG 64-22 or PG 70-22 binders are used. *The temperature of each mixture at the time of spreading shall not be less than 245°F. No mixture shall be placed on a previously paved course that has not cooled to less than 175°F.*

SECTION 402, BEGIN LINE 206, DELETE AND INSERT AS FOLLOWS:

The finished thickness of each course shall be at least two times but not more than ~~four~~ five times the maximum particle size as shown on the DMF. The finished thickness of wedge and level mixtures shall be at least 1 1/2 times but not more than six times the maximum particle size as shown on the DMF. Feathering may be less than the minimum thickness requirements.

621-R-697 SEED UPDATES

(Adopted 09-19-19)

The Standard Specifications are revised as follows:

SECTION 621, BEGIN LINE 11, INSERT AS FOLLOWS:

621.02 Materials

Materials shall be in accordance with the following:

Fertilizer	914.03
Grass Seed.....	914.04
Grass Seed, Temporary	914.02
Leguminous Inoculants	914.06
Mulch	914.05(a)
Plastic Net	914.09(g)
Sod, including Nursery Sod	914.07
Top Soil.....	914.01
Water	914.09(a)
Staples	914.09(f)

Seed that has passed the expiration date shown on the bag tag shall not be installed.

SECTION 621, BEGIN LINE 217, DELETE AND INSERT AS FOLLOWS:

621.06 Seed Mixtures

Seed mixtures are classified as follows. Mixes including warm season grasses, forbs, or aquatic species will be specified in the plans.

(a) Seed Mixture R

This seed mixture shall be applied at the rate of ~~205~~202.5 lb/ac consisting of 100 lb/ac of low endophyte Tall Fescue, 50 lb/ac of turf type Perennial Ryegrass, 50 lb/ac of Creeping Red Fescue, and ~~5~~2.5 lb/ac of White Dutch Clover. Seed used in this mixture shall be drought tolerant. Fertilizer and mulching material, where specified or directed, shall be applied in accordance with 621.05.

(b) Seed Mixture U

This seed mixture shall be applied at the rate of ~~200~~196.5 lb/ac consisting of 100 lb/ac of a 4-way blend of turf type Tall Fescue, 50 lb/ac Creeping Red Fescue, 45 lb/ac Perennial Ryegrass and ~~5~~1.5 lb/ac White Dutch Clover. Fertilizer and mulching material, where specified or directed, shall be applied in accordance with 621.05.

(c) Seed Mixture P

This seed mixture shall be applied at the rate of 130 lb/ac consisting of 35 lb/ac of Weeping Alkaligrass, 35 lb/ac of Creeping Red Fescue, 35 lb/ac of Slender Creeping Red Fescue, and 25 lb/ac of Perennial Ryegrass. Seed used for this mixture shall be salt tolerant. Fertilizer shall be applied at the rate of 400 lb/ac. Fertilizer and mulching material, where specified or directed, shall be applied in accordance with 621.05.

(d) ~~Blank~~Seed Mixture Shade

This seed mixture shall be applied at the rate of 145 lb/ac consisting of 35 lb/ac of Fine Fescue, 40 lb/ac of Perennial Ryegrass, 40 lb/ac of Tall Fescue, 10 lb/ac of Kentucky Bluegrass, 15 lb/ac of Timothy, 3 lb/ac of Redtop, and 2 lb/ac of Alsike Clover. Seed used for this mixture shall be shade tolerant varieties or cultivars. Fertilizer and mulching material, where specified or directed, shall be applied in accordance with 621.05.

(e) Seed Mixture ~~D~~Floodplain

~~This seed mixture is intended for ditch situations which experience seasonal to chronic saturated soils. This seed mixture shall be used on maintenance contracts or where otherwise specified. This mixture shall be applied at the rate of 16 lb/ac. It shall consist of the materials and be applied at the rates shown below.~~ *This seed mixture is intended for areas that require natural habitat restoration below the 100 year floodplain in conjunction with IDNR Construction in a Floodway permit. If certain species in this mix are unavailable, substitutions may be allowed when approved by the Engineer. This mix quantity shall be measured in pure live seed, PLS, pounds per acre. This mixture shall be applied at a rate of 20 PLS lb/ac. This seed mix shall include seasonal cover crop. Fertilizer shall not be applied with this seed mixture.*

Common Name	Botanical Name	Application Rates
Alkaligrass	<i>Puccinellia distans</i>	3 oz/ae
Bearded Strangletop	<i>Leptochloa fascicularis</i>	3 oz/ae
Creeping Bentgrass	<i>Agrostis stolonifera</i>	2 lb/ae
Fowl Manna Grass	<i>Glyceria striata</i>	2 oz/ae
Perennial Ryegrass	<i>Lolium perenne</i>	5 lb/ae
Red Fescue	<i>Festuca rubra</i>	2 lb/ae
Redtop	<i>Agrostis gigantea</i>	1 lb/ae
Rice Cut Grass	<i>Leersia oryzoides</i>	2 oz/ae
Virginia Wild Rye	<i>Elymus virginicus</i>	5 lb/ae
Wetland Carex Species	<i>Carex spp.</i>	3 oz/ae
Wetland Rush Species	<i>Juncus spp.</i>	3 oz/ae

Common Name	Botanical Name	Application Rate, PLS
<i>Virginia Wild Rye</i>	<i>Elymus virginicus</i>	2 lb/ac
<i>Canada Wildrye</i>	<i>Elymus canadensis</i>	2 lb/ac
<i>Rough Dropseed</i>	<i>Sporobolus asper</i>	2.5 lb/ac
<i>Little Bluestem</i>	<i>Schizachyrium scoparium</i>	8.4 lb/ac
<i>Purpletop</i>	<i>Tridens flavus</i>	0.4 lb/ac
<i>Upland Bentgrass</i>	<i>Agrostis perennans</i>	0.2 lb/ac
<i>Partridge Pea</i>	<i>Chamaecrista fasciculata</i>	0.8 lb/ac
<i>Illinois Bundleflower</i>	<i>Desmanthus illinoensis</i>	0.6 lb/ac
<i>Black-eyed Susan</i>	<i>Rudbeckia hirta</i>	0.6 lb/ac
<i>Showy Tick Trefoil</i>	<i>Desmodium canadense</i>	0.4 lb/ac
<i>Foxtail Barley</i>	<i>Hordeum jubatum</i>	0.6 lb/ac
<i>Purple Coneflower</i>	<i>Echinacea purpurea</i>	0.6 lb/ac
<i>False Sunflower</i>	<i>Heliopsis helianthoides</i>	0.4 lb/ac
<i>Common Milkweed</i>	<i>Asclepias syriaca</i>	0.2 lb/ac
<i>Yellow Coneflower</i>	<i>Ratibida pinnata</i>	0.2 lb/ac

<i>Wild Bergamot</i>	<i>Monarda fistulosa</i>	<i>0.1 lb/ac</i>
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Seed used in this mixture shall be wet tolerant. If certain species in this mix are unavailable, substitutions may be submitted for approval. The mix shall be applied as specified per acre. The method of planting shall be by means of hydroseeding or by means of a hand method with a minimal amount of mulch applied in a separate operation. Fertilizer shall not be added to this seed mixture. A seasonal cover crop shall be applied with seed mixture Floodplain. The Spring Summer Cover Crop mix shall be applied during spring and summer months and no later than July 31 of the current year. The Fall Cover Crop mix shall be applied in fall months and no earlier than August 1 of the current year. Cover crops shall be applied at 50 PLS lb/ac.

1. Spring Summer Cover Crop

<i>Common Name</i>	<i>Botanical Name</i>	<i>Application Rate, PLS</i>
<i>Common Oat</i>	<i>Avena sativa</i>	<i>35 lb/ac</i>
<i>Annual Ryegrass</i>	<i>Lolium multiflorum</i>	<i>15 lb/ac</i>

2. Fall Cover Crop

<i>Common Name</i>	<i>Botanical Name</i>	<i>Application Rate, PLS</i>
<i>Cereal Rye</i>	<i>Secale cereal</i>	<i>35 lb/ac</i>
<i>Austrian Winter Pea</i>	<i>Pisum sativum</i>	<i>10 lb/ac</i>
<i>Crimson Clover</i>	<i>Trifolium incarnatum</i>	<i>5 lb/ac</i>

(f) Blank

(g) Seed Mixture Grass

This seed mixture shall be placed when specified as shown below.

1. Type 1

This seed mixture shall be placed at the rate of 235 lb/ac consisting of 15 lb/ac of Smooth Brome Grass, 10 lb/ac of Orchard Grass, and the mixture specified in 621.06(a).

2. Type 2

This seed mixture shall be placed at the rate of 125 lb/ac consisting of 20 lb/ac of Smooth Brome Grass, 10 lb/ac of Orchard Grass, 40 lb/ac of Kentucky Bluegrass, 35 lb/ac of Creeping Red Fescue, and 20 lb/ac of Perennial Rye Grass.

(h) Seed Mixture Legume

This seed mixture shall be placed when specified as shown below. Mulched seeding, when specified, shall be in accordance with 621.07. Legume mixtures shall only be used from February 1 to May 31.

1. Type 1

This seed mixture shall be placed at the rate of 230 lb/ac consisting of 7 lb/ac of Korean Lespedeza, 6 lb/ac of Red Clover or Alsike Clover, 7 lb/ac of Partridge Pea and the mixture specified in 621.06(a).

2. Type 2

This seed mixture shall be placed at the rate of 150 lb/ac consisting of 7.5 lb/ac of Korean Lespedeza, 7.5 lb/ac of Red Clover or Alsike Clover, 7.5 lb/ac of Birdsfoot Trefoil, 7.5 lb/ac of Partridge Pea, 50 lb/ac of Kentucky Bluegrass, 45 lb/ac of Creeping Red Fescue, and 25 lb/ac of Perennial Rye Grass.

“Do Not Spray” signs shall be placed near the beginning and end of this work, at 200 ft intervals, or as otherwise directed. The sign shall be 16 gauge aluminum. The size and message arrangement shall be as shown on the plans. The sign background shall be white. The sign lettering shall be black. The sign shall not be reflectorized. Paint and primer shall be in accordance with 909.04. The sign post shall be placed as shown on the plans. The post shall otherwise be in accordance with 910.15.

621.07 Mulched Seeding

Mulched seeding, when specified, shall consist of applying the seed mixtures in accordance with 621.06(a), 621.06(b), and 621.06(c), and 621.06(d) as specified. This mixture shall include fertilizer and mulching material in the amounts set out herein. If erosion control blanket is specified, the Contractor will be allowed to use excelsior blanket, paper mat, or straw mat in accordance with 621.05(d), 621.05(e), or 621.05(f), respectively.

SECTION 621, BEGIN LINE 349, DELETE AND INSERT AS FOLLOWS:

621.11 Seeding or Sodding Disturbed Areas Outside Construction Limits

Areas outside shown construction limits which are disturbed by the Contractor shall be repaired to their original condition or better. The areas shall be seeded with a seed mixture grass type 2 in accordance with 621.06(g)2 or seed mixture legume type 2 in accordance with 621.06(h)2-R, U, P, Shade, or Floodplain as directed. If the contract contains seed mixtures other than the two mixes listed here, the Contractor may seed the disturbed area with the mixture contained in the contract provided the area is less than 1 ac in size. If the area disturbed is well maintained and part of a residential or commercial lot, it shall be sodded unless the Engineer determines otherwise.

SECTION 621, BEGIN LINE 359, INSERT AS FOLLOWS:

621.12 Seasonal Limitations

The Contractor shall post a warranty bond for all permanent seeding done from October 16 through January 31. Only completed seeding with seed mixtures R, U, or P, or Shade shall will satisfy the requirements of the warranty bond. Seeding without mulch shall not be done between May 1 and August 15.

Sod placed during the months of June, July, and August shall be subject to the following conditions:-

- (a) sod shall be in good, live, growing condition; and
- (b) sod shall be placed within 36 h after cutting and protected from damage during that period.

Winter sodding will be allowed when the temperature is above 35°F. No frozen sod shall be laid and no sod shall be laid on frozen soil. Sod shall be properly protected from drying out and shall be laid within 48 h after cutting.

SECTION 621, BEGIN LINE 377, INSERT AS FOLLOWS:

621.13 Method of Measurement

Fertilizer and mulching material will be measured by the ton. Seed mixtures will be measured by the pound. *Spring Summer Cover Crop and Fall Cover Crop seed mixtures used in conjunction with seed mixture Floodplain will not be measured for payment.* Topsoil will be measured by the cubic yard in accordance with 211.09. Mulched seeding and sodding will be measured by the square yard. Water will be measured by the 1,000 gal. Mobilization and demobilization for seeding will be measured per each trip, when directed, to the project site. "Do Not Spray" signs will be measured by the number of signs installed.

SECTION 621, BEGIN LINE 420, INSERT AS FOLLOWS:

The cost of leguminous inoculants, preparing seed beds, sowing, raking, and all other necessary incidentals shall be included in the cost of seed mixtures. *The cost of Spring Summer Cover Crop and Fall Cover Crop used in conjunction with seed mixture Floodplain shall be included in the cost of seed mixture Floodplain.* The cost of furnishing and placing fertilizer, *water*, seed mixtures, and mulching material, in addition to the incidentals listed above for seed mixtures shall be included in the cost of mulched seeding.

SECTION 914, BEGIN LINE 29, DELETE AND INSERT AS FOLLOWS:

914.04 Grass, and Legume, and Forb Seed

Grass, ~~and~~ legume, *and forb* seed in the quantities and varieties required shall be furnished full-tagged and delivered in properly designated packages or bags as directed. Seeds shall be in accordance with the following requirements.

~~Seed of warm season grasses, forbs, or aquatic species shall be delivered to the project site individually packaged by species. Warm season~~*Native* grass and forb seed shall be purchased from lots for which test results are provided. Testing will not be required for aquatic species. When normal germination testing is not practical for forb species, a tetrazolium test shall be conducted to determine seed viability.

Seeds shall contain none of the *prohibited* noxious weeds listed ~~herein~~*in 360 IAC 1-1-5* or any that are listed in the Acts of the General Assembly of the State. ~~Noxious weeds are Canada Thistle, Field Bindweed, Johnson Grass, Perennial Peppergrass, Perennial Sowthistle, Quack Grass, Russian Knapweed, and Wild Garlic. Restricted noxious weed seed listed in 360 IAC 1-1-6 shall not exceed 0.25% by weight in accordance with IC 15-15-1-32.~~

Clover shall be free from dodder with no tolerance allowed. ~~Lespedeza will be allowed no more than 90 dodder/lb and 45 giant foxtail per lb.~~

Requirements noted above are minimum and trade allowances will not be allowed.

Seed shall be purchased from sources of supply that have been ~~sampled, tested,~~*accepted* and reported by the State Seed Commissioner, Purdue University, West Lafayette, Indiana, and found to be satisfactory. Seed of ~~warm season~~*native* grasses shall

be tested by the State Seed Commissioner or *by* an independent laboratory. Seed of forbs shall be tested by an independent laboratory. Test results by independent laboratories shall be signed by a Registered Seed Technologist. ~~Test results and~~ shall be submitted to the State Seed Commissioner, ~~and a copy to the Office of Materials Management.~~ This report is required before seed is ~~sown~~ *installed*. ~~Such test report shall be no more than nine months old at the time seed is used and the use of the seed shall be subject to approval. Seed will be considered to be expired 15 months after the date it was tested. Expired seed shall not be installed.~~

~~Seed which has been tested by the State Seed Commissioner may be used without further testing provided each bag of seed bears a tag showing the various seeds and their respective percentage in the bag. Each bag of seed used on the contract shall be accompanied by a copy of the State Seed Commissioner's letter for acceptance in accordance with 916.02(e). Each bag or container of seed shall have a printed tag or label providing all of the information required by IC 15-15-1-32. Seed from bags with no labels, illegible labels, or with labels not giving all of the required information will not be accepted.~~

The seed supplier shall provide certification in accordance with 916.02(e) that lists the seed lots used in the mixture and shall indicate that the seed mixture supplied meets the contract requirements for the specific contract that the particular seed mixture is supplied. Also, as part of the certification, the seed supplier shall provide a copy of the State Seed Commissioner's letter for the seed mixture that shows that each seed lot has been tested and found to be satisfactory. The specific test results for each seed lot shall also be attached to the certification.

Seed which meets the weed seed tolerance, but does not comply with the purity or germination requirements, or both, may be used provided the percentage of purity or the percentage of germination is not more than 10% below the minimum specified and that the result obtained from the following formulae does not exceed the maximum percent of weed seeds allowed.

$$W \times P \times G = M \text{ or less}$$

$$P = \frac{\text{Minimum Specified Purity}}{\text{Actual Purity}}$$

$$G = \frac{\text{Minimum Specified Germination}}{\text{Actual Germination}}$$

W = Actual percent of weed seeds

P = Purity Factor

G = Germination Factor

M = Maximum percent of weed seeds allowed.

If such seeds are selected for use, the amount to be used shall be increased in accordance with the following formula except the amount used shall not be less than that specified.

Amount to be used = Amount specified x P x G

Percentages of Weed Seed Content		
Variety		% (not more than)
Alfalfa	<i>Medicago sativa</i>	0.5
Alkaligrass	<i>Puccinellia distans</i>	0.5
Alsike Clover	<i>Trifolium hybridum</i>	0.5
Birdsfoot Trefoil	<i>Lotus corniculatus</i>	0.5
Chewings Fescue	<i>Festuca rubra</i> (var. fallax)	0.5
Creeping Bentgrass	<i>Agrostis stolonifera</i>	0.5
Creeping Red Fescue	<i>Festuca rubra</i> spp. rubra	0.5
Fowl Manna Grass	<i>Glyceria striata</i>	‡
Illinois Bundleflower	<i>Desmanthus illinoensis</i>	0.5
Kentucky Bluegrass	<i>Poa pratensis</i>	0.5
Korean Lespedeza	<i>Lespedeza stipulacea</i>	0.75
Sericea Lespedeza	<i>Lespedeza sericea</i>	0.75
Ladino Clover	<i>Trifolium repens</i> (var. latum)	0.5
Lemons Alkali Grass	<i>Puccinellia airoides</i> (Lemons)	0.5
Orchard Grass	<i>Dactylis glomerata</i>	0.5
Perennial Rye Grass	<i>Lolium perenne</i>	0.5
Purple Prairie Clover	<i>Dalea purpurea</i>	0.5
Red Clover	<i>Trifolium pratense</i>	0.5
Red Fescue	<i>Festuca rubra</i>	0.5
Red top	<i>Agrostis gigantea</i>	0.75
Rice Cut Grass	<i>Leersia oryzoides</i>	‡
Rough Stalked Meadowgrass	<i>Poa trivialis</i>	0.5
Rye, Agricultural	<i>Secale cereale</i>	0.5
Rye, Annual	<i>Lolium multiforum</i>	0.5
Sheeps Fescue	<i>Festuca ovina</i>	0.5
Smooth Brome Grass	<i>Bromus inermis</i>	0.95
Sweet Clover white (Scarified)	<i>Melilotus alba</i>	0.5
Sweet Clover yellow (Scarified)	<i>Melilotus officinalis</i>	0.5
Tall Fescue	<i>Festuca arundinacea</i>	0.5
Timothy	<i>Phleum pratense</i>	0.5
Virginia Wild Rye	<i>Elymus virginicus</i>	‡
White Dutch Clover	<i>Trifolium repens</i>	0.75

Percentages of Purity		
Variety		% (not less than)
Alfalfa	<i>Medicago sativa</i>	99
Alkaligrass	<i>Puccinellia distans</i>	90
Alsike Clover	<i>Trifolium hybridum</i>	97
Birdsfoot Trefoil	<i>Lotus corniculatus</i>	98
Chewings Fescue	<i>Festuca rubra</i> (var. fallax)	97
Creeping Bentgrass	<i>Agrostis stolonifera</i>	98

Creeping Red Fescue	<i>Festuca rubra</i> spp. <i>rubra</i>	95
Fowl Manna Grass	<i>Glyceria striata</i>	95
Illinois Bundleflower	<i>Desmanthus illinoensis</i>	98
Kentucky Bluegrass	<i>Poa pratensis</i>	85
Korean Lespedeza	<i>Lespedeza stipulacea</i>	98
Sericea Lespedeza	<i>Lespedeza sericea</i>	98
Ladino Clover	<i>Trifolium repens</i> (var. <i>latum</i>)	98
Lemons Alkali Grass	<i>Puccinellia airoides</i> (Lemons)	85
Orchard Grass	<i>Dactylis glomerata</i>	85
Perennial Rye Grass	<i>Lolium perenne</i>	95
Purple Prairie Clover	<i>Dalea purpurea</i>	99
Red Clover	<i>Trifolium pratense</i>	98
Red Fescue	<i>Festuca rubra</i>	95
Red top	<i>Agrostis gigantea</i>	90
Rice Cut Grass	<i>Leersia oryzoides</i>	98
Rough Stalked Meadowgrass	<i>Poa trivialis</i>	85
Rye, Agricultural	<i>Secale cereale</i>	99
Rye, Annual	<i>Lolium multiforum</i>	95
Sheeps Fescue	<i>Festuca ovina</i>	97
Smooth Brome Grass	<i>Bromus inermis</i>	85
Sweet Clover white (Scarified)	<i>Melilotus alba</i>	98
Sweet Clover yellow (Scarified)	<i>Melilotus officinalis</i>	98
Tall Fescue	<i>Festuca arundinacea</i>	98
Timothy	<i>Phleum pratense</i>	90
Virginia Wild Rye	<i>Elymus virginicus</i>	90
White Dutch Clover	<i>Trifolium repens</i>	97

Percentages Actual Germination		
Variety		% (not less than)
Alfalfa	<i>Medicago sativa</i>	85*
Alkaligrass	<i>Puccinellia distans</i>	80
Alsike Clover	<i>Trifolium hybridum</i>	85*
Birdsfoot Trefoil	<i>Lotus corniculatus</i>	80*
Chewings Fescue	<i>Festuca rubra</i> (var. <i>fallax</i>)	75
Creeping Bentgrass	<i>Agrostis stolonifera</i>	85
Creeping Red Fescue	<i>Festuca rubra</i> spp. <i>rubra</i>	80
Fowl Manna Grass	<i>Glyceria striata</i>	90
Illinois Bundleflower	<i>Desmanthus illinoensis</i>	85
Kentucky Bluegrass	<i>Poa pratensis</i>	80
Korean Lespedeza	<i>Lespedeza stipulacea</i>	80*
Sericea Lespedeza	<i>Lespedeza sericea</i>	80*
Ladino Clover	<i>Trifolium repens</i> (var. <i>latum</i>)	85*
Lemons Alkali Grass	<i>Puccinellia airoides</i> (Lemons)	80
Orchard Grass	<i>Dactylis glomerata</i>	80
Perennial Rye Grass	<i>Lolium perenne</i>	90
Purple Prairie Clover	<i>Dalea purpurea</i>	75

Red Clover	Trifolium pratense	90*
Red Fescue	Festuca rubra	85
Red top	Agrostis gigantea	80
Rice Cut Grass	Leersia oryzoides	80
Rough Stalked Meadowgrass	Poa trivialis	75
Rye, Agricultural	Secale cereale	80
Rye, Annual	Lolium multiflorum	90
Sheeps Fescue	Festuca orina	75
Smooth Brome Grass	Bromus inermis	80
Sweet Clover white (Scarified)	Melilotus alba	85*
Sweet Clover yellow (Scarified)	Melilotus officinalis	85*
Tall Fescue	Festuca arundinacea	85
Timothy	Phleum pratense	85
Virginia Wild Rye	Elymus virginicus	70
White Dutch Clover	Trifolium repens	90*

* including not more than 25% hard seeds.

For all other seed indicated to be used but not shown in the charts above, that seed shall be placed at the indicated rate and be 100% pure live seed.

SEED CERTIFICATION, OTHER

This is to certify that the seed mixture supplied, _____, by
(name of seed mixture)

(Manufacturer's Name) (source code)

located in _____,
(City) (State)

manufactured at _____
(Location of Manufacturing Plant)

and has Case Review Number _____ meets INDOT Standard Specifications.

Attached are copies of the State Seed Commissioner's Letter and test reports for each lot of seed used in the above-mentioned seed mixture.

Seed Species	Lot No.	Seed Expiration Date
<<All seed species contained in the seed mixture shall be listed in this space. >>		

628-C-265 COMPUTER SYSTEM, COMPUTER SYSTEM EQUIPMENT, OFFICE MACHINE
AND COMMUNICATIONS

(Adopted 11-20-19)

The Standard Specifications are revised as follows:

SECTION 628, BEGIN LINE 170, DELETE AND INSERT AS FOLLOWS:

(c) Computer System and Computer System Equipment

When specified in the Schedule of Pay Items, the Contractor shall provide the computer system and computer system equipment in accordance with the minimum requirements listed below for the Department's exclusive use for each field office.

1. Computer System

- a. Laptop computer
- b. Processor – Intel ~~or AMD~~ compatible, *minimum dual-core 2.0 GHz*
- c. Memory – 8.0 GB, ~~1333~~ *1866 MHz*
- d. Hard Drive – 500 GB, ~~5,400~~ *7,200 rpm* or ~~128~~ *256 GB SSD (Solid State Drive)*
- e. Ports – Two USB 2.0 compliant ports, *one USB 3.0 compliant port*
- f. Network/Wireless – Ethernet or wireless card to be compatible with the selected internet and office network connections
- g. Graphics – Integrated graphics card
- h. Display – *Minimum 15 in. WXGA* ~~1366 by 768~~ *LCD panel*
- i. Battery – ~~Nine~~ *Minimum 3-cell Lithium ion*
- j. Miscellaneous - One ~~compatible port replicator~~ *laptop docking station compatible with the Monitor, with AC adapter, one additional AC adapter, one DC adapter, and one padded carrying case.*

The initial condition of the computer system shall be nearly pristine. All owner installed e-mail accounts, games, spyware, online services, applications, network or other profiles previously set up on the system shall be removed prior to placement in the field office. If the system was provided for a previous Department contract, all software not specified shall be removed prior to placement in the current field office.

The Contractor shall provide a minimum 900 J, six-outlet surge protector for each computer system specified in the contract.

2. Computer System Equipment

- a. Monitor – *Minimum 22 in. widescreen digital flat digital panel with VGA and DVI connections that enables connectivity to DisplayPort and HDMI connections or an adapter*
- b. Keyboard – USB ~~enhanced~~ *multimedia keyboard*
- c. Mouse – Optical USB 2-button scroll mouse
- d. Miscellaneous - One ~~port replicator~~ *laptop docking station compatible with the Monitor, with AC adapter, one additional AC adapter, one DC adapter that is compatible with the Department's provided laptop or mobile device, and one minimum 900 J six-outlet surge protector.*

3. Computer Software

The Contractor shall provide software for the computer system in accordance with the minimum requirements listed below.

- a. Operating System Software – Windows 10 Professional.
- b. Productivity Software – Microsoft Office 2013 Small Business and Adobe Acrobat Professional ~~XDC~~.
- c. Security Software – McAfee ~~Virus Scan Plus~~ *Total Protection*.

SECTION 628, BEGIN LINE 244, DELETE AND INSERT AS FOLLOWS:

The Department will be utilizing the computer system to run or access Department provided construction management software applications. These applications are known to run on Intel ~~and AMD~~ compatible equipment when using the Windows 10 Professional operating system. If the Department experiences problems running these applications due to hardware or software compatibility, the Contractor shall replace the equipment to ensure compatibility to the satisfaction of the Engineer within five business days.

The computer system shall be maintained in good working order. If a portion of the system becomes defective, inoperable, damaged, or stolen, that portion shall be repaired or replaced within five business days after the Contractor is notified by the Engineer. If the computer system and related accessories are not maintained by the Contractor as required, the Engineer may withhold partial payments until the computer system is operational to the Department's satisfaction.

(d) Field Office Internet Service

The Contractor shall provide broadband internet service for the field office. Broadband internet service shall be capable of a minimum average ~~upload~~ *download* speed of ~~50~~ *550* Mbps and a minimum ~~download~~ *upload* speed of ~~50~~ *505* Mbps, unless otherwise approved by the Engineer.

SECTION 628, BEGIN LINE 302, DELETE AND INSERT AS FOLLOWS:

4. Miscellaneous Office Machine Requirements

The Contractor shall provide letter, legal and ledger size paper, ink cartridges and toner as required by the Engineer for the operation of each piece of equipment provided.

If any office machine becomes defective, inoperable, damaged, ~~or~~ *stolen, or incompatible with the Department provided devices*, that machine shall be repaired or replaced within five business days after the Contractor is notified by the Engineer. If any of the office machines are not maintained by the Contractor as required, the Engineer may withhold partial payments until the machine is operational to the Department's satisfaction.

SECTION 628, BEGIN LINE 333, DELETE AND INSERT AS FOLLOWS:

628.03 Mobile Internet Service

When specified, the Contractor shall provide mobile internet service for the Department's exclusive use.

The mobile broadband internet service access device will be used by the Department in a laptop computer provided by either the Contractor or the Department.

The device shall connect to the laptop via a USB 2.0 *or* USB 3.0 compliant port, or by wireless means. The device and service shall be capable of a minimum 3G speed. The internet service rate plan shall include unlimited data and time usage with no roaming charge for national domestic use. All software necessary for the operation of the device shall be provided to the Engineer.

702-R-691 STRUCTURAL CONCRETE

(Revised 06-18-20)

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 7, INSERT AS FOLLOWS:

702.02 Classes of Concrete

The following classes of concrete shall be used where specified.

Class of Concrete	A	B	C
Cement content in lbs/cu yd	564	470	658
Maximum water/cement ratio in lbs of water per lbs of cement	0.450	0.620	0.443
<i>Minimum water/cement ratio in lbs of water per lbs of cement*</i>	<i>0.380</i>	<i>0.400</i>	<i>0.380</i>
<i>*The minimum water/cement ratio for all slipformed railings shall be 0.360.</i>			

SECTION 702, BEGIN LINE 34, DELETE AND INSERT AS FOLLOWS:

Fabric for Waterproofing.....~~918.01~~918.06

SECTION 702, BEGIN LINE 99, DELETE AND INSERT AS FOLLOWS:

~~Blended portland pozzolan cements, fly ash, and ground granulated blast furnace slag used as a pozzolan may only be used in concrete bridge decks between April 1 and October 15 of the same calendar year.~~ Slag cement or silica fume in accordance with 709.05(c) shall be used in all bridge decks and reinforced concrete bridge approaches.

Blended portland pozzolan cements, fly ash, and slag cement may be used in concrete when the ambient temperature is above 50°F during the entire placement period. Immediately following placement, the average ambient temperature shall be above 50°F for the entire curing period. The average temperature shall be calculated based on hourly temperature measurements taken at the jobsite or from published weather station data within 10 miles of the jobsite. If the temperature restrictions are not met during placement or during the required curing period, curing shall continue and the element shall not be put into service until the strength requirements in accordance with 702.24 are met. If no test specimens are available to determine the concrete strength, curing shall continue and the concrete will be adjudicated as failed material. In no case shall the curing period be reduced below the minimum number of days specified for the element.

SECTION 702, BEGIN LINE 116, DELETE AND INSERT AS FOLLOWS:

Class A concrete shall contain a water-reducing admixture. Class C concrete shall contain either a water-reducing admixture or both a water-reducing admixture and a retarding admixture. The types used shall not be changed during any individual contiguous pour. For class C concrete, the types of admixtures to be used, shall be selected based on the expected concrete or air temperature. When either temperature is expected to be 65°F or above, both a water-reducing admixture and a retarding admixture shall be used. A water-reducing admixture shall be used when both temperatures are

expected to be below 65°F unless retardation is required due to the structure design or the proposed pour sequence such as the requirements for floor slab pours set out in 704.04. If class C concrete contains ground granulated blast furnace slag, the producer may propose an alternate temperature threshold for including a retarding admixture. *If either class A concrete or class C concrete is used in slipformed railings, the requirement to use a water reducing admixture is waived.* Air-entraining cements will not be allowed in class C concrete.

SECTION 702, BEGIN LINE 237, INSERT AS FOLLOWS:

Concrete that is not within the specified slump limits at time of placement shall not be used. Except as required in 702.05 for *class A and class C* concrete, chemical admixtures type A, type B, type D, type F, and type G, may be used in the concrete. Chemical admixtures type C and type E will be allowed only with prior written permission.

SECTION 702 BEGIN LINE 477, DELETE AND INSERT AS FOLLOWS:

702.11 Cold Weather Concrete

When it is necessary to place concrete at or below an atmospheric temperature of 35°40°F, or whenever it is determined that the temperature may fall below 35°40°F within the curing period, the water, aggregates, or both shall be heated and suitable enclosures and heating devices provided. Cold weather concrete shall be placed at the risk of the Contractor and shall be removed and replaced with no additional payment if it becomes frozen or otherwise damaged.

SECTION 702, BEGIN LINE 528, DELETE AND INSERT AS FOLLOWS:

702.12 Consistency

Slump will be measured in accordance with 505 and shall be no less than 1 in. and no more than 46 in. except for concrete placed in foundation seals.

SECTION 702, BEGIN LINE 1286, INSERT AS FOLLOWS:

702.24 Application of Loads to and Acceptance of New Concrete

Except as otherwise hereinafter provided, application of loads to new concrete shall be in accordance with the following:

- (a) Equipment or traffic will not be allowed on structures until test beams representing all concrete required to carry live loads have attained a flexural strength of 550 psi for third-point loading.
- (b) Unbalanced backfill will not be allowed until test beams representing the concrete required to resist it have attained a flexural strength of 440 psi for third-point loading. The unbalanced height shall not exceed 10 ft until test beams representing the concrete have attained a flexural strength of 480 psi for third-point loading.
- (c) The dead weight of steel or precast concrete superstructure shall not be placed on concrete until test beams representing the concrete have attained a flexural strength of 400 psi for third-point loading. A dead load shall not be placed on hammer-head piers until test beams representing have attained a flexural strength of at least 480 psi for third-point loading. The

concrete floor, if to be placed thereon, shall not be poured until test beams representing the concrete supporting the superstructure have attained a flexural strength of at least 440 psi for third-point loading.

- (d) Test beams representing concrete anchoring inserts to support falsework shall attain a flexural strength of a minimum of 480 psi for third-point loading, before a dead load of concrete is applied.
 - (e) *When blended portland pozzolan cements, fly ash, or slag cement are used in bridge railings or concrete barrier and the temperature limitations in accordance with 702.05 are not met, the bridge railings or concrete barrier may be put into service when flexural strength testing performed on test specimens indicate a modulus of rupture of 500 psi has been attained.*
-

720-R-646 CURB INLET CASTING

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 910, AFTER LINE 409, INSERT AS FOLLOWS:

Where a 6 in. curb height is specified, a monolithic frame and curb box may be used in place of one with modular components, provided the monolithic casting's dimensions match those shown on the plans.

801-C-157 CERTIFICATION OF TEMPORARY TRAFFIC CONTROL DEVICES

(Revised 05-23-13)

Category I Devices

The Contractor shall certify that the following temporary traffic control devices to be used do not exceed the maximum values shown in the table below, and are considered crashworthy at Test Level 3 in accordance with NCHRP 350.

Device	Composition	Max. Weight	Max. Height
Single Piece Traffic Cones	Rubber	20 lb	36 in.
	Plastic	20 lb	48 in.
Tubular Markers	Rubber	13 lb	36 in.
	Plastic	13 lb	36 in.
Single Piece Drums	High Density Plastic	77 lb	36 in.
	Low Density Plastic	77 lb	36 in.
Delineators	Plastic, Fiberglass	N/A	48 in.

No lights, signs, flags, or other auxiliary attachments are included in the weight of the devices listed above. Reflective sheeting or reflective buttons are included on delineators. Maximum weights, including ballast, do not exceed the values shown in the table. "Single piece" refers to the construction of the body of the drum exclusive of a separate base, if any.

Type A or type C warning lights in accordance with the following specifications will be allowed on drums if they are firmly attached with vandal resistant 1/2 in. diameter by 4 in. cadmium plated steel bolt with nut and a 1 1/2 in. high cup washer.

1. The weight shall be no more than 5 lb.
2. The lens diameter shall be 7 to 8 in.
3. The height of the light shall be 11 to 14 in.

Category II Devices

Category II temporary traffic control devices include type III barricades, vertical panels, portable sign standards, and other light-weight traffic control devices.

Category II temporary traffic control devices shall be in accordance with the NCHRP 350, Test Level 3.

A form will be provided at the preconstruction conference for the Contractor to complete and return to the Engineer prior to the placement of category I or II traffic control devices.

801-T-198 TRAFFIC CONTROL FOR TRAFFIC BREAKS

(Revised 05-25-17)

The Standard Specifications are revised as follows:

SECTION 801, BEGIN LINE 826, DELETE AND INSERT AS FOLLOWS:

801.16 Temporary Traffic Control Zone

A temporary traffic control zone is a work zone with frequently changing operation, a maximum duration of seven calendar days; mobile operation; or a temporary traffic ~~stoppage~~*break*.

SECTION 801, BEGIN LINE 860, DELETE AND INSERT AS FOLLOWS:

(c) Traffic Control for ~~Temporary Traffic Stoppage~~*Breaks*

Traffic shall not be allowed to pass directly beneath personnel or equipment working on an overhead structure. *Traffic breaks, when approved by the Engineer, may be implemented for moving equipment or materials over the traveled way. Traffic breaks shall be accomplished by temporary stoppage, rolling slowdown or other approved method.* Traffic ~~stoppage~~*breaks during an overhead operation* shall not exceed 20 minutes at one time. There shall be enough time between consecutive ~~stoppages~~*breaks* to allow traffic to return to normal flow.

Three working days prior to commencing work which necessitates ~~temporary stoppage~~*breaks* of traffic, written notice shall be given to the Department and the Indiana State Police that highway traffic shall be stopped, *slowed or diverted* temporarily at a specific location, time, and date to accomplish specified work. Traffic shall be safely controlled during the ~~stoppage~~*traffic break*. The following minimum requirements shall be met.

1. On Multi-Lane Divided Highways

Advance warning signs *and pilot vehicles* shall be located as specified or as otherwise directed. ~~For each direction of road closure two flaggers shall be located at the site of the work and a minimum of two additional flaggers shall be used to warn approaching traffic.~~

2. On Non-Divided Highways

Advance warning signs shall be located as specified or as otherwise directed. For each direction of road closure, *a minimum of one* flagger shall be located at the site of the work and a minimum of one additional flagger shall be used to warn approaching traffic.

805-T-078 ELECTRICAL INSULATION SEALANT

(Revised 05-18-17)

The electrical insulation sealant for cable or wire splices as described in 805.05 shall be chosen from the following list:

- (a) Star brite liquid electrical tape, manufactured by Star brite, Inc.
 - (b) 3M Scotchkote Electrical Coating, manufactured by 3M Company
 - (c) 10 Plyseal Insulating Mastic, manufactured by Plymouth Rubber Europa S.A.
 - (d) or approved equal.
-

805-T-084 TRAFFIC SIGNAL EQUIPMENT SALVAGED BY THE DEPARTMENT

(Revised 05-23-11)

The Department desires to salvage the traffic signal equipment listed below:

EQUIPMENT <u>Radio Equipment</u>	EXISTING LOCATION <u>17th & Dunn Intersection</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

805-T-202 ACCESSIBLE PEDESTRIAN SIGNALS WITH SPEECH WALK MESSAGES

(Adopted 11-22-13)

Accessible pedestrian push-buttons shall be provided at:

17th Street & Dunn Street, Bloomington, IN

The walk messages used shall be as follows:

Intersection	Push-button*	Walk Message**
North leg	<u>APS</u>	<u>"Percussive Tone"</u>
South leg	APS	"Percussive Tone"
East leg	<u>APS</u>	"Percussive Tone"
West leg	APS	"Percussive Tone"
* Enter "N/A", or "APS" ** Leave blank, enter "percussive tone" if applicable, or text for speech walk message		

(Leave remainder of this form blank if not applicable)

_____ (_____ leg of intersection)

Walk Message: _____

_____ (_____ leg of intersection)

Walk Message: _____

Special Instructions: _____

805-T-225 TRAFFIC SIGNALS

(Revised 05-21-20)

The Standard Specifications are revised as follows:

SECTION 805, BEGIN LINE 158, DELETE AND INSERT AS FOLLOWS:

805.04 Pole Installation

Working drawings for strain poles or cantilever structures shall be provided in accordance with 105.02. Metal poles shall be erected on concrete foundations and shall be reasonably plumb after installation of signal heads. The handhole side of the pole shall be at right angles to the direction of the signal cantilever arm or span, catenary, and tether. Signal cables shall be brought up inside the poles. Any steel pole, signal cantilever arm, or hardware not galvanized shall be painted with structural steel coating system in accordance with 619.09(a). The surface shall be prepared in accordance with 619.08(a), ~~619.08(b)~~ and 619.08(d). Paint shall be applied in accordance with 619. All rust, scale, and dirt shall be cleaned from the metal surface so that paint adheres to the surface.

The construction of concrete foundations shall be in accordance with 805.13. Timber poles shall be set a minimum of 7 ft in the ground and raked 12 in.

SECTION 805, BEGIN LINE 310, DELETE AND INSERT AS FOLLOWS:

A minimum of 12 in. and a maximum of 18 in. of loop wire duct will be allowed in the detector housing for each loop lead. Concrete used in the installation of detector housings shall be in accordance with 506.04(a), except 506.05 will not apply *and calcium chloride shall not be used*. A CMDS in accordance with ~~502.03~~506.03 shall be submitted, however, utilization of the Department provided spreadsheet is not required. Where a portion of the road is closed or where there is no vehicular traffic, then class A concrete in accordance with 702 may be used. The concrete shall be placed flush with existing surface and shall be covered with a steel plate during the setting time.

902-M-051 ASPHALT MATERIALS

(Revised 12-19-19)

The Standard Specifications are revised as follows:

SECTION 902, BEGIN LINE 76, INSERT AS FOLLOWS:

CRS-2P and HFRS-2P shall be in accordance with AASHTO M 316. The distillation temperature shall be 350°F.

SECTION 902, BEGIN LINE 97, DELETE AND INSERT AS FOLLOWS:

Characteristic ⁽¹⁾	Test Method	AE-90	AE-90S	AE-NT	AE-F	AE-150	AE-PL
Test on Emulsion							
Viscosity, Saybolt Furol at 77°F (25°C), min.	AASHTO T 59			15		50	
Viscosity, Saybolt Furol at 77°F (25°C), max.	AASHTO T 59			100	100		115
Viscosity, Saybolt Furol at 120°F (50°C), min.	AASHTO T 59	50	50			75	
Viscosity, Saybolt Furol at 120°F (50°C), max.	AASHTO T 59					300	
Demulsibility w/35 mL, 0.02N CaCl ₂ , % min.	AASHTO T 59		30				
Demulsibility w/50 mL, 0.10N CaCl ₂ , % min.	AASHTO T 59	75					
Oil Distillate by Distillation, mL/100 g Emul ⁽²⁾ max.	AASHTO T 59	4.0	3.0	4.0	4.0	7.0	3.0
Residue by Distillation, % min.	AASHTO T 59	65	65 ⁽⁴⁾	50	27	65	30
Residue by Distillation, % max.	AASHTO T 59				35		
Sieve Test, % max.	AASHTO T 59	0.10	0.10	0.30	0.10	0.10	0.10
Penetrating Ability, mm, min.	902.02(w)						6
Stone Coating Test, %	902.02(t)3a	90				90	
Settlement, % max.	AASHTO T 59	5		5			
Storage Stability, % max.	AASHTO T 59		1				
Tests on Residue							
Penetration (0.1 mm) at 77°F (25°C), 100g, 5 s, min. ⁽³⁾	AASHTO T 49	100	90				
Penetration (0.1 mm) at 77°F (25°C), 100g, 5 s, max. ⁽³⁾	AASHTO T 49	200	150	40	90		
Penetration (0.1 mm) at 77°F (25°C), 50g, 5 s, min. ⁽³⁾	AASHTO T 49					100	
Penetration (0.1 mm) at 77°F (25°C), 50g, 5 s, max. ⁽³⁾	AASHTO T 49					300	
Ductility at 77°F (25°C), mm, min.	AASHTO T 51	400					
Ash Content, % max.	AASHTO T 111	1.0	1.0	1.0	1.0	1.0	1.0
Float Test at 140°F (60°C), s, min. ⁽³⁾	AASHTO T 50	1200	1200			1200	
Force Ratio	AASHTO T 300		0.3				
Elastic Recovery, at 39°F (4°C)	AASHTO T 301		58				
Notes: ⁽¹⁾ Broken samples or samples more than 4/4 days old will not be tested.							
⁽²⁾ Oil distillate shall be in accordance with ASTM D 396, table 1, grade No. 1.							
⁽³⁾ The Engineer may waive the test.							
⁽⁴⁾ Maximum temperature to be held for 15 minutes at 350 ±9°F (175 ±5°C).							

904-M-052 COARSE AGGREGATES

(Adopted 10-17-19)

The Standard Specifications are revised as follows:

SECTION 904, BEGIN LINE 254, INSERT AS FOLLOWS:

- c. ESAL Category 4 and type D surface mixtures. High friction aggregates including ACBF slag, SF slag, sandstone or aggregates in accordance with ITM 221 shall be used *and at a minimum shall comprise 50% by volume of the coarse aggregate.*

Crushed dolomite and polish resistant aggregates may be used up to a maximum 50% by volume of the coarse aggregate material retained on the No. 4 (4.75 mm) sieve when blended with a high friction aggregate.

Crushed stone and gravel may be used up to a maximum 20% by volume of the coarse aggregate material retained on the No. 4 (4.75 mm) sieve when blended with a high friction aggregate.

918-M-053 GEOTEXTILES PROPERTIES

(Adopted 12-19-19)

The Standard Specifications are revised as follows:

SECTION 918, BEGIN LINE 30, DELETE AND INSERT AS FOLLOWS:

The geotextile shall meet the following requirements:

(a) Geotextile Properties for Riprap and Revetment Applications

Test	Method, ASTM	Requirements ⁽¹⁾				
		Type 1A	Type 1B	Type 2A	Type 2B	Type 3
Grab Tensile Strength, min.	D 4632	200 lbs	200 lbs	250 lbs	300 lbs	250 lbs
Grab Elongation	D 4632	≥ 50%	< 50%	≥ 50%	< 50%	< 50%
CBR Puncture Strength, min.	D 6241	500 lbs	600 lbs	625 lbs	1000 lbs	875 lbs
Trapezoid Tear Strength, min.	D 4533	80 lbs	75 lbs	100 lbs	150 lbs	60 lbs
UV Degradation Resistance 500 hrs, min.	D 4355 D 6637	70%	70%	70%	70%	90%
Apparent Opening Size, AOS	D 4751	≤ No. 80 sieve, for soils ≥ 40% passing the No. 200 sieve	≤ No. 40 sieve, for soils < 40% passing the No. 200 sieve	≤ No. 100 sieve, for soils ≥ 40% passing the No. 200 sieve	≤ No. 40 sieve, for soils < 40% passing the No. 200 sieve	≤ No. 70 sieve
Permittivity	D 4491	≥ 1.2 sec ⁻¹	≥ 2.1 sec ⁻¹	≥ 0.80 sec ⁻¹	≥ 0.90 sec ⁻¹	0.28 sec ⁻¹
Note: (1) All values are minimum average roll values (MARV) as determined in accordance with ASTM D 4354 in the weaker principal direction, except AOS size is based on maximum average roll value.						

(b) Geotextile Properties for Underdrains and Drainage Applications

Test	Method, ASTM	Requirements ⁽¹⁾⁽²⁾				
		Type 1A	Type 1B	Type 2A	Type 2B	Type 3
Grab Tensile Strength, min.	D 4632	80 lbs	200 lbs	160 lbs	200 lbs	200 lbs
Grab Elongation	D 4632	≥ 50%	< 50%	≥ 50%	< 50%	< 50%
CBR Puncture Strength, min.	D 6241	175 lbs	600 lbs	410 lbs	750 lbs	1100 lbs
UV Degradation Resistance 500 hrs, min.	D 4355 D 6637	70%	70%	70%	70%	90%
Apparent Opening Size, AOS	D 4751	≤ No. 50 sieve, for soils ≥ 40% passing the No. 200 sieve	≤ No. 40 sieve, for soils < 40% passing the No. 200 sieve	≤ No. 70 sieve, for soils ≥ 40% passing the No. 200 sieve	≤ No. 30 sieve, for soils < 40% passing the No. 200 sieve	≤ No. 40 sieve
Permittivity, min.	D 4491	≥ 1.2 sec ⁻¹	≥ 2.1 sec ⁻¹	≥ 0.8 sec ⁻¹	≥ 1.5 0.9 sec ⁻¹	0.90 sec ⁻¹
Notes: (1) All values are minimum average roll values (MARV) as determined in accordance with ASTM D 4354 in the weaker principal direction, except AOS size is based on maximum average roll value. (2) Type 3 value is a maximum average roll value (Max ARV) as determined in accordance with ASTM D 4354.						

(c) Geotextile Properties for Pavement or Subgrade Stabilizations

Test	Method, ASTM	Requirements ⁽¹⁾			
		Type 1A	Type 1B	Type 2A	Type 2B
Grab Tensile Strength, min.	D 4632	200 lbs	300 lbs	350 290 lbs	400 lbs
Wide Width Tensile , @ 5% Strain, <i>min.</i>	D 4595	n/a	n/a	1200 <i>lbs/ft</i>	2400 <i>lbs/ft</i>
Grab Elongation	D 4632	≤ 50%	< 50%	≤ 50%	< 50%
CBR Puncture Strength, min.	D 6241	175 lbs	600 lbs	410 lbs	750 lbs
Trapezoid Tear Strength, min.	D 4533	75 lbs	110 lbs	n/a	n/a
UV Degradation Resistance 500 hrs, min.	D 4355 D 6637	70% retained	70% retained	70% retained	70% retained
Apparent Opening Size, AOS, min.	D 4751	sieve No. 50	sieve No. 40	sieve No. 30	sieve No. 30
Soil Retention, Pore Size, O ₅₀ /O ₉₅ , min.	D 6767	n/a	n/a	290/380	320/460 100/ 350
Permittivity, min.	D 4491	0.05 sec ⁻¹	0.050 sec ⁻¹	0.60 0.50 sec ⁻¹	0.40 sec ⁻¹
Notes: (1) All values are minimum average roll values (MARV) as determined in accordance with ASTM D 4354 in the weaker principal direction, except AOS size is based on maximum average roll value.					

919-M-054 TRAFFIC SIGNS

(Adopted 11-20-19)

The Standard Specifications are revised as follows:

SECTION 919, AFTER LINE 39, INSERT AS FOLLOWS:

Digital printed signs shall have transparent and opaque durable ink as recommended by the manufacturer. Digital printed colors shall have a warranty life of the base reflective sign sheeting. Digital applied colors shall present a smooth surface, free from the foreign material, bubbles, blemishes, streaks or spotted areas, and all messages and borders shall be clear and sharp. Digital printed signs shall meet the daytime color and luminance, and nighttime color requirements of ASTM D 4956. Overlapping of colors will not be allowed.

All digital printed signs shall be from an integrated system, including reflective sheeting, durable inks, and clear overlay film all from the same manufacturer applied to aluminum substrate in accordance with 919.01(a)1. Only digital printers recommended by the manufacturer of the reflective sheeting shall be used.

Finished digital printed signs shall have a UV-protective clear overlay applied to the entire face of the signs. Overlay shall be part of an integrated component system as recommended by the reflective sheeting manufacturer. On temporary construction signs digitally printed with black ink only, the protective overlay film is optional.

SECTION 919, BEGIN LINE 73, DELETE AND INSERT AS FOLLOWS:

3. Demountable Letters, Numbers, and Symbols

If demountable letters, numbers, or symbols are used, the backing material for letters, numbers, and symbols shall be 0.040 in. thick aluminum sheets in accordance with ASTM B 209, alloy 3003-H14. Borders shall be 0.032 in. thick aluminum sheet in accordance with ASTM B 209, alloy 6061-T6.

(b) Sheeting Material

Only sheeting materials from the Department's list of approved Sign Sheeting Materials shall be used for Type IV through Type X sheeting. Type IV or higher sheeting shall be used for highway signs all sheet signs except as specified herein. For contracts let on or after September 1, 2020, Type VIII or higher reflective sheeting shall be used for sheet signs with a red background color and Type XI sheeting shall be used for all panel signs. Type XI highway sheeting shall be from the Department's list of approved Sign Sheeting Materials or from a manufacturer that has complete test results from the National Transportation Product Evaluation Program, NTPEP, showing that the ASTM D 4956 minimum requirements have been met. A type C certification in accordance with 916 shall be furnished for Type XI sheeting. The sheeting type for the sign copy and border shall be the same type or higher than the sheeting type used for the background. Sheeting materials will be placed and maintained on the Department's approved list in accordance with ITM 930806, Procedure H.

A non-prorated manufacturer's written warranty against delamination, blistering, discoloration, or 15% or greater loss of retro-reflectivity compared with the minimum

initial ASTM D 4956 value, shall be provided to, and in favor of, the Department by the reflective sheeting manufacturer. The warranty shall cover a period of 10 years.

SECTION 919, BEGIN LINE 115, DELETE AND INSERT AS FOLLOWS:

(c) Letters, Numbers, *and* Symbols, ~~and Accessories~~

Letters, numbers, *and* symbols, ~~and accessories shall~~*may* be demountable.

Supplementary Conditions

List of Subjects

SC-1 Contractor's Responsibilities
SC-6.14 Subcontractors and Suppliers

SC-2

Supplementary Conditions

SC-1 Subcontractors and Suppliers Add the following new paragraph immediately after Paragraph 2.09 of the General Conditions:

6.14 All work performed for the Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

SECTION VIII

SAMPLE AGREEMENT

AGREEMENT

BETWEEN

CITY OF BLOOMINGTON

ENGINEERING DEPARTMENT

AND

CONTRACTOR

FOR

17th & DUNN INTERSECTION IMPROVEMENTS

THIS AGREEMENT, executed by and between the City of Bloomington, Indiana, Planning and Transportation Department through the Board of Public Works (hereinafter CITY), and _____, (hereinafter CONTRACTOR);

WITNESSETH THAT:

WHEREAS, CITY desires to retain CONTRACTOR'S services for the replacement and upgrade of the traffic signal at the intersection of 17th & Dunn (more particularly described in Attachment A, "Scope of Work"; and

WHEREAS, CONTRACTOR is capable of performing work as per his/her Bid on the Bid Summary sheet; and

WHEREAS, in accordance with Indiana Code 5-16-13 *et seq.*, incorporated herein by reference, Contractor is a Tier 1 or General Contractor for this project; and

WHEREAS, CONTRACTOR was determined to be the lowest responsible and responsive Bidder for said project.

NOW, THEREFORE, in consideration of the mutual promises hereinafter enumerated, the parties agree as follows:

ARTICLE 1. TERM

1.01 This Agreement shall be in effect upon execution of this Agreement by all parties. In accordance with Indiana Code 5-16-13 *et seq.*, incorporated herein by reference, Contractor is a Tier 1 contractor or general contractor for this project.

ARTICLE 2. SERVICES

2.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described in Attachment A, "Scope of Work".

2.02 All work required under this Agreement shall be substantially completed by the CONTRACTOR within ninety (90) calendar days from the date of the Notice to Proceed, unless the parties mutually agree to a later completion date. Substantial Completion shall mean that all work is sufficiently completed in accordance with the plans and specifications, as modified by any approved change orders, so that it can be used for its intended purpose.

2.03 It is hereby understood by both parties that time is of the essence in this Agreement. Failure of CONTRACTOR to complete all work as herein provided will result in monetary damages to CITY. It is hereby agreed that CITY will be damaged for every day the work has not been performed in the manner herein provided and that the measure of those damages shall be determined by reference Section 13.00 of the General Conditions for Each Day of Overrun in Contract Time. CONTRACTOR agrees to pay CITY said damages or, in the alternative, CITY, at its sole discretion, may withhold monies otherwise due CONTRACTOR. It is expressly understood by the parties hereto that these damages relate to the time of performance and do not limit CITY's other remedies under this Agreement, or as provided by applicable law, for other damages.

2.04 CONTRACTOR agrees that no charges or claims for damages shall be made by him or her for any delays or hindrances, from any cause whatsoever during the progress of any portion of the services specified in the Agreement. Such delays or hindrances, if any, may be compensated for by an extension of time for a reasonable period as may be mutually agreed upon between the parties, it being understood, however, that permitting CONTRACTOR to proceed to complete any service, or any part of the services / project, after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of CITY of any of its rights herein.

ARTICLE 3. COMPENSATION

3.01 CONTRACTOR shall provide services as specified in Attachment A, "Scope of Work", attached hereto and incorporated into this Agreement.

3.02 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, subject to adjustment under the Contract, at the unit prices stated in Contractor's Bid, attached hereto as Attachment 'E'. CITY may withhold payment, in whole or in part, to the extent necessary to protect itself from a loss on account of any of the following:

Defective work.

Evidence indicating the probable filing of claims by other parties against CONTRACTOR which may adversely affect CITY.

Failure of CONTRACTOR to make payments due to subcontractors, material suppliers or employees.

Damage to CITY or a third party.

3.03 The submission of any request for payment shall be deemed a waiver and release by CONTRACTOR of all liens and claims with respect to the work and period to which such payment request pertains except as specifically reserved and noted on such request.

3.04 CONTRACTOR shall maintain proper account records for the scope of all services of this Agreement and provide an accounting for all charges and expenditures as may be necessary for audit purposes. All such records shall be subject to inspection and examination by CITY's representatives at reasonable business hours.

3.05 For projects utilizing federal funding the CONTRACTOR shall submit time sheets (WH-347) for his or her own and all subcontracted employees, to City Engineer or his or her representative for approval and review, including review for compliance with Davis Bacon requirements, if federal funds are used.

3.06 **Engineer** The City Engineer shall act as the CITY's representative and assume all duties and responsibilities and have all the rights and authority assigned to the Engineer in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 4. RETAINAGE

For contracts in excess of \$100,000 and for which Contractor requested Progressive Payments on its Bid Form, the Owner requires that retainage be held set out below.

4.01 **Escrow Agent** The retainage amount withheld shall be placed in an escrow account. First Financial Bank, Bloomington, Indiana, shall serve as the escrow agent.

4.02 **Retainage Amount** The escrow agent, Owner and Contractor shall enter into a written escrow agreement. Under that agreement, the Owner shall withhold five percent (5%) of the dollar value of all work satisfactorily completed until the Contract work is complete. The escrow agent shall invest all escrowed principal in obligations selected by the escrow agent. The escrow agent shall be compensated for the agent's services by a reasonable fee, agreed upon by the parties, that is comparable with fees charged for the handling of escrow accounts of similar size and duration. The fee shall be paid from the escrow income. The escrow agent's fee may be determined by specifying an amount of interest the escrow agent will pay on the escrowed amount, with any additional earned interest serving as the escrow agent's fee. The escrow agreement may include other terms and conditions as deemed necessary by the parties. However, if Contractor intends to receive a Single Lump Sum payment upon acceptance of this project, retainage will not be required and an Escrow Agreement will not be required.

4.03 **Payment of Escrow Amount** The escrow agent shall hold the escrowed principal and income until receipt of the notice from the Owner and Contractor that the Contract work has been substantially completed to the reasonable satisfaction of the Owner, at which time the Owner shall pay to the Contractor the balance to be paid under this Contract and execute such documents as are necessary to authorize the escrow agent to pay to the Contractor the funds in the escrow account, including both specifying the part of the escrowed principal to be released from the escrow and the person to whom that portion is to be released. After receipt of the notice, the escrow agent shall remit the designated part of the escrowed principal and the escrowed income, minus the escrow agent's fees, to the person specified in the notice. However, nothing in this section shall prohibit Owner from requiring the escrow agent to withhold amounts necessary to complete minor items of the Contract, following substantial completion of the Contract in accordance with the provisions of paragraph 4.04.

4.04 **Withholding Funds for Completion of Contract** If, upon substantial completion of the Contract, there still remains minor Contract work that needs to be completed, or minor Contract work that needs to be performed to the satisfaction of the Owner, Owner may direct the escrow agent to retain in the escrow account, and withhold from payment to the Contractor, an amount equal to two hundred percent (200%) of the value of said work. The value of said work shall be determined by the

architect/engineer. The escrow agent shall release the funds withheld under this section after receipt of notice from the Owner that all work on the Contract has been satisfactorily completed. In the event that said work is not completed by the Contractor, but by Owner or another party under contract with the Owner, said funds shall be released to the Owner.

ARTICLE 5. GENERAL PROVISIONS

5.01 CONTRACTOR agrees to indemnify and hold harmless CITY and its officers, agents, officials and employees for any and all claims, actions, causes of action, judgments and liens arising out of any negligent act or omission by CONTRACTOR or any of its officers, agents, officials, employees, or subcontractors or any defect in materials or workmanship of any supply, materials, mechanism or other product or service which it or any of its officers, agents, officials, employees, or subcontractors has supplied to CITY or has used in connection with this Agreement and regardless of whether or not it is caused in part by a party indemnified herein under. Such indemnity shall include attorney's fees and all costs and other expenses arising there from or incurred in connection therewith and shall not be limited by reason of the enumeration of any insurance coverage required herein.

CONTRACTOR shall indemnify and hold harmless CITY and its officers, agents, officials and employees for any and all damages, actions, costs, (including, but not limited to, attorney's fees, court costs and costs of investigation) judgments and claims by anyone for damage to property, injury or death to persons resulting from the collapse or failure of any trenches, ditches or other excavations constructed under or associated with this contract.

5.02 Abandonment, Default and Termination

5.02.01 CITY shall have the right to abandon the work contracted for in this Agreement without penalty. If CITY abandons the work described herein, CONTRACTOR shall deliver to CITY all surveys, notes, drawings, specifications and estimates completed or partially completed and these shall become the property of CITY. The earned value of the work performed shall be based upon an estimate of the proportion between the work performed by CONTRACTOR under this Agreement and the work which CONTRACTOR was obligated to perform under this Agreement. This proportion shall be mutually agreed upon by CITY and CONTRACTOR. The payment made to CONTRACTOR shall be paid as a final payment in full settlement of his or her services hereunder.

5.02.02 If CONTRACTOR defaults or fails to fulfill in a timely and proper manner the obligations pursuant to this Agreement, CITY may, after seven (7) days' written notice has been delivered to CONTRACTOR, and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due to CONTRACTOR. In the alternative, CITY, at its option, may terminate this Agreement and take possession of the site and of all materials, equipment, tools and construction equipment and machinery thereon owned by CONTRACTOR, and may finish the project by whatever method it may deem expedient, and if the such action exceeds the unpaid balance of the sum amount, CONTRACTOR or his or her surety, shall pay the difference to CITY.

5.02.03 Default: If CONTRACTOR breaches this Agreement or fails to perform the work in an acceptable manner, he or she shall be considered in default. Any one or more of the following will be considered a default:

Failure to begin the work under this Agreement within the time specified.

Failure to perform the work with sufficient supervision, workmen, equipment and materials to insure prompt completion of said work within the time limits allowed.

Unsuitable performance of the work as determined by CITY ENGINEER or his or her representative.

Neglecting or refusing to remove defective materials or failure to perform anew such work as shall have been rejected.

Discontinuing the prosecution of the work or any part of it.

Inability to finance the work adequately.

If, for any other reason, CONTRACTOR breaches this Agreement or fails to carry on the work in an acceptable manner.

5.02.04 CITY shall send CONTRACTOR a written notice of default. If CONTRACTOR, or his or her Surety, within a period of ten (10) days after such notice, fails to remedy the default, then CITY shall have full power and authority, without violation of the Contract, to take the prosecution of the work out of the hands of said CONTRACTOR, to appropriate or use any or all materials and equipment on the ground as may be suitable and acceptable, and may, at its option, turn the work over to the Surety, or enter into an agreement with another Contractor for the completion of the Agreement according to the terms and provisions thereof, or CITY may use such other methods as, in its opinion, shall be required for the completion of said Contract in an acceptable manner.

5.02.05 All cost of completing the work under the Contract shall be deducted from the monies due or which may become due to said CONTRACTOR. In case the expenses so incurred by CITY shall be less than the sum which would have been payable under

the Contract if it had been completed by said CONTRACTOR, CONTRACTOR shall be entitled to receive the difference. However, in case such expense shall exceed the sum which would have been payable under the Contract, CONTRACTOR and his or her Surety will be liable and shall pay to CITY the amount of said excess. By taking over the prosecution of the work, CITY does not forfeit the right to recover damages from CONTRACTOR or his or her Surety for his or her failure to complete the work in the time specified.

5.02.06 Notwithstanding any other provision of this Agreement, if funds for the continued fulfillment of the Agreement by CITY are at any time not forthcoming or are insufficient, through failure of any entity to appropriate the funds or otherwise, then CITY shall have the right to terminate this Agreement without penalty by giving prior written notice documenting the lack of funding in which instance, unless otherwise agreed to by the parties, this Agreement shall terminate and become null and void.

5.02.07 CITY agrees that it will make its best effort to obtain sufficient funds, including but not limited to, including in its budget for each fiscal period during the term hereof a request for sufficient funds to meet its obligations hereunder in full.

5.03 Successors and Assigns

5.03.01 Both parties agree that for the purpose of this Agreement, CONTRACTOR shall be an Independent Contractor and not an employee of CITY.

5.03.02 No portion of this Agreement shall be sublet, assigned, transferred or otherwise disposed of by CONTRACTOR except with the written consent of CITY being first obtained. Consent to sublet, assign, transfer, or otherwise dispose of any portion of this Agreement shall not be construed to relieve CONTRACTOR of any responsibility of the fulfillment of this Agreement.

5.04 Extent of Agreement: Integration

5.04.01 This Agreement consists of the following parts, each of which is as fully a part of this Agreement as if set out herein:

1. This Agreement and its Attachments.
2. All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto.
3. All Addenda to the Bid Documents.
4. The Invitation to Bidders.
5. The Instructions to Bidders.
6. The Special Conditions.
7. All plans as provided for the work that is to be completed.
8. The Supplementary Conditions.
9. The General Conditions.
10. The Specifications.
11. The current Indiana Department of Transportation Standard Specifications and the latest addenda.
12. CONTRACTOR'S submittals.
13. The Performance Bond and the Payment Bond.
14. The Escrow Agreement.
15. Request for Taxpayer Identification number and certification: Substitute W-9.

5.04.02 In resolving conflicts, errors, discrepancies and disputes concerning the Scope of Work to be performed by CONTRACTOR, and other rights and obligations of CITY and CONTRACTOR, the document expressing the greater quantity, quality or other scope of work in question, or imposing the greater obligation upon CONTRACTOR and affording the greater right or remedy to CITY shall govern; otherwise the documents shall be given precedence in the order as enumerated above.

5.05 Insurance

5.05.01

CONTRACTOR shall, as a prerequisite to this Agreement, purchase and thereafter maintain such insurance as will protect him or her from the claims set forth below which may arise out of or result from CONTRACTOR'S operations under this Agreement, whether such operations be by CONTRACTOR or by any SUBCONTRACTORS or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

<u>Coverage</u>	<u>Limits</u>
A. Worker's Compensation & Disability	Statutory Requirements
B. Employer's Liability Bodily Injury by Accident	\$100,000 each accident

	Bodily Injury by Disease	\$500,000 policy limit
	Bodily Injury by Disease	\$100,000 each employee
C.	Commercial General Liability (Occurrence Basis) Bodily Injury, personal injury, property damage, contractual liability, products-completed operations, General Aggregate Limit (other than Products/Completed Operations)	\$1,000,000 per occurrence and \$2,000,000 in the aggregate
	Products/Completed Operation	\$1,000,000
	Personal & Advertising Injury Limit	\$1,000,000
	Each Occurrence Limit	\$1,000,000
	Fire Damage (any one fire)	\$50,000
D.	Comprehensive Auto Liability (single limit, owned, hired and non-owned)	\$1,000,000 each accident
	Bodily injury and property damage	
E.	Umbrella Excess Liability	\$5,000,000 each occurrence and aggregate
	The Deductible on the Umbrella Liability shall not be more than	\$10,000

5.05.02 CONTRACTOR'S comprehensive general liability insurance shall also provide coverage for the following:

Premises and operations;

Contractual liability insurance as applicable to any hold-harmless agreements;

Completed operations and products; which also must be maintained for a minimum period of two (2) years after final payment and CONTRACTOR shall continue to provide evidence of such coverage to CITY on an annual basis during the aforementioned period;

Broad form property damage - including completed operations;

Fellow employee claims under Personal Injury; and

Independent Contractors.

5.05.03 With the prior written approval of CITY, CONTRACTOR may substitute different types or amounts of coverage for those specified as long as the total amount of required protection is not reduced.

5.05.04 Certificates of Insurance showing such coverage then in force (but not less than the amount shown above) shall be on file with CITY prior to commencement of work. These Certificates shall contain a provision that coverage afforded under the policies will not be canceled or non-renewed until at least sixty (60) days' prior written notice has been received by CITY. The CITY shall be named as an additional insured on the Commercial General Liability, Automobile Liability, and Umbrella Excess Liability policies. The CONTRACTOR shall agree to a waiver of subrogation on its Worker's Compensation policy.

5.06 **Necessary Documentation** CONTRACTOR certifies that it will furnish CITY any and all documentation, certification, authorization, license, permit or registration required by the laws or rules and regulations of the City of Bloomington, the State of Indiana and the United States. CONTRACTOR further certifies that it is now and will maintain in good standing with such governmental agencies and that it will keep its license, permit registration, authorization or certification in force during the term of this Agreement.

5.07 **Applicable Laws** CONTRACTOR agrees to comply with all federal, state, and local laws, rules and regulations applicable to CONTRACTOR in performing work pursuant to this Agreement, including, but not limited to, discrimination in employment, prevailing wage laws, conflicts of interest, public notice, accounting records and requirements. CONTRACTOR shall comply with City of Bloomington Ordinance 2.21.020 and all other federal, state and local laws and regulations governing non-discrimination, including but not limited to employment. This Agreement shall be governed by the laws of the United States, and the State of Indiana, and by all Municipal Ordinances and Codes of the City of Bloomington. Venue of any disputes arising under this Agreement shall be in the Monroe Circuit Court, Monroe County, Indiana.

5.08 Non-Discrimination

5.08.01 CONTRACTOR and subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to hire, tenure, terms, training, conditions or privileges of employment, because of race, sex, color, religion, national origin, ancestry, disability, sexual orientation, gender identity, veteran status or housing status. Breach of this covenant may be regarded as a material breach of the Agreement.

5.08.02 CONTRACTOR certifies for itself and all its subcontractors compliance with existing laws of the City of Bloomington, the State of Indiana and the United States regarding:

Prohibition of discrimination in employment practices on the basis of race, sex, color, religion, national origin, ancestry, disability, sexual orientation, gender identity, veteran status, housing status, or any other legally protected classification;

The utilization of Minority and Women Business Enterprises. CONTRACTOR further certifies that it:

- a. Has formulated its own Affirmative Action plan for the recruitment, training and employment of minorities and women, including goals and timetable; which has been approved by the City's Contract Compliance Officer.
- b. Encourages the use of small business, minority-owned business and women-owned business in its operations.

CONTRACTOR understands that the City of Bloomington prohibits its employees from engaging in harassment or discrimination of any kind, including harassing or discriminating against independent contractors doing work for the City. If CONTRACTOR believes that a City employee engaged in such conduct towards CONTRACTOR and/or any of its employees, CONTRACTOR or its employees may file a complaint with the City department head in charge of the CONTRACTOR'S work and/or with the City human resources department or the Bloomington Human Rights Commission. The City takes all complaints of harassment and discrimination seriously and will take appropriate disciplinary action if it finds that any City employee engaged in such prohibited conduct.

5.08.03 FURTHER, PURSUANT TO INDIANA CODE 5-16-6-1, CONTRACTOR AGREES:

- A) That in the hiring of employees for the performance of work under this Agreement or any sub agreement hereunder, no contractor, or subcontractor, nor any person acting on behalf of such CONTRACTOR or subcontractor, shall by reason of race, sex, color, religion, national origin, ancestry, or any other legally protected classification, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment relates.
- B) That no contractor, subcontractor, or any person on their behalf, shall, in any manner, discriminate against or intimidate any employee hired for performance of work under this Agreement on account of race, religion, color, sex, national origin, ancestry, or any other legally protected classification.
- C) That there may be deducted from the amount payable to CONTRACTOR, by CITY, under this Agreement, penalty of Five Dollars (\$5.00) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Agreement. Any such person discriminated against retains the right to file a discrimination complaint with the appropriate civil rights agency or court.
- D) That this Agreement may be canceled or terminated by CITY and all money due or to become hereunder may be forfeited, for a second or any subsequent violations of the terms or conditions under this section of the Agreement.

5.09 Workmanship and Quality of Materials

5.09.01 CONTRACTOR shall guarantee the work for a period of one (1) year from the date of substantial completion. Failure of any portion of the work within one (1) year due to improper construction, materials of construction, or design may result in a refund to CITY of the purchase price of that portion which failed or may result in the forfeiture of CONTRACTOR'S Performance Bond.

5.09.02 OR EQUAL: Wherever in any of the Agreement Documents an article, material or equipment is defined by describing a proprietary product, or by using the name of a manufacturer or vender, the term "Or Equal" or the term "The Equivalent" if not inserted, shall be implied, and it is done for the express purpose of establishing a basis of durability and efficiency and not for the purpose of limiting completion. Whenever material or equipment is submitted for approval as being equal to that specified, the submittal shall include sufficient information and data to demonstrate that the material or equipment conforms to the Contract requirements. The decision as to whether or not such material

or equipment is equal to that specified shall be made by the ENGINEER. The approval by the ENGINEER of alternate material or equipment as being equivalent to that specified, shall not in any way relieve CONTRACTOR of responsibility for failure of the material or equipment due to faulty design, material, or workmanship, to perform the function required by the Contract Documents. Specifications as determined by other entities within the City of Bloomington such as City Utilities shall only be substituted or changed by their approval which shall be submitted in writing to the ENGINEER.

5.09.03 CITY shall be the sole judge of the sufficiency of workmanship and quality of materials. Disputes shall be resolved by the City Engineer and are not subject to arbitration.

5.10 Safety. CONTRACTOR shall be responsible for the safety of employees at all times and shall provide all equipment necessary to insure their safety. CONTRACTOR shall ensure the enforcement of all applicable safety rules, regulations, ordinances and laws, whether federal, state or local. Contractor's Superintendent of Safety shall make daily inspections upon the arrival and leaving of the site at the close of each workday.

5.10.01 CONTRACTOR is required to comply with IOSHA regulations 29 C.F.R 1926, Subpart P, Excavations for all trenches of at least five (5) feet in depth. All cost for trench safety systems shall be the responsibility of the CONTRACTOR and included in the cost of the principal work with which the safety systems are associated. CONTRACTOR shall sign an affidavit, attached as Attachment B, affirming that CONTRACTOR shall maintain compliance with IOSHA requirements for excavations of at least five (5) in depth.

5.11 Amendments/Changes

5.11.01 Except as provided in Paragraph 5.11.02, this Agreement may be amended only by written instrument signed by both CITY and CONTRACTOR.

5.11.02 Without invalidating the Agreement and without notice to any surety, CITY may, at any time or from time to time, order, in writing, additions, deletions, or revisions in the work. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the work involved, which will be performed under the applicable conditions of the Agreement Documents.

5.11.03 If CONTRACTOR believes that any direction of CITY under paragraph 5.11.02, or any other event or condition, will result in an increase in the Contract time or price, he or she shall file written notice with CITY no later than twenty (20) calendar days after the occurrence of the event giving rise to the claim and stating the general nature of the claim with supporting data. No claim for any adjustment of the Contract time or price will be valid if not submitted in accordance with this Paragraph.

5.11.04 CONTRACTOR shall carry on the work and adhere to the progress schedule during all disputes or disagreements with CITY. No work shall be delayed or postponed pending resolution of any dispute or disagreement except as CONTRACTOR and CITY may otherwise agree in writing.

5.12 Performance Bond and Payment Bond

5.12.01 For contracts in excess of \$100,000, CONTRACTOR shall provide CITY with a Performance Bond and a Payment Bond in the amount of one hundred percent (100%) of the contract amount.

5.12.02 Failure by CONTRACTOR to perform the work in a timely or satisfactory fashion may result in forfeiture of CONTRACTOR'S Performance Bond.

5.12.03 If the surety on any bond furnished by CONTRACTOR becomes a party to supervision, liquidation, or rehabilitation action pursuant Indiana Code 27-9 et seq. or its right to do business in the State of Indiana is terminated, CONTRACTOR shall, within thirty (30) calendar days thereafter, substitute another bond and surety, both of which must be acceptable to CITY.

5.13 Payment of Subcontractors CONTRACTOR shall pay all subcontractors, laborers, material suppliers and those performing services to CONTRACTOR on the project under this Agreement. CITY may, as a condition precedent to any payment hereunder, require CONTRACTOR to submit satisfactory evidence of payments of any and all claims of subcontractors, laborers, material suppliers, and those furnishing services to CONTRACTOR. Upon receipt of a lawful claim, CITY shall withhold money due to CONTRACTOR in a sufficient amount to pay the subcontractors, laborers, material suppliers, and those furnishing services to CONTRACTOR.

5.13.01 The surety of the Payment Bond and Performance Bond may not be released until one (1) year after the Board's final settlement with the CONTRACTOR.

5.14 Written Notice Written notice shall be considered as served when delivered in person or sent by mail to the individual, firm, or corporation, or to the last business address of such known to CONTRACTOR who serves the Notice. Notice shall be sent as follows:

TO CITY:

TO CONTRACTOR:

City of Bloomington		
Attn: Matt Smethurst		
P.O. Box 100 Suite 130		
Bloomington, Indiana 47402		

5.15 Severability and Waiver In the event that any clause or provision of this Agreement is held to be invalid by any court of competent jurisdiction, the invalidity of such clause or provision shall not affect any other provision of this Agreement. Failure of either party to insist on strict compliance with any provision of this Agreement shall not constitute waiver of that party’s right to demand later compliance with the same or other provisions of this Agreement.

5.16 Notice to Proceed CONTRACTOR shall not begin the work pursuant to the “Scope of Work” of this Agreement until it receives an official written Notice to Proceed from the City. Contractor shall start active and continuous work on the Agreement within fifteen (15) calendar days after the date of the Notice to Proceed. In no case shall work begin prior to the date of the Notice to Proceed. If a delayed starting date is indicated in the proposal, the fifteen (15) calendar day limitation will be waived. Work day charges will then begin on a date mutually agreed upon, but not later than the delayed starting date specified. In the event that any Agreement is canceled after an award has been made but prior to the issuing of the Notice to Proceed, no reimbursement will be made for any expenses accrued relative to this contract during that period.

5.17 Steel or Foundry Products

5.17.01 To comply with Indiana Code 5-16-8, affecting all contracts for the construction, reconstruction, alteration, repair, improvement or maintenance of public works, the following provision shall be added: If steel or foundry products are to be utilized or supplied in the performance of any contract or subcontract, only domestic steel or foundry products shall be used. Should CITY feel that the cost of domestic steel or foundry products is unreasonable; CITY will notify CONTRACTOR in writing of this fact.

5.17.02 Domestic Steel products are defined as follows:

“Products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two (2) or more of such operations, from steel made in the United States by open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.”

5.17.03 Domestic Foundry products are defined as follows:

“Products cast from ferrous and nonferrous metals by foundries in the United States.”

5.17.04 The United States is defined to include all territory subject to the jurisdiction of the United States.

5.17.05 CITY may not authorize or make any payment to CONTRACTOR unless CITY is satisfied that CONTRACTOR has fully complied with this provision.

5.18 Verification of Employees’ Immigration Status

Contractor is required to enroll in and verify the work eligibility status of all newly-hired employees through the E-Verify program. (This is not required if the E-Verify program no longer exists). Contractor shall sign an affidavit, attached as Attachment C, affirming that Contractor does not knowingly employ an unauthorized alien. “Unauthorized alien” is defined at 8 U.S. Code 1324a(h)(3) as a person who is not a U.S. citizen or U.S. national and is not lawfully admitted for permanent residence or authorized to work in the U.S. under 8 U.S. Code Chapter 12 or by the U.S. Attorney General.

Contractor and any of its subcontractors may not knowingly employ or contract with an unauthorized alien, or retain an employee or contract with a person that the Contractor or any of its subcontractors learns is an unauthorized alien. If the City obtains information that the Contractor or any of its subcontractors employs or retains an employee who is an unauthorized alien, the City shall notify the Contractor or its subcontractors of the Agreement violation and require that the violation be remedied within thirty (30) calendar days of the date of notice. If the Contractor or any of its subcontractors verify the work eligibility status of the employee in question through the E-Verify program, there is a rebuttable presumption that the Contractor or its subcontractor did not knowingly employ an unauthorized alien. If the Contractor or its subcontractor fails to remedy the violation within the thirty (30) calendar day period, the City shall terminate the Agreement, unless the City determines that terminating the Agreement would be detrimental to the public interest or public property, in which case the City may allow the Agreement to remain in effect until the City procures a new contractor. If the City terminates the Agreement, the Contractor or its subcontractor is liable to the City for actual damages.

Contractor shall require any subcontractors performing work under this Agreement to certify to the Contractor that, at the time of certification, the subcontractor does not knowingly employ or contract with an unauthorized alien and the subcontractor has enrolled in and is participating in the E-Verify program. Contractor shall maintain on file all subcontractors' certifications throughout the term of this Agreement with the City.

5.19 Drug Testing Plan

In accordance with Indiana Code 4-13-18 as amended, the CONTRACTOR was required to submit with his/her bid a written drug testing policy for a public works project that is estimated to cost \$150,000 or more. Among other things, the law sets forth specific requirements that must be in the plan for a program to test the employees of the CONTRACTOR and Subcontractors for drugs. The successful CONTRACTOR must comply with all provisions of the statute. This contract is subject to cancellation if CONTRACTOR fails to implement its testing program during the term of this contract, fails to provide information regarding this testing at the request of CITY; or provides false information to CITY regarding CONTRACTOR's employee drug testing program. CONTRACTOR shall sign an affidavit, attached as Attachment D, affirming that CONTRACTOR has and shall implement CONTRACTOR'S employee drug testing program throughout the term of this project.

IN WITNESS WHEREOF, the parties of this Agreement have hereunto set their hands.

DATE: _____

City of Bloomington
Bloomington Board of Public Works

BY:

BY:

Dana Palazzo, President

Contractor Representative

Beth H. Hollingsworth, Member

Printed Name

Kyla Cox Deckard, Member

Title of Contractor Representative

John Hamilton, Mayor of Bloomington

ATTACHMENT 'A'

"SCOPE OF WORK"

17th & Dunn Intersection Improvements

This project shall include, but is not limited to, the replacement and upgrade of the traffic signal at the intersection of 17th Street and Dunn Street. This project shall include the placement of signal hardware, curbing, sidewalk, asphalt, pavement markings, and landscaping per the plans and specifications, and placement of stormwater infrastructure according to the most recent set of City of Bloomington Utilities Specifications at the time of bidding. All other work shall be completed as shown on the plans and specifications included with this packet, and by the most recent INDOT Specifications.

ATTACHMENT 'B'

**BIDDER'S AFFIDAVIT IN COMPLIANCE WITH INDIANA CODE 36-1-12-20 TRENCH SAFETY SYSTEMS;
COST RECOVERY**

STATE OF INDIANA)
) SS:
COUNTY OF _____)

AFFIDAVIT

The undersigned, being duly sworn, hereby affirms and says that:

1. The undersigned is the _____ of
(job title)

(company name)
2. The undersigned is duly authorized and has full authority to execute this Bidder's Affidavit.
3. The company named herein that employs the undersigned:
 - i. has contracted with or seeking to contract with the City of Bloomington to provide services; **OR**
 - ii. is a subcontractor on a contract to provide services to the City of Bloomington.
4. By submission of this Bid and subsequent execution of a Contract, the undersigned Bidder certifies that as successful Bidder (Contractor) all trench excavation done within his/her control (by his/her own forces or by his/her Subcontractors) shall be accomplished in strict adherence with OSHA trench safety standards contained in 29 C.F.R. 1926, Subpart P, including all subsequent revisions or updates to these standards as adopted by the United States Department of Labor.
5. The undersigned Bidder certifies that as successful Bidder (Contractor) he/she has obtained or will obtain identical certification from any proposed Subcontractors that will perform trench excavation prior to award of the subcontracts and that he/she will retain such certifications in a file for a period of not less than three (3) years following final acceptance.
6. The Bidder acknowledges that included in the various items listed in the Schedule of Bid Prices and in the Total Amount of Bid Prices are costs for complying with I.C. 36-1-12-20. The Bidder further identifies the costs to be summarized below*:

ATTACHMENT 'E'

"Unit Prices"



Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
001	104-05404	DESIGN/BUILD (CURB RAMP)	LS	1.00		
002	105-06845	CONSTRUCTION ENGINEERING	LS	1.00		
003	110-01001	MOBILIZATION AND DEMOBILIZATION	LS	1.00		
004	201-02245	TREE 6 IN., REMOVE	EACH	4.00		
005	201-02250	TREE 10 IN., REMOVE	EACH	1.00		
006	201-02255	TREE 18 IN., REMOVE	EACH	1.00		
007	201-02260	TREE 30 IN., REMOVE	EACH	1.00		
008	201-52370	CLEARING RIGHT OF WAY	LS	1.00		
009	202-02272	PAVED SIDE DITCH, REMOVE	LFT	101.00		
010	202-02279	CURB AND GUTTER, REMOVE	LFT	714.00		
011	202-52710	SIDEWALK, CONCRETE, REMOVE	SYS	407.00		
012	202-90747	RETAINING WALL, REMOVE	LFT	65.00		
013	202-91385	INLET, REMOVE	EACH	2.00		
014	202-93047	MANHOLE, REMOVE	EACH	1.00		
015	202-93615	CONCRETE, REMOVE	SYS	2.00		
016	202-96128	GUTTER, CONCRETE, REMOVE	LFT	247.00		
017	202-96133	PIPE, REMOVE	LFT	150.00		
018	203-02000	EXCAVATION, COMMON	CYS	365.00		
019	203-02070	BORROW	CYS	55.00		
020	205-03371	SEDIMENT, REMOVE	CYS	10.00		
021	205-06933	TEMPORARY INLET PROTECTION	EACH	15.00		
022	205-06934	TEMPORARY MULCH	TON	1.00		
023	205-06937	TEMPORARY SILT FENCE	LFT	505.00		
024	205-08594	FILTER SOCK	LFT	10.00		
025	205-09543	NO. 2 STONE	TON	50.00		
026	205-11591	TEMPORARY SEED MIXTURE	LBS	45		
027	207-08264	SUBGRADE TREATMENT, TYPE II	SYS	286		
028	207-08268	SUBGRADE TREATMENT, TYPE IV	SYS	844		
029	211-09265	STRUCTURE BACKFILL TYPE 2	CYS	146		

Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
030	211-09266	STRUCTURE BACKFILL TYPE 3	CYS	74.00		
031	211-09267	STRUCTURE BACKFILL TYPE 4	CYS	74.00		
032	214-12237	GEOTEXTILE FOR PAVEMENT, TYPE IB	SYS	169.00		
033	301-12234	COMPACTED AGGREGATE, NO. 53	CYS	257.00		
034	305-07464	PCC BASE PATCHING, 9 IN	SYS	122.00		
035	306-08034	MILLING, ASPHALT, 1 1/2 IN.	SYS	2344.00		
036	401-XXXXX	HMA, TYPE B, SURFACE	TON	274.00		
037	401-XXXXX	HMA, TYPE B, INTERMEDIATE	TON	548.00		
038	401-XXXXX	HMA, TYPE B, BASE	TON	140.00		
039	401-10258	JOINT ADHESIVE, SURFACE	LFT	1962.00		
040	401-10259	JOINT ADHESIVE, INTERMEDIATE	LFT	1830.00		
041	401-11785	LIQUID ASPHALT SEALANT	LFT	1962.00		
042	406-05520	ASPHALT FOR TACK COAT	TON	2.00		
043	601-02241	GUARDRAIL, REMOVE	LFT	48.00		
044	604-06070	SIDEWALK, CONCRETE	SYS	580.00		
045	604-08086	CURB RAMP, CONCRETE	SYS	140.00		
046	604-12083	DETECTABLE WARNING SURFACES	SYS	19.00		
047	604-95344	HAND RAIL, PEDESTRIAN	LFT	295.00		
048	605-06120	CURB, CONCRETE	LFT	196.00		
049	605-06155	CURB & GUTTER, CONCRETE, MODIFIED	LFT	1413.00		
050	610-07487	HMA FOR APPROACHES, TYPE B	TON	19.00		
051	610-09108	PCCP FOR APPROACHES, 9 IN.	SYS	238.00		
052	615-06527	MONUMENT, SECTION CORNER	EACH	1.00		
053	621-01004	MOBILIZATION/DEMOBILIZATION SEEDING	EACH	1.00		
054	621-06545	FERTILIZER (FOR TEMPORARY SEEDING)	TON	0.10		
055	621-06567	WATER	KGAL	6.00		
056	621-XXXXX	LANDSCAPING STONE	TON	222.00		
057	621-06570	TOPSOIL	CYS	60.00		
058	621-06575	SODDING, NURSERY	SYS	1349.00		
059	622-05650	PLANT, DEC. TREE, SINGLE STEM, 2 IN. TO 2.5	EACH	5.00		
060	702-44240	CONCRETE A, STRUCTURES	CYS	2.40		
061	715-05048	PIPE, TYPE 4, CIRCULAR, 6 IN.	LFT	292.00		
062	715-05053	PIPE, UNDERDRAIN OUTLET, 6 IN.	LFT	16.00		
063	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	LFT	92.00		
064	715-05151	PIPE, TYPE 2, CIRCULAR, 15 IN.	LFT	53.00		
065	715-05154	PIPE, TYPE 2, CIRCULAR, 24 IN.	LFT	134.00		
066	715-05331	PIPE, TYPE 2, DEFORMED, MIN. AREA 3.3 SFT	LFT	100.00		
067	715-09064	VIDEO INSPECTION FOR PIPE	LFT	395.00		

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LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
068	715-46020	PIPE END SECTION, DIAMETER, 24 IN.	EACH	1.00		
069	715-92537	PIPE PVC 8 IN.	LFT	16.00		
070	718-04986	CLEANOUT	EACH	1.00		
071	720-02442	PIPE, PLUG EXISTING	EACH	3.00		
072	720-04682	INLET (G4)	EACH	1.00		
073	720-04682	INLET (F4)	EACH	1.00		
074	720-44000	CASTING, ADJUST TO GRADE, INLET & MANH.	EACH	4.00		
075	720-44045	CASTING, 8, FURNISH, ADJUST TO GRADE	EACH	1.00		
076	720-45045	INLET, J10	EACH	4.00		
077	720-45055	INLET, M10	EACH	1.00		
078	720-45410	MANHOLE, C4	EACH	3.00		
079	720-90349	MANHOLE, C8	EACH	4.00		
080	732-11810	MODULAR BLOCK WALL	SFT	2867.00		
081	732-11811	MODULAR BLOCK WALL ERECTION	SFT	2867.00		
082	801-04308	ROAD CLOSURE SIGN ASSEMBLY	EACH	4.00		
083	801-06625	DETOUR ROUTE MARKER ASSEMBLY	EACH	23.00		
084	801-06640	CONSTRUCTION SIGN, A	EACH	4.00		
085	801-06645	CONSTRUCTION SIGN, B	EACH	2.00		
086	801-06775	MAINTAINING TRAFFIC	LS	1.00		
087	801-07119	BARRICADE, III-B	LFT	128.00		
088	802-05701	SIGN POST, SQUARE, 1, RNFRCD ANCHR BSE	LFT	78.00		
089	802-07058	SIGN, SHEET, ASSEMBLY, RELOCATE	EACH	3.00		
090	802-07060	SIGN, SHEET, RELOCATE	EACH	5.00		
091	802-09838	SIGN, SHEET, WITH LEGEND, 0.080 IN.	SFT	23.00		
092	802-09840	SIGN, SHEET, WITH LEGEND, 0.100 IN.	SFT	14.00		
093	802-09842	SIGN, SHEET, WITH LEGEND, 0.125 IN.	SFT	19.00		
094	805-01300	TRAFFIC SIGNAL EQUIPMENT, REMOVE	EACH	1.00		
095	805-01842	HANDHOLE SIGNAL TYPE 1	EACH	5.00		
096	805-01844	CONDUIT, STEEL, GALVANIZED, 2 IN.	LFT	60.00		
097	805-02150	PEDESTRIAN SGNL HD, COUNTDOWN 18 IN.	EACH	8.00		
098	805-02445	CNTRLR & CBNT, P1, W/ UPS ATTCHD CBNT	EACH	1.00		
099	805-02645	SGNL POLE FNDTN 24 IN. X 24 IN. X 36 IN.	EACH	7.00		
100	805-04782	VIDEO VEHICLE DETECTOR SYSTEM	EACH	1.00		
101	805-05405	SGNL POLE, PDDL, 4 FT., PAINTED BLACK	EACH	7.00		
102	805-11387	SGNL CNTLVR STRC, SPRD FTNG FNDTN, C	EACH	4.00		
103	805-11437	SGNL CNTLVR STRC SNGL ARM CMB ARM LM	EACH	4.00		
104	805-11815	CONDUIT, HDPE, 2 IN. SCHEDULE 80	LFT	1300.00		
105	805-11817	PEDESTRIAN PUSH BUTTON, APS	EACH	8.00		

Project Title : 17th & Dunn Intersection Improvements

LINE	ITEM	DESCRIPTION	Approximate Quantity and Units	UNITS	UNIT PRICE	BID AMOUNT
106	805-78205	TRAFFIC SIGNAL HEAD, 3 SECTION, 12 IN.	EACH	8.00		
107	805-78225	TRAFFIC SIGNAL HEAD, 4 SECTION, 12 IN.	EACH	3.00		
108	805-78445	SIGNAL SERVICE	EACH	1.00		
109	805-78467	SIGNAL CABLE, SERVICE, COPPER 3C/8 GA	LFT	210.00		
110	805-78480	SIGNAL CABLE, SERVICE, COPPER, 3C/14 GA	LFT	1300.00		
111	805-78485	SIGNAL CABLE, SERVICE, COPPER, 5C/14 GA	LFT	240.00		
112	805-78490	SIGNAL CABLE, SERVICE, COPPER, 7C/14 GA	LFT	810.00		
113	805-78495	SIGNAL CABLE, SERVICE, COPPER, 9C/14 GA	LFT	740.00		
114	805-78925	CONTROLLER CABINET FOUNDATION, P1	EACH	1.00		
115	805-XXXXX	MODIFY EXIST. SGNL CABNT & FNDTN, P1	LS	1.00		
116	805-XXXXX	AI-500-02 SRS GLNC PRE-EMPT & PRY FLD MNT	EACH	1.00		
117	807-86910	CONNECTOR KIT, UNFUSED	EACH	4.00		
118	807-86915	CONNECTOR KIT, FUSED	EACH	1.00		
119	807-95709	PHOTOCELLS	EACH	1.00		
120	807-95889	WIRE, NO. 10 COPPER, 1/C	LFT	2560.00		
121	808-03439	TRNVRS MRKNGS THRMPLSTC CRSWLK WHT 24"	LFT	329.00		
122	808-06703	LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.	LFT	239.00		
123	808-75245	LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.	LFT	1856.00		
124	808-75297	TRNSVRS MRKNG, THRMPLSTC, STOP LINE, 24 IN.	LFT	86.00		
125	808-75320	ARRW	EACH	5.00		

TOTAL PROJECT BID:

SECTION IX

SPECIFICATIONS

Indiana Department of Transportation Standard Specifications dated 2020 and current supplements thereto, to be used with this project.