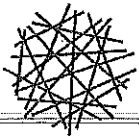


Proposal Manual for:  
**Indiana Department of Natural Resources**  
**Clark, Indiana**  
**Charlestown State Park**

**Project No. ENG#2003724395**

January 21, 2020

Documents Prepared By:



**HWC**  
**ENGINEERING**

303 Scribner Drive, Suite 201  
New Albany, Indiana 47150  
Ph: 812-913-6420





**STATE OF INDIANA**

Eric J. Holcomb, Governor

**NOTICE TO BIDDERS**

BY STATE OF INDIANA DEPARTMENT OF ADMINISTRATION, PUBLIC WORKS DIVISION FOR A PUBLIC WORKS CONSTRUCTION PROJECT ESTIMATED AT ONE HUNDRED FIFTY THOUSAND DOLLARS OR ABOVE

SEALED BIDS FOR:

**PROJECT NO. ENG2003724395**  
**Charlestown State Park**  
**Bank Stabilization to Protect Parking Lot**  
**Clark County**

will be received from Contractors, holding a current Certificate of Qualification, at the Bid Desk, Department of Administration, Public Works Division, 402 W. Washington St., Room W467, Indianapolis, Indiana, 46204 until 1:31 P.M. (Indianapolis Time), February 13, 2020, after which all bids will be publicly opened and read in the appropriate bid room.

State Certified Minority and Women-Owned firms are encouraged to submit bids on this project as a prime contractor or through a prime contractor.


Copies of the detailed Instructions to Bidders and Drawings and/or Specifications dated January 2020 may be obtained from: Department of Natural Resources Division of Engineering Website <http://www.in.gov/dnr/engineer/2908.htm> for a non-refundable fee of \$0.00. Contractors are responsible for checking this website for additional documents or addenda that may be added before the bid opening date.

Bids shall be taken from Prime Contractors pre-qualified by the Public Works Certification Board in the following classification/s: 1622.01 Gen Constr-Brdgs, vdcts, elevd hwys, rlwy, tnls or 1794.01 Earthmoving and Land Clearing or 1794.02 Excavation.

The Specified construction period is ending December 31, 2020. The State of Indiana reserves the right to reject any and all bids.

A goal of 7% MBE and 5% WBE has been set for this project.

**Project Manager:**   
Jonary Baller (317) 234-8731 Dated: January 21, 2020  
jballer@dnr.in.gov

**Director of Public Works:**   
Robert Grossman, Director 1-21-20

**Pre-Bid Information:**  
January 29 @ 10:00 a.m. at Charlestown  
State Park, Overlook Parking Lot



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## INSTRUCTIONS TO BIDDERS

### PROJECT ESTIMATED BY DEPARTMENT OF ADMINISTRATION, PUBLIC WORKS DIVISION TO BE BID AT ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000) AND ABOVE

#### 01 GENERAL

- A. This project is estimated by the Public Works Division, Indiana Department of Administration (the Owner), as stated in the Notice to Bidders, at One Hundred Fifty Thousand Dollars (\$150,000) and above.
- B. QUALIFICATION BY THE CERTIFICATION BOARD IS REQUIRED FOR THIS PROJECT PRIOR TO BID OPENING DATE. For information and procedure contact Executive Secretary, Certification Board, Indiana Department of Administration, 402 W. Washington St., Room W467, Indianapolis, Indiana 46204 or phone (317) 232-3005.

#### 02 PROJECT NUMBER, DESCRIPTION AND LOCATION is as stated in the Notice to Bidders.

#### 03 TITLE AND DEFINITIONS

Said building and/or land upon which it stands is the property of the State of Indiana. All references to the title owner of said property hereinafter will be by the term "State" and all references to the person, firm, or corporation awarded the contract for the project will be by the term "Contractor". All references to Designer shall refer to the consulting person or firm employed to contract with the Public Works Division, Indiana Department of Administration to provide architectural, engineering or other consulting services for the project, or to the Public Works Division. The preparation and issuance of contracts for this project are the responsibility of the Commissioner of the Indiana Department of Administration acting with approval of the Governor.

Contract: A written agreement between two or more parties enforceable by law.

Contractor: A person who has entered into or seeks to enter into a contract with Public Works Division.

Prime Contractor: A person or business which is primarily responsible for providing goods and service or performing a specific service, etc. under contract. A prime contractor can also be a Minority Business Enterprise.

Subcontractor: A person or a business who has a direct contract with a prime contractor who is under contract to provide goods and services or perform a specific service.

Joint Venture: An association of two or more businesses to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge.

Manufacturer: A supplier that produces goods from raw materials or substantially alters them before resale.

Minority or Women Business Enterprise (M/WBE): A business concern which is certified as at least fifty-one percent (51%) owned and controlled by a woman or women or, one or more of the individuals classified as a minority group which includes: African Americans, Hispanic Americans, Asian Americans, and other racial minorities.

Supplier: Any person or entity engaged to furnish goods, materials and/or equipment, but no on-site labor, is capable of furnishing such goods, materials and/or equipment either directly from its own stock or by ordering materials and/or equipment directly from a manufacturer, and is engaged to furnish such goods, materials and/or equipment directly to a prime contractor or one of its subcontractors.

#### 04 PRE-BIDDING, BIDDING AND POST BIDDING REQUIREMENTS

- A. The Director, Public Works Division will authorize the Designer to issue bidding documents, construction documents and addenda to bidders.
- B. It is recommended that all Bidders visit the site prior to submitting bid, and become thoroughly familiar with the existing site conditions and work to be performed, as indicated in the bidding documents, construction documents and addenda. Extra compensation or extension of time will not be allowed for failure to examine the site prior to bidding.
- C. During the bidding period, should questions arise as to the meaning of any part of the bidding documents, construction documents or addenda that may affect the Bidder, the Bidder shall contact the Designer and/or Public Works Division and submit a written request for clarification. The Designer and/or Public Works Division will make such clarification only by written Addendum that will be mailed to each document holder or may be obtained at the office of the Designer and/or Public Works Division. By submitting a bid, the Bidder acknowledges procurement of all Addenda. No written request for clarification will be accepted by the Designer and/or Public Works Division later than fourteen (14) calendar days prior to the scheduled bid date.

- D. Bid as described in Contractor's Bid (DAPW 13) shall include Base Bid (in figures and in words) and Alternates as specified in Section entitled Alternates. In verifying bids, word amounts shall have precedence over figure amounts.
- E. Alternate amount(s) shall be listed where indicated. Add Alternates are not to be included in the Base Bid Scope of Work. Deduct Alternates are to be included in the Base Bid Scope of Work. The bid form must be signed. Note that by signing the bid document, the Bidder is acknowledging the procurement of all addenda and is certifying that the bid recognizes all items in all addenda.
- F. A bid by a corporation shall be in the legal name of the corporation followed by the word "by" and the signature of the president. The secretary of the corporation shall sign indicating his/her authority to sign. A Certificate of Corporate Resolution (DAPW 41) is required with and as a part of the bid if anyone other than the president of the corporation is signing bid documents.
- G. *The Form 96A-Questionnaire and Financial Statement is no longer required to be submitted.* The Director, Public Works Division reserves the right to request additional financial information or contractor experience as a basis for rejection of bid or award of contract.
- H. Each Bidder must file with his bid a Non-Collusion Statement (DAPW-121) signed by the same authorized person(s) who signed the bid.
- I. Each Bidder must file with his bid a completely filled in and executed Bid Bond (DAPW 15A) in accordance with IC 4-13.6-7-5. The bid bond penal sum shall be the minimum amount of five percent (5%) of the bid including all additive alternates.
- J. Each Bidder must file with his bid a completed MWBE Participation Plan and Good Faith Effort Work Sheet (DAPW 26SUP2). Refer to the Supplement to the General Conditions for MWBE Participation Policy (DAPW 26SUP1) for specific requirements.
- K. Each Bidder must file with his bid, the completed Contractor's Affidavit of Subcontractors Employed (DAPW 12) only if he proposes to perform any work with a subcontract amount of \$150,000.00 or more.
- L. Each bidder must file with his bid an Employee Drug Testing Plan (DAPW 150A) in accordance with IC 4-13-18 (P.L. 160-2006), or evidence that the contractor is subject to a collective bargaining agreement containing drug testing requirements that comply with IC 4-13-18.
- M. Each Bidder must include his Federal ID number or Social Security number on page 1 of 3 of the Bid Form (DAPW 13). All required bid documents must contain original hand written signatures.
- N. All documents required by statute, rule or these instructions to be included in the bid, must be submitted together in a single sealed envelope, plainly marked with the Name of Bidder, Project Identification, Project Number, Bid Time and Bid Date. Bids shall be rejected if all required documents are not in the single sealed envelope.
- O. A Bidder with proper identification may withdraw his bid at any time prior to the scheduled time for receipt of the bids; however, no bid may be withdrawn without written consent of the Director, Public Works Division for a *period of sixty (60) days after the date of the bid opening*, or unless extended in accordance with IC 4-13.6-6-4. Bids received after the designated due time for any reason, shall be rejected and returned unopened to the Bidder. The Director, Public Works Division reserves the right to reject any or all bids.
- P. Subcontractors whose work will equal or exceed One Hundred Fifty Thousand Dollars (\$150,000.00) must attain a Certificate of Qualification by the Certification Board before commencing any work on this project. Note paragraph 01. (B) above.
- Q. All Bidders (corporations) must be in good standing with the Indiana Secretary of State.

**05 SIGNATURE AFFIDAVIT**

- A. A Signature Affidavit (DAPW-14) containing the Bidder's authorized signature(s), properly notarized, may be submitted as a signature supplement to all other bid documents, except the bid bond, including:
  1. Contractor's Bid (DAPW 13)
  2. Non-Collusion Statement (DAPW-121)
  3. Contractor's Affidavit of Subs Employed (DAPW 12)
  4. MWBE Participation Plan and Good Faith Effort Work Sheet (DAPW 26 SUP 2)

- B. All documents herein before required with the bid may be unsigned if the signature affidavit is submitted, except for the BID BOND. BIDDER MUST SIGN THE BID BOND.

NOTE: SIGNING THE SIGNATURE AFFIDAVIT OR BID FORM IS ACKNOWLEDGMENT OF PROCUREMENT OF ALL ADDENDA AND CERTIFICATION BY BIDDER THAT THE BID RECOGNIZES ALL ITEMS IN ALL ADDENDA.

06      WORK BY CONTRACTOR

The Contractor shall perform a minimum of 15% of the value of work (measured in dollars of the total contract price) with his own forces, and not more than 85% of the value of work is to be subcontracted.

07      SUBSTITUTIONS

The materials, products, systems and equipment described in the bidding documents, construction documents and addenda establish a standard or required function, dimension, appearance and quality that shall also be met by any proposed substitution. No substitution by manufacturer, or trade name of product named, or of a quality specified will be considered unless written request for approval has been submitted by the Bidder and has been received by the Designer and/or Public Works Division at least fourteen (14) calendar days prior to the date for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the proposer. The Designer and/or Public Works Division decision of approval or disapproval of the proposed substitution shall be final. Products, materials or systems not specified or approved prior to bidding, shall not be accepted for use in this project. All such substitutions accepted shall be acknowledged by addendum. See paragraph. 04 (C).

08      NONDISCRIMINATION

Pursuant to IC 22-9-1-10, the Contractor and subcontractors, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract. Pursuant to IC 5-16-6-1, the contractor agrees:

- A. that in the hiring of employees for the performance of work under this contract or any subcontract hereunder, no contractor, or subcontractor, nor any person acting on behalf of such contractor or subcontractor shall, by reason of race, religion, color, sex, disability, national origin or ancestry, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment relates; and
- B. that no contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry; and
- C. that there may be deducted from the amount payable to the contractor by the State of Indiana or by any municipal corporation thereof, under this contract, a 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 the contract; and
- D. that this contract may be canceled or terminated by the State of Indiana or by any municipal corporation thereof, and all money due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this section of the contract.

09      EMPLOYMENT ELIGIBILITY VERIFICATION

The Contractor affirms under the penalties of perjury that he/she/it does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require his/her/its subcontractors, who perform work under this contract, to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.



The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

The contractor shall submit, before work begins the E-Verify case verification number for each individual who is required to be verified under IC 22-5-1.7. An individual who is required to be verified under IC 22-5-17 whose final case result is final nonconfirmation may not be employed on the public works project.

A contractor may not pay cash to any individual employed by the contractor for work done by the individual on the public works project.

A contractor must be in compliance with the federal Fair Labor Standards Act of 1938, as amended (29 U.S.C. 201-209) and IC 22-2-2-1 through IC 22-2-2-8. A contractor must be in compliance with IC 22-3-5-1 and IC 22-3-7-34. A contractor must be in compliance with IC 22-4-1 through IC 22-4-395. A contractor must be in compliance with IC 4-13-18-1 through IC 4-13-18-7.

## 10 NOTICE OF AWARD

- A. Prior to execution of the Contract, in accordance with IC 4-13.6-5-2, the Director of Public Works may require additional submittals from Bidder/s to clarify contractor's experience and plans for performing the proposed work. Submittals which may be required include a critical path construction schedule which coordinates all significant tasks sequences and durations; schedule of values, and documentation of efforts to include minority and woman owned businesses in the proposed work. The Director may require Bidder/s to provide a comprehensive list of subcontractors and suppliers within 24 hours of receipt of bids.
- B. Prior to execution of the Contract, the successful Bidder shall furnish a completed Domestic Steel Affidavit (DAPW-11) to Public Works Division, Indiana Department of Administration as part of the contract. The Domestic Steel Affidavit is included for Bidder's review but need not be submitted at the time of the bid opening. Definition of Steel Products:  
"Steel products" means 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 the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.
- C. Prior to execution of the Contract, the successful Bidder shall furnish a completed Contractor's Bond for Construction (DAPW 15) (combined performance and payment bond) to Public Works Division, Department of Administration as part of the contract. The Bond form is included for Bidder's review but need not be submitted at the time of the bid opening.
- D. Prior to execution of the Contract, the successful Bidder shall furnish a completed Contractor's Certificate of Insurance (DAPW 16) to Public Works Division, Department of Administration as part of the contract. The Insurance form is included for Bidder's review but need not be submitted at the time of the bid opening.
- E. Prior to execution of the Contract, the State of Indiana will issue to the successful Bidder a letter stating that his bid was the lowest responsible and responsive bid and that the enclosed contract document is submitted to him for his consideration. If he finds it in accordance with the bid documents, it is to be returned to Public Works Division by certified mail or in person within ten (10) calendar days after receipt for further execution and with the caution that a contract will not exist until it is signed by all signatories required. Failure to execute the proper contract and furnish the ancillary documents shall constitute reason to surrender the bid bond.
- F. Concurrent with execution of the Contract, the successful Bidder may be required to furnish executed copies of Contractor-Subcontractor agreements as required in Article 5 of the General Conditions.

11 SUMMARY

All required bid documents must contain original hand written signatures. Complete documents to be submitted with this bid:

- A. The Bid Bond (DAPW-15A) must be signed by both the Bidder and Bonding Company. The Bonding Company must also attach a Power of Attorney. Bid bond information, may be on the Bonding Company's standard form.
- B. The Contractor's Bid (DAPW-13)
  - Page 1: State the amount of the bid in figures and words.
  - Page 2: State the amount of the alternate(s), indicate add, deduct or no change (READ CAREFULLY).
  - Page 3: Authorized signature of the Company. If the signature affidavit is completed and submitted with the bid, this page must be submitted but need not be signed or notarized.
- C. The Signature Affidavit (DAPW-14) must contain the completed authorized signatures properly notarized and submitted with the bid as a supplement.

This Signature Affidavit shall fulfill all of the signature requirements. **NOTE:** The Signature Affidavit does not apply to the Bid Bond (DAPW 15A). The Bid Bond document must be fully completed with all required signatures and submitted with the bid.
- D. The Non-Collusion Statement (DAPW-121) must be signed by the same authorized person(s) who signed the bid documents. If the signature affidavit is completed and submitted with bid, this form shall be submitted, but need not be signed.
- E. For corporations, if anyone other than the president of the corporation signs, a Certificate of Corporate Resolution (DAPW 41) giving signature authority for the signer must be included.
- F. MWBE Participation Plan and MWBE Good Faith Effort Work Sheet (DAPW 26SUP2) must be completed and signed by the same authorized person who signed the bid documents.
- G. The completed Contractor's Affidavit of Subcontractors Employed (DAPW-12) whose subcontract amount will be \$150,000.00 or more.
- H. The completed plan for Contractor's Employee Drug Testing Plan (or statement of collective bargaining agreement).
- I. One copy only of the Bid Documents is required. Bidders may remove and use the Documents included in the project specifications or use reproductions of the Documents.

12 INDIVIDUAL BIDS SHALL BE REJECTED BY THE DIRECTOR, PUBLIC WORKS DIVISION FOR THE FOLLOWING REASONS (IC 4-13.6-5-2; IC 4-13.6-6-1; 25 IAC 2-6-5)

- A. If the bid envelope is not sealed at the time of submission; if the envelope does not clearly identify the project number and description; if the name of the Bidder is not clearly indicated on the outside of the envelope and/or if the envelope is not date and time stamped by Public Works Division prior to the stated time for receipt of bids.
- B. If the estimated base bid cost exceeds \$150,000.00 and the bidding contractor is not certified by Public Works Certification Board to offer bids in one of the specified categories.
- C. If the bidding contractor is under suspension by the Director of Public Works or by the Public Works Certification Board.
- D. If the bidding contractor is a trust and does not identify all beneficiaries and empowered settlors of the trust.
- E. If the contractor's drug plan is not included in the bid documents pursuant to and complies with IC 4-13-18

13 INDIVIDUAL BIDS MAY BE REJECTED BY THE DIRECTOR, PUBLIC WORKS DIVISION FOR THE FOLLOWING REASONS (25 IAC 2-6-5)

- A. If the Contractor's Bid (DAPW 13) Non-Collusion Statement (DAPW 121) and/or Bid Bond (DAPW 15A) are not signed and notarized as required by these instructions, or the Signature Affidavit (DAPW 14) and the Bid Bond (DAPW 15A) are not signed and notarized as allowed as an alternative.
- B. If all required bid or alternate(s) amounts, or unit prices are not submitted with the bid when specifically called for by the specifications issued for the project.

- C. When the Bidder adds any provision reserving the right to accept or reject the award, or if the Bidder adds conditions or alternates to his bid not requested (voluntary alternates), or if there are unauthorized additions or irregularities of any kind which tend to make the proposal incomplete, indefinite or ambiguous as to its meaning or amount.
- D. When no bids received are under or within funds that can be appropriated, or within the Designer's estimate or when situations develop which make it impossible or not practical to proceed with the proposed work.
- E. If, subsequent to the opening of the bids, facts exist which would disqualify the Bidder, or that such Bidder is not deemed by the Director, Public Works Division to be responsive or responsible.
- F. If an out-of-state contractor is not registered with the Indiana Secretary of State or if any bidding contractor is not in good standing with the Secretary of State.

**CONTRACTOR'S AFFIDAVIT OF SUBS EMPLOYED**

Public Works Project Number: \_\_\_\_\_ Date: \_\_\_\_\_

Project Description: \_\_\_\_\_

Prime Contractor: \_\_\_\_\_

Form Submitted for Bid: \_\_\_\_\_ Contract: \_\_\_\_\_ or Payment No.: \_\_\_\_\_

The following companies are subcontractors on this project for the amount indicated:

Subcontractor Name	Subcontract For	Subcontract Amount	Revised Amount	DAPW Certified Y/N	MBE WBE	On Site Y/N

\_\_\_\_\_ being duly sworn upon oath, deposes and says that he is \_\_\_\_\_ of the firm of \_\_\_\_\_ and is familiar with the affidavit herewith and that these entries are complete and true.

STATE OF \_\_\_\_\_ }  
 COUNTY OF \_\_\_\_\_ } SS:

\_\_\_\_\_ personally appeared before me, a Notary Public, in and for said County and State, this \_\_\_ day of \_\_\_\_\_, 20\_\_\_, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
 NOTARY PUBLIC - SIGNATURE

\_\_\_\_\_  
 NOTARY PUBLIC PRINTED NAME

(SEAL)

GENERAL BID FOR PUBLIC WORKS

CONTRACTOR'S BID

For \_\_\_\_\_  
(Insert class of work)

Project Number \_\_\_\_\_

Project Description (Title) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_

To: Department of Administration, Public Works Division  
Room W467  
402 West Washington Street  
Indianapolis, Indiana 46204

Pursuant to notices given, the undersigned proposes to furnish and install work  
in accordance with the construction documents prepared by:

\_\_\_\_\_  
(Designer Name, Address, Telephone)

-----

for the sum of \_\_\_\_\_  
(State amount in words)

\_\_\_\_\_ \$ \_\_\_\_\_  
(State amount in figures)

If required add attachment for all unit prices called for in the Specifications.

\_\_\_\_\_ Federal I.D. Number or Social Security Number

Contractor's Email address \_\_\_\_\_  
(Contract and Purchase Order will be sent to email address provided)

Bidder ID Number \_\_\_\_\_

(If you do not have an Indiana Department of Administration Bidder ID Number, please obtain one online at:  
<http://www.in.gov/idoa/2464.htm> )

ALTERNATE BIDS

Add Alternates Are Not to be included as part of the Base Bid Scope of Work.

Deduct Alternates are items of work that Are to be included in the Base Bid Scope of Work, and deducted from the project as described herein.

The work shall be as described in Section, ALTERNATES.

Bidder shall provide a response to each alternate specified. Response must indicate the amount to be ADDED to the base bid, DEDUCTED from the base bid, or that there is NO CHANGE.

Failure to respond to all alternates may cause the bid to be rejected.

BIDDER SHALL CHECK APPLICABLE BOX for each listed alternate.

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Alternate No. \_\_\_ ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ AMOUNT \$ \_\_\_\_\_

Ethics Compliance. The Contractor and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State, as set forth in Indiana Code § 4-2-6 et seq., the regulations promulgated there under, and Executive Order 04-08, dated April 27, 2004. If the Contractor is not familiar with these ethical requirements, the Contractor should refer any questions to the Indiana State Ethics Commission, or visit the Indiana State Ethics Commission website at <<<<http://www.in.gov/ethics/>>>>. If the Contractor or its agents violate any applicable ethical standards, the State may, in its sole discretion, terminate this contract immediately upon notice to the Contractor. In addition, the Contractor may be subject to penalties under Indiana Code § 4-2-6-12.

Pursuant to IC 22-9-1-10, the Contractor and subcontractors, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

-----  
IN TESTIMONY WHEREOF, the Bidder (a sole proprietor) has hereunto set his hand  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Proprietorship (Company Name)

(INDIVIDUAL)

\_\_\_\_\_  
Bidder (Owner)

-----  
IN TESTIMONY WHEREOF, the Bidder (a partnership) has hereunto set their hands  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Partner

\_\_\_\_\_  
Partner

-----  
IN TESTIMONY WHEREOF, the Bidder (a corporation) has caused this proposal to be signed by its  
President or other authorized signatory and Secretary this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Corporation Name

\_\_\_\_\_  
By President or Other Authorized Signatory

\_\_\_\_\_  
Secretary

If the bid is signed by other than the President, a Corporation Resolution designating other authorized signatory shall be submitted with this bid unless already on file with the Certification Board of the Public Works Division.

-----  
BY SIGNING THIS BID THE BIDDER ACKNOWLEDGES PROCUREMENT OF ALL ADDENDA AND  
CERTIFIES THAT THIS BID RECOGNIZES ALL ITEMS IN ALL ADDENDA.

**SIGNATURE AFFIDAVIT**

PROJECT NO: \_\_\_\_\_

STATE OF \_\_\_\_\_ }  
   } SS:  
COUNTY OF \_\_\_\_\_ }

Before me, the undersigned notary public, appeared \_\_\_\_\_ and being duly  
(name of bidder)

sworn, on his oath says that he/she is \_\_\_\_\_  
(president, general partner, owner)

of \_\_\_\_\_, bidder on Project No. \_\_\_\_\_, and  
(name of company)

Affirmed that:

1. This bid is submitted in good faith in the amount stated herein, and will be fulfilled according to the Contract Documents (contract, general and supplemental conditions, technical specification, drawings and addenda thereto), if his bid is accepted; and
2. The statements are true contained in the Non-Collusion Statement, and as applicable, the Contractor's Affidavit of Subs Employed, the M/WBE Participation Plan and the M/WBE Good Faith Effort Work Sheet.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed name)

\_\_\_\_\_  
(Printed or typed name of company)

\_\_\_\_\_  
(must be signed by principal of organization)

STATE OF \_\_\_\_\_ }  
   } SS:  
COUNTY OF \_\_\_\_\_ }

\_\_\_\_\_ personally appeared before me, a Notary Public, in and for said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires:

\_\_\_\_\_  
NOTARY PUBLIC – SIGNATURE

\_\_\_\_\_  
NOTARY PUBLIC PRINTED NAME

(SEAL)



BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we \_\_\_\_\_  
(Contractor's Name and Address)

as Principal, hereinafter called the Principal, and the \_\_\_\_\_  
(Bonding Company Name)

a corporation duly organized under the laws of the State of \_\_\_\_\_  
as Surety, hereinafter called the Surety, are held and firmly bound unto Public Works Division/Department of  
Administration, State of Indiana, as Obligee, hereinafter called the Obligee,

in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_ )  
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our  
heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for: (insert State Project Number, Description and Location)

Project No. \_\_\_\_\_

Project Description: \_\_\_\_\_

Project Location: \_\_\_\_\_

NOW THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract  
with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the  
bidding or contract documents with good and sufficient surety for the faithful performance of such contract and for  
the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the  
Principal to enter such contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference  
not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the  
Obligee may in good faith contract with another party to perform the work covered by said bid, then this obligation  
shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Principal)

By: \_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
Witness)

\_\_\_\_\_  
(Attorney-in-fact)

**I. MINORITY AND WOMEN'S BUSINESS ENTERPRISES PARTICIPATION PLAN**

A Respondent is expected to submit in each response a Minority and Women's Business Enterprises Participation Plan in accordance with IC 4-13-16.5 and 25 IAC 5. The Plan must show that there are, participating in the proposed contract, Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) listed in the Minority and Women's Business Enterprises Division (MWBD) directory of certified firms. Respondents must indicate the name of the MBE and WBE with which it will work, the contact name and phone number at the firm(s), the service supplied by the firm(s), the specific dollar amount from this contract that will be directed toward each firm, and the approximate date these products and/or services will be utilized. If participation is met through use of vendors who supply products and/or services, the Respondent must also indicate the vendor's tax ID number as well as provide a description of products and/or services provided to the Respondent that are directly related to this proposal and the cost of direct supplies for this proposal. All prime contractors, including MBE and WBE prime contractors, must meet the contract goals through use of subcontractors. MBE and WBE prime contractors will get no credit toward the contract goal for the use of its own workforce. The State does not accept national plans.

Failure to meet these requirements will affect the evaluation of your Proposal. The Department reserves the right to verify all information included in the Plan.

Respondents are encouraged to contact and work with MWBD to design a plan to meet established goals. MWBD's website address is [www.IN.gov/idoa/minority/](http://www.IN.gov/idoa/minority/) and contains a complete list of all the Department's certified MBE's and WBE's.

**Minority & Women's Business Enterprises Participation  
Letter of Commitment**

A signed letter(s), on company letterhead, from the MBE and/or WBE must accompany the Plan. This letter(s) shall state and will serve as acknowledgement from the MBE and/or WBE of its amount of participation, the scope of products and/or services, and approximate date these products and/or services will be utilized.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's M/WBE Program. Questions involving the regulations governing the Plan should be directed to MWBD's Compliance Unit at 317/232-3061

**MBE/WBE PARTICIPATION PLAN**

RFP # / Bid # / Quote # \_\_\_\_\_ DUE DATE \_\_\_\_\_

(Circle One)

RFP / BID / QUOTE NAME \_\_\_\_\_

(Circle One)

RESPONDENT \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

PHONE ( ) \_\_\_\_\_

The following MBE and/or WBE's listed in the MWBD directory will be participating in the contract:

**MBE/WBE   P HONE   COMPANY NAME   SCOPE OF PRODUCTS/SERVICES   UTILIZATION DATE   AMOUNT**

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\*If additional room is necessary, indicate here \_\_\_\_\_. Please attach a separate page.

**THIS DOCUMENT MUST BE INCLUDED IN YOUR RESPONSE**

**Indiana Department of Administration  
Public Works and State Office Building Commission  
GOOD FAITH EFFORTS WORKSHEET**

BIDDER \_\_\_\_\_ BID/PROJECT NUMBER \_\_\_\_\_

CONTRACT GOALS    7% MBE        5% WBE

List the M/WBEs contacted and complete the following information for each. Copies of all communications to and from each vendor should be maintained.

Company Name and Address	MBE	WBE	Type of Contact	Date of Contact	Date Response Due	Goods Or Services Requested	Result (Include Price Quote)

Indicate **Good Faith Efforts** made to utilize MWBEs. Check and explain all that apply or should be considered. Please provide evidence of the efforts that you want to be considered. A complete description of each criteria may be found in the **Indiana Department of Administration Public Works and State Office Building Commission MWBE Participation Policy**.

<b>MBE and WBE Barrier Assistance</b>	Describe
<b>Advertisement</b>	Describe
<b>Agency Assistance</b>	Describe
<b>Other Criteria</b>	Describe

CERTIFICATE OF CORPORATE RESOLUTION

I, \_\_\_\_\_, do hereby certify that I am the Secretary  
Type Name  
of \_\_\_\_\_, a corporation duly organized and  
existing under and by virtue of the Laws of the State of Indiana;

I further certify that a regular/special meeting of the members of the Board of Directors of said corporation, duly called held and convened in conformity with the Charter and By Laws of said corporation, on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, a quorum being present and voting thereon, the following resolution was duly adopted, to-wit:

I further certify that the foregoing resolution is a full, true, and complete copy as the same appears on record in the Minute Record Book of said corporation of which I am the legal custodian; that the same has not been altered, amended or repealed and is now in full force and effect.

In Witness Whereof, I have hereunto set my hand for said corporation this \_\_\_\_\_ day  
of \_\_\_\_\_, 20\_\_\_\_\_.

By: \_\_\_\_\_  
(Signature)

(must be signed by principal of organization)

\_\_\_\_\_  
STATE OF }  
                  } SS:  
COUNTY OF }

personally appeared before me, a Notary Public, in and for said County and State, this day of \_\_\_\_\_, 20\_\_\_\_\_, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires:

\_\_\_\_\_  
NOTARY PUBLIC - SIGNATURE

(SEAL)

\_\_\_\_\_  
NOTARY PUBLIC PRINTED NAME

NON-COLLUSION STATEMENT

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. **Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.**

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Signature

---

Printed Name

---

Title

---

Company

DOMESTIC STEEL AFFIDAVIT

STATE OF }
} SS:
COUNTY OF }

PROJECT NO: \_\_\_\_\_

I hereby swear, under penalties of perjury, that the steel products furnished for this project shall conform to the following Indiana Code Definitions and contract provisions:

IC 5-16-8-1 Definitions:

"Steel products" means 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 the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.

"United States" refers to the United States of America. The term includes all territory, continental or insular, subject to the jurisdiction of the United States.

IC 5-16-8-2 Public agency contract provisions; rules for determining reasonable pricing.

Sec. 2. (a) Each public agency shall require that every contract for the construction, reconstruction, alteration, repair, improvement or maintenance of public works contain a provision that, if any steel or foundry products are to be used or supplied in the performance of the contract or subcontract, only steel or foundry made in the United States shall be used or supplied in the performance of the contract or any of the subcontracts unless the head of the public agency determines, in writing, that the cost of steel or foundry products is deemed to be unreasonable.

(Signature)

(Printed name)

(Attest)
(Vice President/Secretary/Treasurer)

(Printed or typed name of company)

STATE OF }
} SS:
COUNTY OF }

\_\_\_\_\_ personally appeared before me, a Notary Public, in and for said County and State, this \_\_\_ day of \_\_\_\_\_, 20\_\_\_, after being duly sworn upon his oath, says that the facts alleged in the foregoing affidavit are true.

My Commission Expires:

NOTARY PUBLIC - SIGNATURE

(SEAL)

NOTARY PUBLIC PRINTED NAME

CONTRACTOR'S BOND FOR CONSTRUCTION

KNOW ALL MEN BY THESE PRESENT, that \_\_\_\_\_  
(Contractor)

\_\_\_\_\_ of \_\_\_\_\_  
(Address) (City, State)

as principal and \_\_\_\_\_  
(Bonding Company)

\_\_\_\_\_ (Address) (City, State) (Zip Code)

as surety, are firmly bound unto the State of Indiana in the penal sum of \$\_\_\_\_\_ Dollars, for the payment of which, well and truly to be made, we bind ourselves, jointly and severally, and our joint and several heirs, executors, administrators and assigns, firmly by these present, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SURE, THAT, WHEREAS the State of Indiana acting by and through the Commissioner, Department of Administration, has entered into a certain written contract dated \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_ (Project Number and Description)

\_\_\_\_\_ situated in \_\_\_\_\_ Indiana, in accordance with the construction documents approved and adopted by said Commissioner, Department of Administration, which are made a part of this bond.

NOW THEREFORE, if the said \_\_\_\_\_ (Contractor)

\_\_\_\_\_, shall well and faithfully do and perform the same in all respects according to the plans and specifications adopted by said Commissioner, Department of Administration, and according to the time, terms and conditions specified in said contract and incurred by him or any subcontractor in the prosecution of said work, including labor, service and materials furnished, then this obligation shall be void; otherwise to remain in full force, virtue and effect. This bond shall adhere to the requirements of IC 4-13.6-7-6 and IC 4-13.6-7-7.

IN WITNESS WHEREOF, we hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

By: \_\_\_\_\_ (Seal)  
(Contractor)

By: \_\_\_\_\_ (Seal)  
(Bonding Company)

By: \_\_\_\_\_  
(Attorney-in-fact)

## CONTRACTOR'S CERTIFICATE OF INSURANCE

This certifies to the addressee shown below that the following described policies, subject to their terms, conditions, and exclusions, have been issued to:

NAME AND ADDRESS OF INSURED: \_\_\_\_\_

COVERING (show State project number, name and location) \_\_\_\_\_

ADDRESSEE: **PUBLIC WORKS DIVISION/DEPARTMENT OF ADMINISTRATION**

DATE: \_\_\_\_\_

TYPE OF INSURANCE	POLICY NUMBER	EFFECTIVE DATE	EXPIRATION DATE	LIMITS	
1. General Liability  a. Bodily Injury Including Personal Injury				Each Person - Premises and Operations	\$ _____
				Each Person - Elevators	\$ _____
				Each Person - Independent Contractor	\$ _____
				Each Person - Products Completed Including Operations	\$ _____
				Each Person - Contractual	\$ _____
				Each Occurrence -	\$ _____
				Aggregate - Products Completed Including Operations	\$ _____
				b. Property Damage	
Each Occurrence - Elevators	\$ _____				
Each Occurrence - Independent Contractor	\$ _____				
Each Occurrence - Products Completed Including Operations	\$ _____				
Each Occurrence - Contractual	\$ _____				
Aggregate -	\$ _____				
Aggregate - Operations Protective Products and Contractual	\$ _____				
2. Automobile Liability  a. Bodily Injury b. Property Damage				Each Person	\$ _____
				Each Occurrence	\$ _____
				Each Accident	\$ _____
3. Excess Liability Umbrella					\$ _____
4. a. Workmen's Compensation b. Employer's Liability				Statutory Workmen's Compensation	\$ _____
				One Accident And Aggregate Disease	\$ _____
5. Builder's Risk					\$ _____

**UNDER GENERAL LIABILITY POLICY OR POLICIES**

- |   | YES   | NO    |
|---|-------|-------|
| 1. Does Property Damage Liability Insurance shown include coverage for XC and U hazards? .....                    | _____ | _____ |
| 2. Is Occurrence Basis Coverage provided under Property Damage Liability? .....                                   | _____ | _____ |
| 3. Is Broad Form Property Damage Coverage provided for this Project?.....   | _____ | _____ |
| 4. Is Personal Injury Coverage included? .....  | _____ | _____ |
| 5. Is coverage provided for Contractual Liability (including indemnification provision) assumed by insured? ..... | _____ | _____ |

**UNDER AUTOMOBILE LIABILITY POLICY OR POLICIES.....**

- |   |       |       |
|---|-------|-------|
| 1. Does coverage shown above apply to non-owned and hired automobiles? .....    | _____ | _____ |
| 2. Is Occurrence Basis Coverage provided under Property Damage Liability? ..... | _____ | _____ |

In the event of cancellation, fifteen (15) days written notice shall be given to the party to whom this certificate is addressed.

\_\_\_\_\_  
NAME OF INSURANCE COMPANY

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
SIGNATURE OF AUTHORIZED REPRESENTATIVE



## CONTRACTOR'S EMPLOYEE DRUG TESTING

IC 4-13-18 IS ADDED TO THE INDIANA CODE AS A NEW CHAPTER TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2006]:

### Chapter 18. Drug Testing of Employees of Public Works Contractors

Sec. 1. This chapter applies only to a public works contract awarded after June 30, 2006.

Sec. 2. As used in this chapter, "bid" includes a quotation.

Sec. 3. (a) As used in this chapter, "contractor" refers to a person who:

- (1) submits a bid to do work under a public works contract; or
- (2) does any work under a public works contract.

(b) The term includes a subcontractor of a contractor.

Sec. 4. As used in this chapter, "public works contract" refers to:

- (1) a public works contract covered by IC 4-13.6;
- (2) a public works contract covered by IC 5-16 and entered into by a state agency; or
- (3) a state highway contract covered by IC 8-23-9;

when the estimated cost of the public works project is one hundred fifty thousand dollars (\$150,000) or more.

Sec. 5. (a) A solicitation for a public works contract must require each contractor that submits a bid for the work to submit with the bid a written plan for a program to test the contractor's employees for drugs.

(b) A public works contract may not be awarded to a contractor whose bid does not include a written plan for an employee drug testing program that complies with this chapter.

(c) A contractor that is subject to a collective bargaining agreement shall be treated as having an employee drug testing program that complies with this chapter if the collective bargaining agreement establishes an employee drug testing program that includes the following:

- (1) The program provides for the random testing of the contractor's employees.
- (2) The program contains a five (5) drug panel that tests for the substances identified in section 6(a)(3) of this chapter.

(3) The program imposes disciplinary measures on an employee who fails a drug test. The disciplinary measures must include at a minimum, all the following:

- (A) The employee is subject to suspension or immediate termination.
- (B) The employee is not eligible for reinstatement until the employee tests negative on a five (5) drug panel test certified by a medical review officer.
- (C) The employee is subject to unscheduled sporadic testing for at least one (1) year after reinstatement.

(D) The employee successfully completes a rehabilitation program recommended by a substance abuse professional if the employee fails more than one (1) drug test.

A copy of the relevant part of the collective bargaining agreement constitutes a written plan under this section.

Sec. 6. (a) A contractor's employee drug testing program must satisfy all of the following:

- (1) Each of the contractor's employees must be subject to a drug test at least one (1) time each year.
- (2) Subject to subdivision (1), the contractor's employees must be tested randomly. At least two

percent (2%) of the contractor's employees must be randomly selected each month for testing.

(3) The program must contain at least a five (5) drug panel that tests for the following:

- (A) Amphetamines.
- (B) Cocaine.
- (C) Opiates (2000 ng/ml).
- (D) PCP.
- (E) THC.

(4) The program must impose progressive discipline on an employee who fails a drug test. The discipline must have at least the following progression:

(A) After the first positive test, an employee must be:

- (i) suspended from work for thirty (30) days;
- (ii) directed to a program of treatment or rehabilitation; and
- (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.

(B) After a second positive test, an employee must be:

- (i) suspended from work for ninety (90) days;
- (ii) directed to a program of treatment or rehabilitation; and
- (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.

(C) After a third or subsequent positive test, an employee must be:

- (i) suspended from work for one (1) year;
- (ii) directed to a program of treatment or rehabilitation; and
- (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.

The program may require dismissal of the employee after any positive drug test or other discipline more severe than is described in this subdivision.

(b) An employer complies with the requirement of subsection (a) to direct an employee to a program of treatment or rehabilitation if the employer does either of the following:

(1) Advises the employee of any program of treatment or rehabilitation covered by insurance provided by the employer.

(2) If the employer does not provide insurance that covers drug treatment or rehabilitation programs, the employer advises the employee of agencies known to the employer that provide drug treatment or rehabilitation programs.

Sec. 7. (a) The public works contract must provide for the following:

(1) That the contractor implement the employee drug testing program described in the contractor's plan.

(2) Cancellation of the contract by the agency awarding the contract if the contractor:

- (A) fails to implement its employee drug testing program during the term of the contract;
- (B) fails to provide information regarding implementation of the contractor's employee drug testing program at the request of the agency; or
- (C) provides to the agency false information regarding the contractor's employee drug testing program.

(b) The provisions of the public works contract relating to cancellation of the contract by the agency awarding the contract apply to cancellation of the public works contract under this section.

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STATE OF INDIANA  
GENERAL CONDITIONS

ARTICLE 1 CONTRACT DOCUMENTS

1.1 Definitions

1.1.1 The Contract Documents

The Contract Documents consist of the Agreement, the Instructions to Bidders, the Contractor's Proposal (Bid), the Conditions of the Contract (General and Supplementary), Drawings, Specifications, and Addenda issued prior to bidding, Change Orders, any written interpretation issued as a field order by the Designer pursuant to Article 1.2, and all field orders for minor changes in the Work by the Designer pursuant to Article 12.3.

1.1.2 The Contract

The Contract Documents form the Contract for construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral.

1.1.3 The Work

All labor, material, equipment, systems and services necessary to produce the result called for in the Contract Documents.

1.1.4 The Project

The Project is the total construction designed by the Designer of which the Work performed under the Contract Documents may be the whole or a part.

1.2 Execution, Correlation, Intent and Interpretations

1.2.1 The Contract Documents shall be signed by the Owner and the Contractor. The signature process may be done electronically at the discretion of the Owner.

1.2.2 By executing the Contract the Contractor represents that he has visited the site and correlated his observations with the requirements of the Contract Documents, and has no major question pertaining thereto.

1.2.3 The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the Documents is to include all labor, equipment, supervision and materials, for the proper execution and completion of the Work, and also to include those things that may be reasonably inferable from the Contract Documents as being necessary to produce the intended results. Words that have a well-known technical or trade meaning are used herein, in accordance with such recognized meaning.

1.2.4 Written interpretations necessary for the proper execution of the Work, in the form of drawings or otherwise will be issued with reasonable promptness by the Designer. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents, and may be issued by field order subject to Owner's approval.

1.3 Copies Furnished and Ownership

1.3.1 The Contractor will be furnished 5 copies of drawings and specifications and any other information necessary for the execution of the Work.

1.3.2 All drawings, specifications, and copies thereof furnished by the Designer are his property. They are not to be used on any other Project, and, with the exception of one Contract set for each party to the Contract, are to be returned on request to the Designer at the completion of the Work.

ARTICLE 2 DESIGNER

2.1 Definition

2.1.1 The Designer is the person or organization identified as Designer of the Project, and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The terms Designer, Engineer, Architect, (and in certain projects Director, Public Works Division or his authorized representative), shall mean the Designer.

## 2.2 Administration of the Contract

2.2.1 The Designer will provide general administration of the Contract, including the functions hereinafter described.

2.2.2 Unless stated otherwise, the Designer shall be the Owner's representative during the construction phase. He shall have authority to act on behalf of the Owner only to the extent expressly provided in the Contract Documents or otherwise in writing, which will be shown to the Contractor. The Designer will advise and consult with the Owner and all of the Owner's instructions to the Contractor shall be issued through the Designer.

2.2.3 The Designer shall have access to the Work at all times wherever it is in storage, preparation and progress. The Contractor shall provide facilities for such access so that the Designer and Owner's Site Representative may perform their functions under the Contract Documents.

2.2.4 The Designer will make no less than weekly visits to the site when work is in progress to familiarize himself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. He will not be required to make exhaustive or continuous on-site inspection to check the quality or quantity of the Work. On the basis of his on-site observations as Designer, he will keep the Owner informed of the progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.

2.2.5 Based on such observation and the Contractor's applications for payment, the Designer will determine the amount owed to the Contractor and will issue Certificates for Payment in such amounts.

2.2.6 The Designer will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder. He will promptly render such interpretations as he may deem necessary for the proper execution or progress of the Work.

2.2.7 All interpretations and decisions of the Designer will be consistent with the intent of the Contract Documents. He will exercise his best efforts to insure faithful performance by the Contractor.

2.2.8 Claims, disputes and other matters in question relating to the execution or progress of the Work or interpretation of the Contract Documents shall be referred initially to the Designer for decision and be subject to written appeal within fifteen (15) days by the Contractor. The Designer shall submit his decision promptly in writing to the Director, Public Works Division, who shall have full authority to render the final and binding decision.

2.2.9 The Designer will have responsibility to recommend to the Owner the rejection of work that does not conform to the Contract Documents. Whenever the Designer considers it necessary or advisable, he shall recommend to the Owner the stoppage of the Work or any portion thereof, and to recommend special examination or testing of the Work (whether or not fabricated, installed, or completed).

2.2.10 The Designer will review and approve or take other appropriate action upon the Contractor's submittals such as shop drawings, product data and samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Designer's approval of a specific item shall not indicate approval of all assembly of which the item is a component.

2.2.11 The Designer will prepare change orders in accordance with Article 12.

2.2.12 The Designer will conduct reviews to determine the dates of Substantial Completion and Final Completion, will receive and forward to the Owner for the Owner's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of Article 9.7.

2.2.13 The Designer, together with representatives from the Contractor and the Owner will conduct a review of the Work nine (9) months after the date of substantial completion to determine any work not in compliance with the Contract Documents at that time. A list of items to be corrected or completed will be forwarded to the Contractor for corrective action prior to the expiration of the one year warranty period.

2.2.14 The duties, responsibilities and limitations of authority of the Designer as the Owner's representative during construction as set forth in Articles 1 through 14 of these General Conditions shall not be modified or extended without written consent of the Owner.

2.2.15 The Designer will not be responsible for the acts or omissions of the Contractor, Subcontractor, or any of their superintendents, supervisory staffs, agents or employees, or any other persons performing any of the Work.

2.2.16 In case of the termination of the employment of the Designer, the Owner shall appoint a Designer against whom the Contractor makes no reasonable objections, whose status under the Contract shall be that of Designer.

## ARTICLE 3 OWNER

### 3.1 Definition

3.1.1 The Owner is the State of Indiana, represented by the Commissioner; Department of Administration acting through the Director, Public Works Division and the Director's designated project manager.

### 3.2 Information and Service Required of the Owner

3.2.1 The Owner will furnish, through the Designer, surveys, describing known physical characteristics, legal limits and utility locations for the property on which the Project is to be erected, if in the Owner's possession.

3.2.2 Information or services under the Owner's control shall be furnished by the Owner with promptness to avoid delay in the orderly progress of the Work.

3.2.3 The Owner shall issue all instructions to the Contractor through the Designer unless specified elsewhere in these documents.

3.2.4 If the Contractor fails to correct defective work as required by Article 13 or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner, by a written order 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 person or entity, except to the extent required by Article 6.1.

### 3.3 Owner's Site Representative

3.3.1 Notwithstanding the obligations of the Designer as Owner's representative during construction, the Owner may employ an on-site representative to observe the progress of the Work.

3.3.2 The Owner's Site Representative shall function as an observer only. He shall report his findings to the Designer for review and any required further action. The Owner's Site Representative is not authorized to make changes in the Work or to interpret the Contract Documents.

3.3.3 The Owner's Site Representative shall have at all times access to the Work wherever it is in storage, preparation and progress. He may attend meetings at the site and he may review and approve the Contractor payment requests.

## ARTICLE 4 CONTRACTOR

### 4.1 Definition

4.1.1 The Contractor is the person or organization identified as such in the Agreement. He is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

### 4.2 Review of Contract Documents

4.2.1 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Designer and the Owner any error, inconsistency or omission he may discover. The Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings, product data or samples for such portion of the Work.

### 4.3 Supervision and Construction Procedures

4.3.1 The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for the quality of the Work and for all construction techniques, sequences, and procedures, and for coordinating all portions of the Work.

4.3.2 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Designer in administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.9 by persons other than the Contractor.

### 4.4 Labor and Materials

4.4.1 Unless otherwise specified in Division 1, the Contractor shall provide and pay for all labor, material, equipment, tools, construction equipment, machinery, transportation, and other facilities and services necessary for the proper execution of the Work.

4.4.2 Unless otherwise specified in Division 1, the Contractor shall provide and pay for all electric current, water, heat, and telephone services and shall maintain necessary discipline to prevent waste.

4.4.3 If any item of work shall be the subject of a jurisdictional dispute as to the craft to be used for said work, the Contractor shall aid in such inter-craft resolution and if arbitrated, abide by the decision, holding the Owner free of involvement in the dispute, and if time is lost by the dispute, extra work days will only be considered through the provisions of Article 12.2. He will do whatever he can to eliminate any embarrassment to the Owner caused by picketing, etc.

4.4.4 The Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ on the Work any unfit person or any one employee unskilled in the Work assigned to him or unqualified as a tradesman in the trade involved.

#### 4.5 Warranty and Guarantee

4.5.1 The Contractor warrants and guarantees that all materials and equipment incorporated in the Project shall be new unless otherwise specified, and all work will be of the highest quality, free from faults and defects, and in strict conformance with the Contract Documents for a period of one year from the date of substantial completion. All work not so conforming to the Contract Documents may be considered defective. If required by the Designer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The warranties and guarantees provided in this Article and elsewhere in the Contract Documents shall be in addition to and not in limitation of any other warranty or guarantee or remedy called for the Contract Documents or otherwise prescribed by law. The Contractor, together with the Designer and representatives from the Owner, shall review the Work nine (9) months after the date of substantial completion to determine any work not in compliance with the Contract Documents. The Contractor shall correct such non-complying work prior to the expiration of the one year warranty.

#### 4.6 Permits, Fees and Notices

4.6.1 The Contractor shall secure and pay for all permits, fees and licenses necessary for the execution of the Work.

4.6.2 The Contractor and Subcontractors must submit an "Exemption Certificate for Construction Contractors" (Form ST-105) to each supplier in order to obtain exemption from the Indiana Gross Tax (i.e., sales and use tax).

4.6.3 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the conduct of the Work. If he observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Designer in writing, and any necessary changes shall be adjusted by change order. If he performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Designer, he shall bear all cost arising from such non-conformance.

#### 4.7 Cash Allowances

4.7.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. These allowances cover the net cost of the materials and equipment delivered and unloaded at the site which cost shall be determined by the Owner through proper procedures for receiving quotes or bids as required by law. The Contractor's handling costs on the site, labor, installation costs, overhead, profit, and other expenses shall be included in the Contract sum and not in the allowance. The Contractor shall cause the Work required by these allowances to be performed by such persons as the Designer may direct, but he will not be required to employ persons against whom he has a reasonable objection. If the net cost above, when determined, is more than or less than the allowance, the Contract Sum will be adjusted accordingly by change order.

#### 4.8 Superintendent

4.8.1 The Contractor shall keep on the Project, during the entire contract time, a competent superintendent and necessary assistants, all satisfactory to the Designer and the superintendent shall not be changed, except with the consent of the Owner, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The superintendent shall represent the Contractor and shall have full authority to act on his behalf. All communications given the superintendent shall be as binding as if given by the Contractor. Important communications shall be confirmed in writing.

#### 4.9 Responsibility for Those Performing the Work

4.9.1 The Contractor shall be responsible for the quality of the Work, for acts and omissions of all the Subcontractors, their superintendents, their supervisory staffs, agents, or employees and of all other persons performing any of the Work under a Contract with the Contractor.

#### 4.10 Progress Schedule

4.10.1 Unless otherwise indicated in Division 1, the Contractor, immediately after being awarded the Contract, shall prepare and submit for the Designer's approval a progress schedule for the Work in relation to the entire Project. This schedule in bar graph form, or other form approved by the Owner, shall indicate the dates for the starting and completion of the various stages of construction, and in addition, will state the contractual completion date. The contract completion date, based on the construction period stated in the notice to bidders, shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by change order. A more detailed schedule may be required elsewhere in the documents.

#### 4.11 Record Documents at the Site

4.11.1 The Contractor shall maintain for the Owner as part of the Contract one record copy of all drawings, specifications, addenda, shop drawings, change orders and other modifications at the site in good order, and marked to record all changes made during construction. These shall be available to the Designer and the Owner's Site Representative at all times while Work is in progress. All changes made during construction shall be recorded monthly and reviewed by the Designer before approval of each partial progress payment. The record documents shall be submitted to the Designer prior to the Contractor's final payment.

#### 4.12 Shop Drawings and Samples

4.12.1 Shop drawings are all drawings, diagrams, illustrations, schedules, brochures, and other data, which are prepared by the Contractor, or any Subcontractor, manufacturer, supplier, or distributor, and which illustrate the Work.

4.12.2 The Contractor shall submit all shop drawings and samples required by the Contract or by the Designer in a timely manner, allowing sufficient time for the Designer's review so as not to cause any delay in the Work or in work by any other Contractor.

4.12.3 At the time of such submission, the Contractor shall furnish or verify all field measurements, field construction criteria, materials, catalog numbers, and the like and shall individually check, coordinate and stamp with his approval each submission, and shall in writing call the Designer's attention to any deviations in the shop drawings or samples from the requirements of the Contract Documents.

4.12.4 The Designer will check and approve, with reasonable promptness so as to cause no delay, these shop drawings and samples only for conformance with the design concept of the Project, and with the information given in the Contract Documents. The Designer's approval of a separate item will not indicate approval of the assembly in which the item functions.

4.12.5 The Designer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has in writing called the Designer's attention to such deviation at the time of submission and the Designer has given written approval to the specific deviation, nor shall this relieve the Contractor from errors or omissions in the shop drawings or samples.

4.12.6 No work requiring a shop drawing or sample submission shall be commenced until the submission has been approved by the Designer. All such work shall be in accordance with approved shop drawings and samples.

#### 4.13 Use of Premises

4.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the premises with any materials or equipment.

#### 4.14 Cutting and Patching

4.14.1 The Contractor shall do all cutting, fitting or patching of his work that may be required to make its several parts come together properly and shall not endanger any work by cutting, excavating, or otherwise altering the Work or any part of it. Costs caused by defective or ill-timed work shall be borne by the party responsible therefore.

#### 4.15 Cleaning Up

4.15.1 The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work, he shall remove all waste material and rubbish from and about the building as well as all his tools, scaffolding and surplus materials. Contractor shall clean all glass surfaces, lights and fixtures, ceilings, walls and shall leave the Work dusted, swept and wet mopped clean, unless more exactly specified.

4.15.2 In case of dispute the Owner may remove the rubbish and charge the cost to the several Contractors as the Designer shall determine to be just.



## ARTICLE 5 SUBCONTRACTORS

### 5.1 Definition

As used in this article "contractor tier" refers collectively to the following classes of contractors on a public works project:

- (1) "Tier 1 contractor" includes each person that has a contract with the public agency to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "prime contractor" or a "general contractor".
- (2) "Tier 2 contractor" includes each person that has a contract with a tier 1 contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "subcontractor".
- (3) "Tier 3 contractor" includes each person that has a contract with a tier 2 contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "sub-subcontractor".
- (4) "Lower tier contractor" includes each person that has a contract with a tier 3 contractor or lower tier contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "lower tier subcontractor".

A Subcontractor is a person or entity who has a direct Contract with the Contractor to perform any of the Work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative. The term Subcontractor does not include any separate Contractor or his Subcontractors.

### 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

5.2.1 Unless otherwise required by the Contract, the Contractor shall furnish to the Owner, with his bid on the prescribed form, the names of all persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work with an installed value of \$150,000.00 or more. The Designer will promptly reply to the Contractor in writing stating whether or not the Owner or the Designer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Designer to reply within fourteen (14) days shall constitute notice of no reasonable objection.

5.2.2 The Contractor shall not subcontract with any such proposed person or entity to which the Owner or the Designer has made reasonable objection. The Contractor shall not be required to subcontract with anyone to whom he has a reasonable objection.

5.2.4 If the Owner or the Designer has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner or the Designer has no reasonable objection.

5.2.5 The Contractor shall make no substitution of any Subcontractor, person or entity previously selected, if the Owner or Designer makes reasonable objection to such substitution.

5.2.3 The Contractor and his subcontractors shall employ only licensed plumbers and shall provide to the Owner the names and license numbers of all plumbers engaged in the Work. The Contractor shall submit this documentation with any monthly progress payment request that includes plumbing labor.

### 5.3 Subcontractual Relations

5.3.1 By an appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Said agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Provisions of Article 9 for progress payments, retainage and payment for stored material shall be incorporated without modification in all Contractor-Subcontractor agreements. The Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. Prior to execution of the Contractor-Subcontractor agreement, the Contractor shall provide all Subcontractors a complete copy of all proposed Contract Documents for the Project to which the Subcontractor will be bound by this Paragraph 5.3. Each Subcontractor shall similarly make available to his Sub-Subcontractors copies of such Documents. Executed copies of all agreements shall remain on file with the Contractor and be available for review by the Owner at the Owner's discretion.

## ARTICLE 6 SEPARATE CONTRACTS

### 6.1 Owner's Right to Let Separate Contracts

6.1.1 The Owner reserves the right to let other contracts in connection with other portions of the Project under these or similar General Conditions.

6.1.2 When separate contracts are awarded for different portions of the Project, "the Contractor" in the Contract Documents in each case shall be the Contractor who signs each separate contract with the Owner.

6.1.3 When separate contracts are awarded for portions of the Project, the General Construction Contractor shall be responsible for the overall coordination of all separate contracts for the Project.

### 6.2 Mutual Responsibility of Contractors

6.2.1 The Contractor shall afford each other Contractor reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and each shall properly connect and coordinate his work with all others as coordinated by the General Contractor.

6.2.2 If any part of the Contractor's work depends on proper execution or results upon the work of any other separate Contractor, the Contractor shall inspect and promptly report to the Designer any discrepancies or defects that shall cause his work to fail or be non-conforming. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work.

6.2.3 Should the Contractor cause damage to any separate Contractor on the Project, the General Contractor agrees, upon due notice, to settle with such other Contractor by agreement, if at all possible without involving the Owner. The Owner will be involved only after evidence is presented that sureties cannot settle the problem.

6.2.4 Any costs caused by defective or ill-timed work shall be borne by the party responsible.

## ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 Delinquent State Taxes (IC. 4-13-2-14.5). The Public Works Division may allow the Department of State Revenue access to the name of each person who is either:

- (1) Bidding on a Contract to be awarded under this chapter; or
- (2) A Contractor or Subcontractor under this chapter.

If the Public Works Division is notified by the Department of State Revenue that a bidder is on the most recent tax warrant list, a Contract may not be awarded to that bidder until the bidder provides a statement from the Department of State Revenue that the Bidder's delinquent tax liability has been satisfied. The Department of State Revenue may notify:

- (1) The Department of Administration; and
- (2) The Auditor of State;

that a Contractor or Subcontractor under this chapter is on the most recent tax warrant list, including the amount owed in delinquent taxes. The Auditor of State shall deduct from the Contractor's or Subcontractor's payment the amount owed in delinquent taxes. The Auditor of State shall remit this amount to the Department of State Revenue and pay the remaining balance to the Contractor or Subcontractor.

### 7.2 Choice of Law

7.2.1 The Contract shall be governed by the laws of the State of Indiana.

### 7.3 Assignment

7.3.1 The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the Owner.

### 7.4 Written Notice

7.4.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or sent by registered or certified mail to the last business address known to him who gives the notice.

## 7.5 Claims for Damages

7.5.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within seven (7) days of the first observance of such injury or damage.

## 7.6 Performance Bond and Labor and Material Payment Bond

7.6.1 For projects advertised with an estimated base bid amount of One Hundred Fifty Thousand Dollars (\$150,000) or more, the Contractor shall furnish and pay for an approved one hundred percent (100%) combination performance and payment bond (Contractor's Bond for Construction, Public Works Division Form DAPW 15). This bond shall adhere to the requirements of IC. 4-13.6-7-6 and IC. 4-13.6-7-7 as amended and shall cover the faithful performance of the Contract and the payment of all obligations arising thereunder, including reimbursement for any stored materials paid for but returned to materialmen, with such sureties as the Owner may approve. The combination bond shall remain in effect throughout the entire construction period and in addition for a period of one year from the date of final acceptance. The Contractor shall deliver the required bonds to the Owner prior to execution of the Contract by the Owner unless authorized to the contrary in writing by the Owner. All bonds must be issued by bonding companies, which are licensed and approved by the Indiana Insurance Commission.

## 7.7 Owner's Right to Carry Out the Work

7.7.1 If the Contractor should default or neglect to carry out the Work properly or fail to perform any provision of the Contract, the Owner may, after giving seven (7) days written notice to the Contractor, without prejudice to any other remedy it may have, make good such deficiencies. In such case, an appropriate change order shall be issued deducting the cost thereof including the cost of the Designer's additional service made necessary by such default, neglect or failure of the Contractor, from the payments then or thereafter due the Contractor, provided, however, that the Designer shall approve both such action and the amount charged to the Contractor. If such payments due to the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

## 7.8 Royalties and Patents

7.8.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from liability of any nature or kind including costs and expenses for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of this Contract, including its use by the Owner.

## 7.9 Tests & Substitution of Materials

7.9.1 If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any work to be inspected, tested, or approved, the Contractor will give the Designer timely notice of its readiness and of the date fixed for such inspection, testing, or approval so that the Designer may observe the same. The Contractor shall bear all cost of such inspections, tests, and approvals unless otherwise provided.

7.9.2 If, after the commencement of the Work, the Designer, with approval of the Owner in writing, determines that the Work requires special inspection, testing, or approval for which subparagraph 7.9.1 does not provide, he will, upon written authorization from the Owner, order such special inspection, testing or approval. If such special inspection or test reveals a failure of the Work to fulfill the requirements of the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof; otherwise the Owner shall bear such costs. An appropriate change order shall be issued.

7.9.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him to the Designer.

7.9.4 Observations by the Designer of the inspections, tests, or approvals required by Article 7 will be promptly made, and where practicable at the source of supply at no additional cost to the Owner.

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

7.9.6 All building construction and work, alterations, repairs, plumbing, mechanical, and electrical installations and appliances connected therewith, shall comply with the Rules and Regulations of the Department of Fire and Building Services, State Board of Health, local ordinances, Rules for Licensure of Building Trades, and other statutory provisions pertaining to this class of work; such rules and regulations and local ordinances to be considered as a part of these specifications.

7.9.7 Where in these specifications, one or more certain materials, trade names, or articles of certain manufacture are mentioned, it is done for the express purpose of establishing a basis of durability and efficiency and not for the purpose of limiting competition. Approval of other acceptable products for those specified may be obtained by requesting to the Designer no later than fourteen (14) days in advance of bid date with all documentation required for the Designer to evaluate any approval. If approval is granted, the subject product will be added by addendum.

7.9.8 Should there be a reason for change of materials after award of the Contract, the following criteria shall apply:

- a. Original material no longer manufactured,
- b. Delivery not possible within time specified for job, and/or
- c. Unavailability due to causes beyond the control of the Contractor.

7.9.9 After agreement by the Designer and the Owner that a change is necessary, the Contractor shall present a request for substitution to the Designer. The burden of proof of the merit of the proposed substitute is upon the proposing party. The decision of the Designer and the Owner regarding the substitution shall be final.

7.10 Certificate of Qualification

7.10.1 In accordance with IC. 4-13.6-4 as amended, all Contractors and Subcontractors performing work for the State of Indiana on projects estimated to be in excess of one hundred fifty thousand dollars (\$150,000.00), must hold a valid Certificate of Qualification issued by the Public Works Certification Board. The Instructions to Bidders define the procedure for certification and bidding.

7.10.2 The Contractor must perform at least fifteen (15) percent of the total Contract Sum of the Work with his own forces. The Contractor shall submit copies of his payroll records, if requested by the Owner, showing the hours, rates and total costs for all personnel on his payroll detailed to the degree to ensure compliance with this paragraph and any Wage Determination provisions.

7.11 Appropriation

7.11.1 The Contract specifically limits payments to be made in accordance with appropriations made and funds made available under laws of the State of Indiana.

7.12 Federal Wage Determination if required

7.12.1 If a Davis-Bacon wage determination is included in the Contract Documents, it shall be used as the minimum wage and benefits to be paid for the trades indicated.

7.12.2 Contractor shall submit a schedule of hourly wages to be paid to each employee (including those of his subcontractors) engaged in work on the site. This submittal shall be on Contractor's letterhead stationery and shall be signed by the Contractor and notarized. A copy of this submittal shall be conspicuously posted at the site.

7.12.3 Said rates shall in no case be less than those set out in the Davis-Bacon wage schedule a copy of which is herein bound or is on file with the Owner if it is required.

7.12.4 The Contractor shall provide (and require each Subcontractor to provide) weekly payroll records listing employees engaged in work on the site for the week and the hourly rates for base pay and benefits paid to each employee listed. The payroll record form shall include a statement by the Contractor/Subcontractor certifying the accuracy and completeness of the information provided. Payroll records shall be maintained by the Contractor during the course of the Work until the end of the required warranty period.

7.13 Out-of-State Contractors

7.13.1 Proof of payment by Out-of-State Contractors of Indiana Gross Income Tax, as provided in IC. 6-2.1-5-1.1 (b) and 6-2.1-5-1.1 (a) (d) as amended shall be submitted before final payment will be approved.

7.13.2 Out-of-State Corporations must be authorized to do business in the State, IC. Title 23 prior to submitting bids. Forms may be obtained by contacting the Secretary of State, State of Indiana, Indianapolis, Indiana.

7.14 Material Delivery

7.14.1 Shipments of material to be used by the Contractor or any Subcontractor under this Contract should be delivered to the job site only during the regular working hours of the Contractor or Subcontractor. If a delivery is made during other than the normal working hours of the Contractor or Subcontractor, his authorized agent must be on duty to receive such material. No employee of the Owner is authorized to receive any shipments designated for the Contractor or Subcontractor.

## 7.15 Weather

7.15.1 The Contractor shall at all times provide protection against weather, rain, wind, storms, frost or heat, so as to maintain all work, materials, apparatus and fixtures free from injury or damage. At the end of the day's work, all new work likely to be damaged shall be covered.

7.15.2 During cold weather, the Contractor shall protect all work from damage. If low temperature makes it impossible to continue operations safely, in spite of cold weather precaution, the Contractor shall cease work and shall so notify the Owner and Designer.

7.15.3 Any work damaged by failure to provide protection above required, shall be removed and replaced with new work at the Contractor's expense.

7.15.4 The Contractor shall provide and maintain on the premises, where directed, watertight storage shed (or sheds) for storage of all materials, which might be damaged by exposure to weather.

## 7.16 Fire Hazards

7.16.1 Wherever and whenever any burning, welding, cutting or soldering operation is in progress, or equipment is in use, or any work involving a fire hazard, is performed, the Contractor responsible for such operation shall have at all times acceptable fire extinguisher or protection within five (5) feet of the operation.

## 7.17 Dismissal

7.17.1 Any foreman or workman employed by the Contractor or by any Subcontractor who, in the opinion of the Director, Public Works Division and/or the Designer, does not perform his work in a proper and skillful manner, or is disrespectful, intemperate, disorderly, intoxicated or otherwise objectionable shall at the written request of either of the above, be forthwith discharged by the Contractor or Subcontractor employing such foreman or workman and he shall not be employed again on any portion of the Work without the written consent of the Director of the Division of Public Works and the Designer. Should the Contractor fail to furnish suitable and sufficient machinery, equipment or personnel for the proper prosecution of the Work, the Owner or Designer may withhold all payments that are or may become due, or may suspend the Work until such orders are upheld.

## ARTICLE 8 TIME

### 8.1 Definitions

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined herein, including authorized adjustments thereto.

8.1.2 The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date of the Governor's signature on the Owner-Contractor Agreement or such other date as may be established therein.

8.1.3 The Date of Substantial Completion of the Work, or designated portion thereof, is the date certified by the Director, Public Works Division when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy or utilize the Work, or designated portion thereof, for the use for which it is intended.

8.1.4 The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

### 8.2 Progress and Completion

8.2.1 All time limits stated in the Documents are of the essence of the Contract.

8.2.2 The Contractor shall begin the Work on the date of commencement as defined herein. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.2.3 The Owner fully expects the Contractor to employ any and all means necessary to complete the Work within the Contract Time. Conduct of the Owner's affairs, such as unforeseen site conditions or delay in processing change orders, shall not be viewed as justification for delaying the Project unless the Owner can be shown to have breached the Contract. Contractor must employ all reasonable means to execute the Project in a timely manner and in conformance with the Contract Documents even if the Contractor or Designer seeks legal remedy against the Owner for claim of damage.

### 8.3 Delays and Extensions of Time

8.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner or the Designer, or by any employee of either, or by any separate Contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonable to anticipate, unavoidable casualties, or

any causes beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by any other cause which the Designer determines may justify the delay, then the Contract Time shall be extended by a Change Order for such reasonable time as the Designer may determine.

8.3.2 Claims for extension of time shall be made in writing to the Designer. In case of a continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

8.3.3 If no agreement is made stating the dates upon which interpretations as provided in Article 2.2 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen days after written request is made for them, and not unless such claim is reasonable.

8.3.4 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

## ARTICLE 9 PAYMENTS AND COMPLETION

### 9.1 Contract Sum

9.1.1 The Contract Sum is the total amount payable by the Owner for the performance of the Work under the Contract Documents.

### 9.2 Schedule of Values

9.2.1 Before the first application for payment, the Contractor shall submit to the Owner a schedule of various parts of the Work, including quantities if required by the Owner, aggregating the total Contract Sum, divided so as to facilitate payments to Subcontractors in accordance with Article 5.3, made out in such form as the Owner and the Contractor may agree upon, and supported by such data to substantiate its correctness as the Owner may require. Each item in the Schedule of Values shall include its proper share of overhead, profit, and other general charges. This schedule, when approved by the Owner, shall be used as a basis for the Contractor's Applications for Progress and Final Payments.

### 9.3 Progress Payments

9.3.1 Completed work: The Contractor shall submit to the Designer an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Designer may direct. The Owner shall make payments on account of the Contract, upon issuance of Certificates of Payment certified by the Designer and the Owner's Representative, for labor and materials incorporated into the Work at the rate of ninety four (94%) percent of such value until fifty (50%) percent of the value of the Work is completed. After that fifty (50%) percent, no further retainage will be deducted. The Director, Public Works Division has the option to require that three (3%) percent of the value of the Work be retained throughout the duration of the entire Contract. The retainage schedule shall be determined prior to award of Contract. Retainage may be paid with final payment at the discretion of the Director, Public Works Division, but shall not be paid in any event until a minimum of sixty one (61) days after all work is completed.

9.3.2 Materials Stored: Payments may be made on account for materials or equipment not incorporated in the Work, but delivered and suitably stored at the site. With written approval of the Owner, materials may be stored at another location other than the Work site if properly identified as the property of the Owner and properly protected. Storage of material at the place of business of the vendor is not acceptable (25 IAC 2-9-2). Such payments shall be conditional upon the submission by the Contractor of one of the following: 1) receipts marked by the supplier as paid; 2) supplier's final waiver of lien listing specific materials involved; 3) invoice with copy of canceled check showing payment; or 4) such other evidence of payment as the Owner may require in lieu thereof to establish ownership of all items except those listed as miscellaneous materials below. For the aggregate of miscellaneous stored materials for which payment is requested and above proof of payment is not available, a complete list will be provided along with the affidavit of payment. Upon certification by the Owner's representative that the listed materials are suitably stored, payment can be made. Miscellaneous materials are defined as pipe, fittings, wire, conduit, etc., normally stored as stock items in Contractor's warehouse. For materials stored other than at the construction site applicable insurance and transportation to the site shall be provided by the Contractor.

9.3.3 As stored materials are incorporated into the Work, the value shall be removed from the total value of stored materials requested in successive payments. Proof of ownership through one of the above methods will be required for additional materials. When, in the judgment of the Owner, retainage for completed work is not sufficient in relation to excessive amounts requested for stored materials or equipment, the Owner may elect to place the retainage for such materials or equipment in escrow. This retainage shall apply as a credit toward retainage due to be held for completed work on future payments.

9.3.4 The Contractor warrants that title to all work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt by the Contractor of payment, whichever occurs first, free and clear of all liens, claims, security interest or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest

therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

9.3.5 The Contractor shall accompany each application for payment request with a certification that he paid to all Subcontractors (fabricators) within ten (10) days of receipt of payment that pro rata amount of funds he has received from the Owner for the value of work or services (fabricated materials or equipment) performed by the Subcontractor (supplied by fabricator) contained in previous progress payments. The Contractor's inclusion of a value of subcontract work in his progress pay estimate is prima facie evidence of acceptance of work having such a value; therefore, if the Owner receives a certification from a Subcontractor that he has not been paid such amounts as were included in the Contractor's partial billing and subsequently paid to the Contractor by the Owner, then the Owner will hold all subsequent partial payment requests until satisfactory evidence is received from the Subcontractor that he has been paid such amounts presented to the Owner by the Contractor, paid to the Contractor by the Owner, and not distributed by the Contractor to the Subcontractor. The making of an incorrect certification of either partial payment or final payment may be considered by the Owner to be a breach of contract, and it may exercise all of its prerogatives set out in the Contract in addition to the remedies for falsifying an affidavit. Such an action could result in a suspension of qualification with the State Certification Board for a period of up to two (2) years.

#### 9.4 Certificates for Payment

9.4.1 When the Contractor has made application for payment as above, the Designer will issue a Certificate of Payment to the Owner for such amount as he determines to be properly due, or state in writing his reasons for withholding a certificate as provided in Articles 9.5.1.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Designer to the Owner, based on the Designer's observations at the site as provided in Article 2.2.4 and the data comprising the Application for Payment, that the Work has progressed to the point indicated, and that, to the best of his knowledge, information and belief, the quality of work is in accordance with the Contract Documents subject to an evaluation of the Work as a functioning whole upon substantial completion, to the results of any subsequent tests called for in the Contract documents, to minor deviations correctable prior to the next certificate for payment and to any specific qualifications stated in his certificate, and that the Contractor is entitled to payment in the amount certified.

9.4.3 The Designer's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Article 9.7 have been fulfilled. However, by issuing a Certificate, the Designer shall not thereby be deemed to represent that he has made any examination to ascertain how or for what purpose the Contractor has used the monies paid on account of the Contract Sum.

9.4.4 The Owner shall make payment as soon as the fiscal procedure of the State can process same after receipt from the Designer of the Certificate for Payment. The fiscal procedure by the State can include, but not be limited to, review by the Owner's using agency, verification of the Certificate by the Owner's Site Representative, review for accuracy of form and calculation by the Owner's accountant, review by the Owner's project management and execution by the Director, Public Works Division and others.

9.4.5 No certificate for a progress payment or progress payment for partial or entire occupancy of the Project by the Owner shall constitute an acceptance of work not in accordance with the Contract Documents.

9.4.6 Pursuant to IC. 4-13.6-7-2 all Contract awards of One Million Dollars (\$1,000,000) or above, if elected by the Contractor, an escrow agent will be selected by the State with whom the retainage funds for this Contract will be deposited and held until receipt of notice from the Director, Public Works Division (Escrow Form DAPW 32A) and from all other necessary parties as specified in and in accordance with the procedures and provisions of said Act.

#### 9.5 Payments Withheld

9.5.1 The Designer (or Owner) will not approve an application in whole or in part, if in his opinion, he is unable to make representations to the Owner as provided in Article 9.4. The Designer (or Owner) will not approve Application for Payment or, because of subsequent inspections, may nullify the whole or any part of the Certificate for Payment previously issued to such extent as may be necessary in his opinion to protect the Owner from loss because of:

- A. defective work not remedied,
- B. claim filed or reasonable evidence indicating probable filing of claims,
- C. failure of the Contractor to make payments properly to Subcontractors or for materials, equipment or labor,
- D. reasonable doubt that the Contract can be completed for the unpaid balance,
- E. damage to another Contractor,
- F. reasonable indication that the Owner may be damaged by delay in receiving use of the Work as scheduled, or,
- G. unsatisfactory prosecution of the Work by the Contractor.

9.5.2 When the above grounds are removed, payment shall be processed for amounts withheld.

## 9.6 Failure of Payment

9.6.1 If the Designer should fail to issue any Certificate for Payment, through no fault of the Contractor, or if the Owner should fail to pay the Contractor in a reasonable time considering the fiscal procedures of the State for processing same after receipt from the Designer the amount certified by the Designer, then the Contractor may, after seven (7) additional days, give written notice to the Owner and Designer, that work will stop until payment of the amount owing has been received.

## 9.7 Substantial Completion and Final Payment

9.7.1 When advised by the Contractor that the Work or a designated portion thereof is substantially complete, the Designer; the Director, Public Works Division, and the Contractor shall determine jointly by inspection that the Work is substantially complete. If they determine that the Work is substantially complete, the Contractor shall then prepare a Certificate of Substantial Completion with an accompanying list of incomplete items of work (punch list), and submit it to the Designer for his signature and subsequent forwarding for approval by the Director, Public Works Division. The Certificate shall fix the date of Substantial Completion and shall state the responsibilities of the Owner and the Contractor for maintenance, heat, utilities and insurance.

9.7.2 Upon approval of the above, and notice that the Work is ready for final acceptance, the Designer, the Contractor and Owner will promptly make final review, and when they find the Work acceptable under the Contract and the Contract fully performed, the Contractor shall promptly submit the final Certificate for Payment with all other required documents, showing that the Work has been completed in accordance with the terms and conditions of the Contract, and that the entire balance in said final certificate, is due and payable.

9.7.3 Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall submit to the Designer releases or waivers of all liens arising out of the Contract; an affidavit that the releases and waivers include all the labor, materials, and equipment for which a lien could be filed and that all payrolls, material bills, and other indebtedness connected with the Work for which the Owner or its property might in any way be responsible have been paid or otherwise satisfied; and such other data establishing payment or satisfaction of all such obligations as the Owner may require. If any such lien or claim remains unpaid, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such lien or claim, including all costs.

9.7.4 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor, and the Designer so confirms, the Owner shall, upon certification by the Designer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted, or such portion as may be available from funds not already released to an escrow agent pursuant to IC 4-13.6-7. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.7.5 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

- A. unsettled liens,
- B. faulty work appearing after Substantial Completion,
- C. failure of the Work to comply with the requirements of the Contract Documents,
- D. terms of any special guarantees required by the Contract Documents.

9.7.6 If upon Substantial Completion of the Work there are any remaining uncompleted minor items, the Owner shall withhold, until those items are completed, an amount equal to two hundred percent (200%) of the value of each item as determined by the Designer or Owner.

9.7.7 The acceptance of final payment shall constitute a waiver of all claims by the Contractor, except those previously made in writing and still unsettled and covered by other agreed arrangements.

## ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

### 10.1 Safety Precautions and Programs

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

### 10.2 Safety of Person and Property

10.2.1 The Contractor shall take all necessary precautions for the safety of, and will provide all necessary protection to prevent damage, injury, or loss to:

- A. all employees on the Project and all other persons who may be affected thereby,
- B. all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, and,
- C. other property at the site or adjacent thereto, including trees, shrubs, lawns, pavements, roadways, structures and



utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. He shall erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities.

10.2.3 All damage or loss to all property specified herein 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 by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable solely to faulty Contract Documents or to the acts or omissions of the Owner, or Designer or their employees, or for those whose acts either of them may be liable.

10.2.4 The Contractor shall designate a responsible member of his organization on the Work 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 and the Designer.

10.2.5 When the use or storage of explosives or other hazardous materials or equipment is necessary for the prosecution of the Work, the Contractor shall carry on such activities under the supervision of properly qualified personnel.

10.2.6 The Contractor shall not overload, or permit any part of the Work to be loaded so as to endanger its safety.

10.2.7 All excavations creating a trench of five (5) or more feet in depth shall strictly adhere to the shoring and other safety requirements called for and described under Indiana OSHA Regulation 29 C.F.R. 1926, Subpart "P", for trench safety systems.

### 10.3 Emergencies

10.3.1 In an emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor because of emergency work shall be determined as provided for in Article 12, Changes in the Work, and he shall notify the Owner of such a decision within seven (7) days of the event giving rise to such claim.

## ARTICLE 11 INSURANCE

### 11.1 General Requirements for Insurance

11.1.1 The Contractor will be required to furnish to the Owner, evidence that he has complied with all items of insurance listed herein. All insurance policies/certificates shall be on file with the Owner prior to release of the signed Contract and commencement of work.

11.1.2 The Contractor shall purchase and maintain, with a company or companies licensed to do business in Indiana, such insurance as will protect him from claims set forth below, arising out of or resulting from the Contractor's operations under the Contract, whether such operations be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by any of them:

- A. claims under Workmen's Compensation Acts and other employee benefit acts;
- B. claims for damages because of bodily injury, personal injury, occupational sickness or disease, or death of his employees;
- C. claims for damages because of bodily injury, personal injury, sickness, disease or death of any person other than his employees;
- D. claims for damages to tangible property, including loss of use thereof.

11.1.3 This insurance shall be written for not less than any limits of liability specified herein, or required by law, whichever is greater. Policies or certificates of insurance, acceptable to the Owner, shall be filed with the Owner prior to execution of the Contract. These Certificates shall contain a provision that coverages afforded under the policies will be for the life of the Work.

11.1.4 Policies (certificates) shall show name and complete address of the Company, expiration date or dates, and policy number or numbers. Policies shall not be canceled until at least thirty (30) days prior written notice has been given to the Owner and acknowledged by the Owner in writing.

## 11.2 Property Insurance

11.2.1 The Contractor shall furnish and maintain, at the Contractor's expense, Fire, Extended Coverage, Vandalism, and Malicious Mischief Insurance (Builder's Risk), in the sum of 100% of the Contract amount. Builder's Risk insurance shall cover the structure on/in which the Work of this Contract is to be done including items of labor and material connected therewith, whether in or adjacent to the structure insured; material in place or to be used as part of the permanent construction, including surplus materials; shanties, protective fences, bridges, or temporary structures; miscellaneous materials and supplies incident to the Work; scaffolding, staging, towers, forms, and equipment, if included in the cost of the Work. This insurance need not cover any tools owned by mechanics, or any tools, equipment, scaffolding, staging, towers, and forms owned or rented by the Contractor, the capital value of which is not included in the cost of the Work.

11.2.3 Any loss under this Article 11.2 is to be adjusted with the Owner, and made payable to the Owner as trustee for the insured, as their interests may appear.

## 11.3 Liability Insurance

11.3.1 The Contractor and their subcontractors ( if any) shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which may in any manner arise out of or result from Contractor's performance under this Contract:

- A. Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than \$700,000 per person and \$5,000,000 per occurrence unless additional coverage is required by the State. The State is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.
- B. Automobile liability for owned, non-owned and hired autos with minimum liability limits of \$700,000 per person and \$5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.
- C. The Contractor shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the services provided under this Contract involve work outside of Indiana.
- D. The Contractor's insurance coverage must meet the following additional requirements:
  - 1. The insurer must have a certificate of authority or other appropriate authorization to operate in the state in which the policy was issued.
  - 2. Any deductible or self-insured retention amount or other similar obligation under the insurance policies shall be the sole obligation of the Contractor.
  - 3. The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract.
  - 4. The insurance required in this Contract, through a policy or endorsement(s), shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.
  - 5. The Contractor waives and agrees to require their insurer to waive their rights of subrogation against the State of Indiana.
- E. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.
- F. Boiler and Machinery Explosion Insurance shall be required when the Work includes boiler, other pressure

vessels or steam piping installation or repair.

- G. After June 30, 2015, this entire Article will apply to any contractor that will be on the construction site pursuant to IC 5-16-13 and an acceptable certificate of insurance will be provided by each and every contractor

## ARTICLE 12 CHANGES IN THE WORK

### 12.1 Change Orders

12.1.1 The Owner, without invalidating the Contract, may order changes in the Work consisting of additions, deletions, or modifications, with the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be executed under the applicable conditions of the Contract Documents.

12.1.2 A Change Order is a written order to the Contractor compiled and reviewed by the Designer, prepared by the Owner and then signed by the Owner and the Contractor. The order is issued after the execution of the Contract authorizing a change in the Work, and documenting any adjustment in the Contract Sum and/or the Contract Time. The Contract Sum may be changed only by change order.

12.1.3 The value of any work involved in a change in the Work shall be determined in one or more of the following ways, in order of priority listed:

- A. by mutual acceptance of a lump sum. For all amounts over \$500, the Contractor shall provide a complete listing of quantities and unit prices of materials, hours of labor with cost per hour, and separate agreed percentages for any overhead and profit. The maximum aggregate increase for overhead and profit (including all home office and field office overhead) for any Subcontractor or for the Contractor performing his own work is fifteen (15%) percent; the maximum increase for a Contractor on work performed by a Subcontractor is five (5%) percent. If the cost of performance and payment bond(s) is shown as a separate line item in the Contractor's schedule of values for the project, then an increase will be permitted to provide for the additional cost of the bond(s). If the cost of the bond(s) is not indicated on the Contractor's schedule of values for the Project, any increase in cost for bond(s) shall be included in the Contractor's allowed overhead. For listings under \$500, list lump sum for each item, or,
- B. by unit prices named in the Contract or subsequently agreed upon, or,
- C. by cost plus a mutually acceptable fixed or percentage fee.

12.1.4 Should conditions be encountered below the surface of the ground that are:

- A. at variance with the conditions indicated by the Contract Documents, and
- B. different than could be expected after a reasonable viewing of the site by the bidders, and
- C. not evident from available soil samples,

then the Contract sum may be equitably adjusted by Change Order upon claim by Contractor made within a reasonable time after the first observance of the conditions.

12.1.5 If the Contractor claims that a written interpretation issued pursuant to Article 1.2 or a written order for a minor change issued pursuant to Article 12.3 involves additional cost or time, the Contractor shall make such claim as provided in Article 12.2.

### 12.2 Claims for Additional Cost or Time

12.2.1 If the Contractor wishes to make a claim under the provisions of the Contract Documents for an increase in the Contract Sum or an extension in the Contract Time, he shall give the Designer written notice thereof within fifteen (15) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor and authority received in writing from the Owner before proceeding to execute the Work, except in an emergency endangering life or property. No such claim shall be valid unless so made. Any approved change in the Contract Sum or Contract Time resulting from such claim shall be incorporated in a Change Order, initiated by the Designer and executed by the Owner. If the Designer does not initiate or the Owner execute a Change Order within a reasonable time in response to the request, such lack of action shall be construed as prima facie evidence of rejection of the request. For the purpose of this section "reasonable time" is expected not to exceed 30 days after receipt by the Owner.

### 12.3 Minor Changes in the Work

12.3.1 The Designer shall have authority, with Owner's approval, to order minor changes in the Work not involving an increase in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such change may be affected by written field order, with copy transmitted to the Owner. Such minor changes need not be approved in writing by the Owner; however, the Owner may provide written approval of any substitution of significant materials or equipment.

### 12.4 Field Orders

12.4.1 The Designer may issue written field orders, which interpret the Contract Documents in accordance with Article 1.2.4 without change in Contract Sum or Contract Time. The Contractor shall carry out such field orders promptly. The Designer shall

transmit copies of field orders to the Owner.

## ARTICLE 13 EXAMINATION AND CORRECTION OF WORK

### 13.1 Examination of Work

13.1.1 If any portion of the Work should be covered contrary to the request of the Designer or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Designer, be uncovered for his observation and shall be replaced at the Contractor's expense.

13.1.2 Examination of questioned work may be ordered by the Designer with the approval of the Owner, and if so ordered the Work must be uncovered by the Contractor. If such work were found in accordance with the Contract Documents, the cost of re-examination and replacement shall, by appropriate change order, be charged to the Owner. If such work be found not in accordance with the Contract Documents, the Contractor shall pay such costs, unless it is found that the defect in the Work was caused by a separate Contractor employed as provided in Article 6 and in that event, the separate Contractor shall pay such costs.

### 13.2 Correction of Work before Substantial Completion

13.2.1 The Contractor shall promptly remove from the site all work rejected by the Designer as failing to conform to the Contract Documents, whether or not incorporated in the Project, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract Documents and without cost to the Owner and shall bear the cost of repair to or replacement of all work of separate Contractors destroyed or damaged by such removal or replacement.

13.2.2 If the Contractor does not remove such rejected work within a reasonable time, fixed by written notice from the Designer, the Owner may remove and store the material at the expense of the Contractor. If the Contractor does not agree to pay or credit the Contract with the cost of such removal within ten days thereafter, the Owner may acquire a lien upon such property and materials. If proceeds of lien foreclosure do not cover all costs, which the Owner has then borne, the difference shall be deducted from the amount to be paid to the Contractor.

### 13.3 Correction of Work after Substantial Completion

13.3.1 The Contractor shall correct all faults and deficiencies in the Work which appear within one year of the date of substantial completion or such longer period of time as may be prescribed by the terms of any special guarantees called for by the Contract Documents, and he shall pay for all damage to other work caused thereby. The Contractor shall remove all defective work where necessary.

13.3.2 If the Contractor does not correct such faulty or defective work and remove defective work where necessary, within a reasonable time fixed by the Designer in writing, the Owner may do the corrective work and remove the defective work, as described in Article 13.2 above.

13.3.3 All costs attributable to correcting and removing faulty or defective work shall be borne by the Contractor.

13.3.4 The obligations of the Contractor under this Article 13.3 shall be in addition to and not a limitation of any obligations imposed upon him by special guarantees called for by the Contract Documents or otherwise prescribed by law.

## ARTICLE 14 TERMINATION OF THE CONTRACT

### 14.1 Termination by the Contractor

14.1.1 If the Work is stopped for a period of thirty days under an order of any court or other public authority through no act of fault of the Contractor or of anyone employed by the Contractor, or if the Work should be stopped for a period of thirty days by the Contractor for the Designer's failure to issue a Certificate for payment as provided in Article 9.6, or for the Owner's failure to make payment thereon as provided in said Article, then the Contractor may, upon seven days' written notice to the Owner and the Designer, terminate the Contract and recover from the Owner, in satisfaction of all claims of the Contractor, payment for all work executed, except those items involved in Designer's failure to issue Certificate, or Owner's failure to make payment.

### 14.2 Termination by the Owner

14.2.1 If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to Subcontractors for materials or labor, or persistently disregard laws, ordinances, rules, regulations or orders of any public authority or otherwise be guilty of a substantial violation of a provision of the Contract Documents, then the Owner, upon certification by the Designer that sufficient cause exists to justify such action, may without prejudice to any right or remedy against the Contractor or his surety and after giving the Contractor and his surety seven days written notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and finish the Work by whatever method the Owner

deems expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is completed, and an accounting made as set out below.

14.2.2 If the unpaid balance of the Contract sum exceeds the cost of finishing the Work, including compensation for the Designer's additional services such excess shall be paid to the Contractor. If such cost exceeds such unpaid balance, the Contractor shall pay the difference to the Owner. The Designer shall certify the cost incurred by the Owner as herein provided.

END

# Indiana Department of Administration M/WBE Participation Policy for Construction Projects

## I. Introduction

The Indiana Department of Administration (“IDOA”) in its commitment to Minority and Women participation in the state’s procurement and contracting process, will require MBE and WBE participation or a best-efforts waiver as a specification in bids for construction services \$150,000 and over with subcontracting opportunities effective January 1, 2006. *See* Indiana Code 5-22-7, 5-22-7-2, 5-22-7-4.

## II. Definitions

“Application for MBE and WBE Program Waiver” means documents submitted by Bidder for relief from contract goal after demonstrating all reasonable good faith efforts were made by the Bidder for the purpose of fulfilling the contract goal. The Application for MBE and WBE Program Waiver may be submitted prior to the bid due date or included in the bid package response.

“Certification” means verification by the Indiana Department of Administration, Minority and Women's Business Enterprises Division (“MWBED”) or an organization accepted by MWBED with respect to the authenticity of a minority or women owned business enterprise.

“Commercially useful function” Determination that an enterprise performs a commercially useful function will be made based on the following considerations:

(1) An MBE or a WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE or WBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether an MBE or a WBE is performing a commercially useful function, one must evaluate the following:

- (A) The amount of work subcontracted.
- (B) Industry practices.
- (C) Whether the amount the enterprise is to be paid under the contract is commensurate with the work it is actually performing.
- (D) The credit claimed for its performance of the work.
- (E) Other relevant factors.

(2) An MBE or a WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of MBE or WBE participation. In determining whether an MBE or a WBE is such an extra participant, one must examine similar transactions, particularly those in which MBEs or WBEs do not participate.

(3) In the case of construction contracts, if:

- (A) an MBE or a WBE does not perform or exercise responsibility for at least the agency’s requisite percent of the total cost of its contract with its own workforce; or
- (B) the MBE or WBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved;

it is presumed that the enterprise is not performing a commercially useful function.

“Letter of Commitment” means a letter obtained from the MBE and WBE’s by the Bidders. The Letter of Commitment is a signed letter(s), on company letterhead, from the minority and/or women certified business. It must be produced no later than 24 hours after the bid due date and time. This letter(s) shall state and will serve as acknowledgement from the minority and/or women certified business of their level of participation in this solicitation, the dollar amount of the commitment, the scope of service or product to be provided and the anticipated dates of utilization.

“Minority and Women Business Enterprises Division (MWBED)” means the Division which acts on behalf of the state to actively promote, monitor, and enforce the MBE AND WBE program. The final authority on all matters pertaining to the maintenance and administration of the MBE AND WBE program and compliance thereto.

“Minority/Woman Business Enterprise (MBE and WBE)” means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is at least fifty-one percent (51%) owned and controlled by one (1) or more persons who are United States citizens and a member(s) of a minority group. The MBE and WBE must meet the eligibility requirements of 25 IAC 5.

“Participation Plan” means the IDOA prescribed document that sets forth the MBE and WBE subcontractors that will perform work under the contract.

### **III. Minority and Women Business Enterprise Certification**

MBE and WBEs must be listed on the IDOA directory of certified firms at the time the bid is submitted to be eligible to meet the contract goals. The bidder should verify that a firm is certified before the bid is submitted.

Questions regarding Certification should be addressed to the following:

Indiana Department of Administration  
Minority and Women's Business Enterprises Division  
402 West Washington Street, Room W469  
Indianapolis, IN 46204  
(317) 232-3061  
[www.buyindiana.in.gov](http://www.buyindiana.in.gov)  
[mwbe@idoa.in.gov](mailto:mwbe@idoa.in.gov)

### **IV. Bidding Process**

IDOA will review projects for viable subcontracting opportunities. All projects will be governed by this policy unless otherwise stated.

A representative from MWBED will attend most pre-bid meetings to discuss and answer questions related to the MBE and WBE participation requirement. The MWBED will be available to assist Bidders in locating MBE and WBE firms to engage in the contract.

The 2007-2008 Contract Goals for construction projects are 7% for MBE’s and 5% for WBE’s.

Effective January 1, 2006, the following procedures will be implemented in the acceptance and evaluation of responsive and responsible bids.

Bidders must produce a Participation Plan on the approved form listing the utilization of MBE and WBE subcontractors who will be providing a commercially useful function on the project. Letter of Commitment from MBE and WBE firms they plan to engage in the contract if successful on the bid

Per 25 IAC 5-6-2(d), all prime contractors, including MBE and WBE prime contractors, must meet the sub-contracting goals through use of businesses found in the IDOA directory of certified firms. MBE and WBE prime contractors will get no credit toward the contract goal for the use of their own workforce.

If the bidder can not achieve the Contract Goals established for the bid package, the bidder shall submit a Waiver Application on the form supplied by MWBED. Bidders may submit waiver applications to MWBED up to two business days in advance of the bid due date to obtain advance approval of the waiver, or the application may be submitted without advance approval with the bid package. Bidders who submit a Participation Plan that will achieve the Contract Goals are not required to submit a Waiver Application.

If a partial waiver is being requested, a Participation Plan listing the MBE and WBE certified firms that will be used to satisfy the portion of the goal that will be met, must be included. Partial waivers may be requested using the waiver application process discussed above. A faxed copy of the Letter of Commitment for each MBE and WBE firm that is listed in the Participation Plan must be provided by the Low Bidder to the appropriate department no later than 24 hours after the bid due date and time. The original letter(s) must be provided upon receipt.

MWBED will review Applications for MBE and WBE Program Waivers and make a determination as to the bidder's responsiveness and good faith efforts. Evidence of efforts should be included with the waiver form. Any combination of the following criteria may be utilized in determining whether good faith efforts have been made:

- A. Notice to MBE and WBEs. Whether and when the bidder provided written notice, by mail, hand delivery, facsimile or electronic transmission to all qualified MBE and WBEs that perform the type of work to be subcontracted and advising the MBE and WBEs:
  - 1. of the subject work the bidder intends to subcontract;
  - 2. that their interest in Subcontracts is being solicited;
  - 3. how to obtain information for the review and inspection of Contract plans and specifications; and
  - 4. how to bid on the subcontracting opportunities and deadlines.
  
- B. Economically Feasible Subcontract. Whether the bidder selected economically feasible portions of the work to be performed by an MBE and WBE, including, when appropriate, breaking Subcontracts into smaller pieces or combining elements of work into economically feasible units. The ability of the bidder to perform the work with its own forces will not excuse the bidder from making positive efforts to meet the MBE and WBE goals.



- C. Consideration of all MBE and WBE Quotations. Whether the bidder considered all quotations received from MBE and WBEs and, for those quotations not accepted, an explanation of why the MBE and WBE will not be used during the course of the Project. Receipt of a lower quotation from a non-MBE and WBE will not, in itself, excuse bidder's failure to meet the MBE and WBE goals. Price alone does not constitute an acceptable basis for rejecting MBE and WBE subcontractor bids unless the bidder can demonstrate that a reasonable price was not obtained from an MBE and WBE.
- D. MBE and WBE Barrier Assistance. Whether the bidder provided assistance to interested MBE and WBE firms: in reviewing the Contract plans and specifications or addressing other barriers to subcontracting.
- E. Advertisement. Whether the bidder advertised to search for prospective MBE and WBEs to participate in the Contract.
- F. Agency Assistance. Whether the bidder contacted any of the following agencies for the purpose of locating prospective MBE and WBEs:
1. Indiana Department of Administration  
Minority and Women's Business Enterprises Division  
402 West Washington Street, Room W469  
Indianapolis, IN 46204  
(317) 232-3061  
[mwbe@idoa.in.gov](mailto:mwbe@idoa.in.gov)
  2. Indiana Business Diversity Council, Inc.  
2126 North Meridian Street  
Indianapolis, IN 46202  
(317) 921-2678  
[mdhouse@inbdc.org](mailto:mdhouse@inbdc.org)
- G. Research Participation Areas. Whether the bidder made efforts to research other possible areas of participation including supplying, shipping, engineering and any other role that may contribute to the production and delivery of the products or services needed to fulfill the Contract.
- H. Response Time. The time the bidder allowed for a meaningful response to its solicitations.
- I. Documentation of Statements from MBE and WBEs. Any documentation or statements received from MBE and WBEs who have been listed as having been contacted by the bidder.
- J. Availability of MBE and WBEs. The availability of MBE and WBEs to perform the work and the availability, or lack of availability, of MBE and WBEs in the location where the work is to be performed.
- K. Other Criteria. Any other criteria deemed appropriate by MWBED.

This list is not intended to be exclusive or exhaustive. The bidder may also submit documentation of other types of efforts that they have taken which reflect the quality, quantity and intensity of those efforts.

When evaluating Waiver Applications, MWBED reserves the right to verify that any information supplied on the Participation Plan and Waiver Application is accurate. By the submittal of a bid, the bidder acknowledges the right of MWBED to ensure compliance with the Participation Program and thereby agrees to provide, upon request, earnest, diligent and prompt cooperation in MWBED's verification process.

In cases where MWBED concludes the bidder's Participation Plan and the Waiver Application is deficient through no fault of the bidder, the bidder may be instructed to submit a modified Participation Plan within five (5) working days from the date of such notice. Failure to submit the modified Participation Plan within the specified period of time, may result in the bid being considered non-responsive and may be rejected.

In cases where MWBED concludes that the Participation Plan and Waiver Application is deficient or in cases where MWBED has determined that the bidder has not cooperated with its efforts to verify the submitted documentation, a bid may be considered non-responsive and may be rejected.

If the established Contract Goals are not achieved but the Waiver Application is granted, the bid will be considered responsive. If the established Contract Goals are not achieved and the Waiver Application is denied, a bid may be considered non-responsive and may be rejected.

Failure to provide the Participation Plan and/or a Waiver Application accounting for the total participation goal set for the project will result in the bid being considered non-responsive and the bid may be rejected.

By submission of a bid, a bidder thereby acknowledges and agrees to be bound by the regulatory process set forth in 25 IAC 5.

A bidder who knowingly or intentionally misrepresents the truth about either the status of a firm that is being proposed as an MBE and WBE or who misrepresents the level of the nature of the amount to be subcontracted to the MBE and WBE may suffer penalties pursuant to Indiana Code 5-16-6.5-5.

A Contractor who knowingly or intentionally misrepresents the truth about his/her status as an MBE and WBE or who misrepresents the level or the nature of the amount subcontracted to his/her firm may suffer penalties pursuant to Indiana Code 35-44-2-1.

## **V. Compliance**

Contractors shall contract with all MBE and WBE firms listed on the Participation Plan. The subcontract or purchase order shall be for an amount that is equal to, or greater than, the total dollar amount listed on the form.

Contractors shall notify MWBED immediately if any firm listed on the Participation Plan refuses to enter into a subcontract or fails to perform according to the requirements of the subcontract.

The Contractor's proposed MBE and WBE Contract Goals will become incorporated into and a requirement of the Contract. Contractors shall not substitute, replace or terminate any MBE and WBE firm without prior written authorization from MWBED and the Owner.

Contractors shall cooperate and participate in compliance reviews as determined necessary by MWBED. Contractors shall provide all necessary documentation to show proof of compliance with the requirements as requested by MWBED.

## **VI. Non Compliance**

A bid governed by this policy that does not meet the participation goals or does not receive an approved waiver will NOT be considered.

After the bid is awarded and if it is determined by MWBED that the Contractor is not in compliance with this Participation Program, MWBED will notify the Contractor within ten (10) days after the initial compliance review or the site visit and identify the deficiencies found and the required corrective action that should be taken to remedy the deficiencies within a specific time period.

If a Contractor is found non-compliant, the Contractor must submit, in writing, a specific commitment, in writing, to correct the deficiencies. The commitment must include the precise action to be taken and the date for completion.

If MWBED determines the Contractor has failed to comply with the provisions of this Participation Program, Contractor's Utilization Statement or 25 IAC 5, IDOA may impose any or all of the following sanctions:

- a. Withholding payment on the Contract until such time that satisfactory corrective measures are made.
- b. Adjustment to payments due or the permanent withholding of retainages of the Contract.
- c. Suspension or termination of the specific Contract in which the deficiency is known to exist. In the event this sanction is employed, the Contractor will be held liable for any consequential damages arising from the suspension or termination of the Contract, including damages caused as a result of the delay or from increased prices incurred in securing the performance of the balance of the work by other Contractors.
- d. Recommendation to the certification board to revoke the contractor's certification status with the Public Works Division of IDOA. This recommendation may result in the suspension or revocation of the contractor's ability to perform on future state contracts for a period no longer than thirty-six (36) months.
- e. Continued non-compliance may be deemed a material breach of the agreement between MWBED and Contractor, whereupon MWBED shall have all the rights and remedies available to it under the Contract or at law.
- f. Suspension, revocation, or denial of the MBE or WBE certification and eligibility to participate in the MBE or WBE program for a period of not more than thirty-six (36) months.

## **VII. Forms and Attachments**

Minority Participation Plan  
Good Faith Efforts Worksheet

**STATE OF INDIANA'S  
STANDARD CONTRACT FOR PUBLIC WORKS CONSTRUCTION PROJECT  
(for projects estimated more than \$150,000)  
WORKS PROJECTNUMBER XXXXX  
[INSERT] PROJECT DESCRIPTION  
[INSERT] INSTITUTION/DEPARTMENT**

**THIS IS A PUBLIC WORKS CONSTRUCTION CONTRACT** (“Contract”), entered into by and between the Indiana Department of Administration’s Public Works Division (“State”) and XXXXXXXXXXXX (“Contractor”), executed pursuant to the terms and conditions set forth herein and is governed by Indiana Code 4-13.6, *et seq.*

**1. Definitions.** The following definition applies throughout this Contract:

For purposes of the State’s Public Works Project Number **XXXXXX** (“Project”), the term “Contract Documents” shall mean and include the following: this Contract and the Project Bid Package, which includes the Contractor’s Application for Pre-Qualification, the Public Work’s Solicitation for Quotation (DAPW 30), Bid Documentation, Pre-Contract Document, General Conditions (DAPW 26), Supplementary Conditions, Instructions to Bidders, Drawings, Specifications, and Addenda issued by the State in connection with the Project and prior to the submission of the Contractor’s Proposal.

Subject to Section 39, *Order of Precedence, Incorporation by Reference*, of this Contract, Contract Documents shall also consist of the Contractor’s Proposal and Response, as well as any other documentation submitted by it in response to the Project (hereinafter collectively referred to as “Contractor’s Proposal”).

Additionally, Contract Documents shall include any subsequent amendments, change orders and any written interpretations issued as field orders by the Designer pursuant to General Conditions, Article 1.2 (DAPW 26) and all field orders for minor changes by the Designer pursuant to General Conditions, Article 12.3 (DAPW 26). Change orders and amendments shall be executed in the manner authorized by Section 35, *Merger and Modification*, of this Contract.

When applicable, Contract Documents shall include the Performance Bond and/or the Labor and Materials Payment Bond, as required by IC 4-13.6-7-6 and IC 4-13.6-7-7, and fully described and captured in the General Conditions (DAPW 26).

The Contract Documents are specifically and collectively incorporated herein by reference.

**2. Duties of Contractor.** The Contractor shall furnish all labor and materials, perform all of the work, and otherwise fulfill all of its obligations in conformance with the Contract Documents. These duties are described and captured in the Contract Documents. The Contractor agrees that not less than fifteen percent (15%) of the work, measured in dollar volume, will be performed by its own forces. Any subcontractor employed for any part of this Contract awarded in excess of One Hundred Fifty Thousand Dollars (\$150,000.00) shall be qualified with the State of Indiana’s Public Works Division Certification Board and shall have a valid Certificate of Qualification in the prime classification of work for this Contract.

**3. Consideration.** All payments provided herein are subject to appropriations made and funds allocated as provided by laws of the State of Indiana. The State shall pay the Contractor for performance of this Contract in current funds as follows:

BASE BID: \$XXXXXXX.00  
ALTERNATE(S):  
TOTAL CONTRACT PRICE: \$XXXXXXX.00

**4. Term.** The work to be performed under this Contract shall commence within ten (10) days of the last signatory to this Contract. The work shall be completed within XXX calendar days.

**5. Conflict of Interest.** As used in this section:

"Immediate family" means the spouse, partner, housemate or the unemancipated children of an individual, as defined by 42 Indiana Administrative Code 1-3-13.

"Interested party," means:

1. The individual executing this Contract;
2. An individual who has an ownership interest of three percent (3%) or more of the Contractor, if the Contractor is not an individual; or
3. Any member of the immediate family of an individual specified under Subdivision 1 or 2.

"State" means the Indiana Department of Administration.

"State employee" means a state employee, a special state appointee or a state officer, as defined by IC 4-2-6-1(a)(9), (a)(18) and (a)(19), respectively.

- A. The Contractor covenants that it neither has, nor will it have, a direct or indirect financial interest by way of an interested party in any other contract connected or associated with this Contract. The Contractor further represents and warrants that no state employee, who is an interested party of the Contractor as sole proprietor, or who serves as an officer, director, trustee, partner or employee of the Contractor as a legal business entity, participated in any decision or vote of any kind in the award of this Contract. As such and by the execution of this Contract, the Contractor represents and warrants that the result of this Contract does not and will not create a conflict of interest under IC 4-2-6-9 or IC 4-2-6-10.5.
- B. The State may cancel this Contract, without recourse by the Contractor, if an interested party is a state employee and a violation of IC 4-2-6-9 or IC 4-2-6-10.5 has occurred.
- C. The State will not exercise its right of cancellation under Section B above, if the Contractor provides the State an opinion from the State Ethics Commission indicating that the existence of this Contract and the employment by the State of the interested party does not violate any statute or rule relating to ethical conduct of state employees. The State may take action, including cancellation of this Contract, consistent with an opinion of the State Ethics Commission obtained under this Section.
- D. The Contractor has an affirmative obligation under this Contract to disclose to the State when an interested party is or becomes a state employee. The obligation under this section extends only to those facts that the Contractor knows or reasonably should know.

**6. Licensing Standards.** The Contractor and its employees and subcontractors shall comply with all applicable licensing standards, certification standards, accrediting standards and any other laws, rules or regulations governing services to be provided by the Contractor pursuant to this Contract. The State shall not be required to pay the Contractor for any services performed when the Contractor, its employees or

subcontractors are not in compliance with such applicable standards, laws, rules or regulations. If licensure, certification or accreditation expires or is revoked, or if disciplinary action is taken against the applicable licensure, certification or accreditation, the Contractor shall notify the State immediately and the State, at its option, may immediately terminate this Contract.

**7. Escrow Agreement.** Contemporaneously with the execution of this Contract, the parties may provide for the escrow of retained portions of payments to the Contractor by entering into a separate Escrow Agreement, pursuant to IC 4-13.6-7, with an escrow agent described in IC 4-13.6-7-2(b). Should the Contractor elect to escrow retainage, the Escrow Agreement will become a part of this contract as if fully contained herein.

**8. Contractor's Certification.** The Contractor certifies that it has been pre-qualified by the State of Indiana's Public Works Division Certification Board to perform the work and furnish the services required by this Project. The Contractor further certifies that all information and documentation submitted by it in its Application for Prequalification Certification, the Contractor's Proposal and submitted in response to the Project, is true, accurate and complete as of the date of this Contract's effectiveness. The Contractor shall immediately notify the State of any material change to such information. The Contractor shall immediately notify the State if, during the course of performance of this Contract, it or any of its principals are proposed for debarment or ineligibility, or become debarred or declared ineligible, from entering into contracts with the federal government or any department, agency or political subdivision of the State.

**9. Contractor Employee Drug Testing.** Pursuant to IC 4-13-18, the Contractor shall implement the employee drug testing program submitted as part of its Contractor's Proposal. The State may cancel this Contract if it determines that the Contractor:

- A. Has failed to implement its employee drug testing program during the term of this Contract;
- B. Has failed to provide information regarding implementation of the Contractor's employee drug testing program at the request of the State; or
- C. Has provided to the State false information regarding the Contractor's employee drug testing program.

**10. Access to Records.** The Contractor and its subcontractors, if any, shall maintain all books, documents, papers, accounting records, and other evidence pertaining to all costs incurred under this Contract. They shall make such materials available at their respective offices at all reasonable times during this Contract, and for three (3) years from the date of final payment under this Contract, for inspection by the State or its authorized designees. Copies shall be furnished at no cost to the State if requested.

**11. Assignment; Successors.** The Contractor binds its successors and assignees to all the terms and conditions of this Contract. The Contractor shall not assign or subcontract the whole or any part of this Contract without the State's prior written consent. The Contractor may assign its right to receive payments to such third parties as the Contractor may desire without the prior written consent of the State, provided that the Contractor gives written notice (including evidence of such assignment) to the State thirty (30) days in advance of any payment so assigned. The assignment shall cover all unpaid amounts under this Contract and shall not be made to more than one party.

**12. Assignment of Antitrust Claims.** As part of the consideration for the award of this Contract, the Contractor assigns to the State all right, title and interest in and to any claims the Contractor now has, or

may acquire, under state or federal antitrust laws relating to the products or services which are the subject of this Contract.

**13. Audits.** The Contractor acknowledges that it may be required to submit to an audit of funds paid through this Contract. Any such audit shall be conducted in accordance with IC §5-11-1, *et seq.*, and audit guidelines specified by the State.

The State considers the Contractor to be a “vendor” for purposes of this Contract. However, if required by applicable provisions of the Office of Management and Budget Circular A-133 (Audits of States, Local Governments, and Non-Profit Organizations), following the expiration of this Contract the Contractor shall arrange for a financial and compliance audit of funds provided by the State pursuant to this Contract. Such audit is to be conducted by an independent public or certified public accountant (or as applicable, the Indiana State Board of Accounts), and performed in accordance with Indiana State Board of Accounts publication entitled “Uniform Compliance Guidelines for Examination of Entities Receiving Financial Assistance from Governmental Sources,” and applicable provisions of the Office of Management and Budget Circulars A-133 (Audits of States, Local Governments, and Non-Profit Organizations). The Contractor is responsible for ensuring that the audit and any management letters are completed and forwarded to the State in accordance with the terms of this Contract. Audits conducted pursuant to this paragraph must be submitted no later than nine (9) months following the close of the Contractor’s fiscal year. The Contractor agrees to provide the Indiana State Board of Accounts and the State an original of all financial and compliance audits. The audit shall be an audit of the actual entity, or distinct portion thereof that is the Contractor, and not of a parent, member, or subsidiary corporation of the Contractor, except to the extent such an expanded audit may be determined by the Indiana State Board of Accounts or the State to be in the best interests of the State. The audit shall include a statement from the Auditor that the Auditor has reviewed this Contract and that the Contractor is not out of compliance with the financial aspects of this Contract.

If Federal Funds are involved in this Contract, the State also considers the Contractor to be a “Contractor” under 2 C.F.R. 200.330 for purposes of this Contract. However, if required by applicable provisions of 2 C.F.R. 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements), Contractor shall arrange for a financial and compliance audit, which complies with 2 C.F.R. 200.500 *et seq.*

**14. Authority to Bind Contractor.** The signatory for the Contractor represents that he/she has been duly authorized to execute this Contract on behalf of the Contractor and has obtained all necessary or applicable approvals to make this Contract fully binding upon the Contractor when his/her signature is affixed, and accepted by the State.

**15. Changes in Work.** The Contractor shall not commence any additional work or change the scope of the work until authorized in writing by the State. The Contractor shall make no claim for additional compensation in the absence of a prior written approval and amendment executed by all signatories hereto. This Contract may only be amended, supplemented or modified by a written document executed in the same manner as this Contract.

**16. Compliance with Laws.**

- A. The Contractor shall comply with all applicable federal, state, and local laws, rules, regulations, and ordinances, and all provisions required thereby to be included herein are hereby incorporated by reference. The enactment or modification of any applicable state or federal statute or the promulgation of rules or regulations thereunder after execution of

this Contract shall be reviewed by the State and the Contractor to determine whether the provisions of this Contract require formal modification.

- B. The Contractor and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State as set forth in IC §4-2-6, *et seq.*, IC §4-2-7, *et seq.*, the regulations promulgated thereunder, and Executive Order 04-08, dated April 27, 2004. **If the Contractor has knowledge, or would have acquired knowledge with reasonable inquiry, that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor shall ensure compliance with the disclosure requirements in IC 4-2-6-10.5 prior to the execution of this contract.** If the Contractor is not familiar with these ethical requirements, the Contractor should refer any questions to the Indiana State Ethics Commission, or visit the Inspector General's website at <http://www.in.gov/ig/>. If the Contractor or its agents violate any applicable ethical standards, the State may, in its sole discretion, terminate this Contract immediately upon notice to the Contractor. In addition, the Contractor may be subject to penalties under IC §§4-2-6, 4-2-7, 35-44-1-3, and under any other applicable laws.
- C. The Contractor certifies by entering into this Contract that neither it nor its principal(s) is presently in arrears in payment of taxes, permit fees or other statutory, regulatory or judicially required payments to the State of Indiana. The Contractor agrees that any payments currently due to the State of Indiana may be withheld from payments due to the Contractor. Additionally, further work or payments may be withheld, delayed, or denied and/or this Contract suspended until the Contractor is current in its payments and has submitted proof of such payment to the State.
- D. The Contractor warrants that it has no current, pending or outstanding criminal, civil, or enforcement actions initiated by the State, and agrees that it will immediately notify the State of any such actions. During the term of such actions, the Contractor agrees that the State may delay, withhold, or deny work under any supplement, amendment, change order or other contractual device issued pursuant to this Contract.
- E. If a valid dispute exists as to the Contractor's liability or guilt in any action initiated by the State or its agencies, and the State decides to delay, withhold, or deny work to the Contractor, the Contractor may request that it be allowed to continue, or receive work, without delay. The Contractor must submit, in writing, a request for review to the Indiana Department of Administration (IDOA) following the procedures for disputes outlined herein. A determination by IDOA shall be binding on the parties. Any payments that the State may delay, withhold, deny, or apply under this section shall not be subject to penalty or interest, except as permitted by IC §5-17-5.
- F. The Contractor warrants that the Contractor and its subcontractors, if any, shall obtain and maintain all required permits, licenses, registrations, and approvals, and shall comply with all health, safety, and environmental statutes, rules, or regulations in the performance of work activities for the State. Failure to do so may be deemed a material breach of this Contract and grounds for immediate termination and denial of further work with the State.
- G. The Contractor affirms that, if it is an entity described in IC Title 23, it is properly registered and owes no outstanding reports to the Indiana Secretary of State.



H. As required by IC §5-22-3-7:

- (1) The Contractor and any principals of the Contractor certify that:
  - (A) The Contractor, except for de minimis and nonsystematic violations, has not violated the terms of:
    - (i) IC §24-4.7 [Telephone Solicitation Of Consumers];
    - (ii) IC §24-5-12 [Telephone Solicitations]; or
    - (iii) IC §24-5-14 [Regulation of Automatic Dialing Machines];in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and
  - (B) The Contractor will not violate the terms of IC §24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.
- (2) The Contractor and any principals of the Contractor certify that an affiliate or principal of the Contractor and any agent acting on behalf of the Contractor or on behalf of an affiliate or principal of the Contractor, except for de minimis and nonsystematic violations,
  - (A) Has not violated the terms of IC §24-4.7 in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and
  - (B) Will not violate the terms of IC §24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.

**17. Condition of Payment.** All services provided by the Contractor under this Contract must be performed to the State's reasonable satisfaction, as determined at the discretion of the undersigned State representative and in accordance with all applicable federal, state, local laws, ordinances, rules and regulations. The State shall not be required to pay for work found to be unsatisfactory, inconsistent with this Contract or performed in violation of and federal, state or local statute, ordinance, rule or regulation.

**18. Confidentiality of State Information.** The Contractor understands and agrees that data, materials, and information disclosed to the Contractor may contain confidential and protected information. The Contractor covenants that data, material, and information gathered, based upon or disclosed to the Contractor for the purpose of this Contract will not be disclosed to or discussed with third parties without the prior written consent of the State.

The parties acknowledge that the services to be performed by Contractor for the State under this Contract may require or allow access to data, materials, and information containing Social Security numbers maintained by the State in its computer system or other records. In addition to the covenant made above in this section and pursuant to 10 IAC 5-3-1(4), the Contractor and the State agree to comply with the provisions of IC §4-1-10 and IC §4-1-11. If any Social Security number(s) is/are disclosed by Contractor, Contractor agrees to pay the cost of the notice of disclosure of a breach of the security of the system in addition to any other claims and expenses for which it is liable under the terms of this Contract.

**19. Continuity of Services.**

- A. The Contractor recognizes that the service(s) to be performed under this Contract are vital to the State and must be continued without interruption and that, upon Contract expiration, a successor, either the State or another contractor, may continue them. The Contractor agrees to:
  - 1. Furnish phase-in training; and
  - 2. Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.
  
- B. The Contractor shall, upon the State's written notice:
  - 1. Furnish phase-in, phase-out services for up to sixty (60) days after this Contract expires; and
  - 2. Negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the State's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this Contract are maintained at the required level of proficiency.
  
- C. The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this Contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.
  
- D. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations).

**20. Debarment and Suspension.**

- A. The Contractor certifies by entering into this Contract that neither it nor its principals nor any of its subcontractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from entering into this Contract by any federal agency or by any department, agency or political subdivision of the State of Indiana. The term "principal" for purposes of this Contract means an officer, director, owner, partner, key employee or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor.
  
- B. The Contractor certifies that it has verified the state and federal suspension and debarment status for all subcontractors receiving funds under this Contract and shall be solely responsible for any recoupment, penalties or costs that might arise from use of a suspended or debarred subcontractor. The Contractor shall immediately notify the State if any subcontractor becomes debarred or suspended, and shall, at the State's request,

take all steps required by the State to terminate its contractual relationship with the subcontractor for work to be performed under this Contract.

**21. Default by State.** If the State, sixty (60) days after receipt of written notice, fails to correct or cure any material breach of this Contract, the Contractor may cancel and terminate this Contract and institute measures to collect monies due up to and including the date of termination.

**22. Disputes.**

- A. Should any disputes arise with respect to this Contract, the Contractor and the State agree to act immediately to resolve such disputes. Time is of the essence in the resolution of disputes.
- B. The Contractor agrees that, the existence of a dispute notwithstanding, it will continue without delay to carry out all of its responsibilities under this Contract that are not affected by the dispute. Should the Contractor fail to continue to perform its responsibilities regarding all non-disputed work, without delay, any additional costs incurred by the State or the Contractor as a result of such failure to proceed shall be borne by the Contractor, and the Contractor shall make no claim against the State for such costs.
- C. If the parties are unable to resolve a contract dispute between them after good faith attempts to do so, a dissatisfied party shall submit the dispute to the Commissioner of the Indiana Department of Administration for resolution. The dissatisfied party shall give written notice to the Commissioner and the other party. The notice shall include (1) a description of the disputed issues, (2) the efforts made to resolve the dispute, and (3) a proposed resolution. The Commissioner shall promptly issue a Notice setting out documents and materials to be submitted to the Commissioner in order to resolve the dispute; the Notice may also afford the parties the opportunity to make presentations and enter into further negotiations. Within 30 business days of the conclusion of the final presentations, the Commissioner shall issue a written decision and furnish it to both parties. The Commissioner's decision shall be the final and conclusive administrative decision unless either party serves on the Commissioner and the other party, within ten business days after receipt of the Commissioner's decision, a written request for reconsideration and modification of the written decision. If the Commissioner does not modify the written decision within 30 business days, either party may take such other action helpful to resolving the dispute, including submitting the dispute to an Indiana court of competent jurisdiction. If the parties accept the Commissioner's decision, it may be memorialized as a written Amendment to this Contract if appropriate.
- D. The State may withhold payments on disputed items pending resolution of the dispute. The unintentional nonpayment by the State to the Contractor of one or more invoices not in dispute in accordance with the terms of this Contract will not be cause for the Contractor to terminate this Contract, and the Contractor may bring suit to collect these amounts without following the disputes procedure contained herein.
- E. With the written approval of the Commissioner of the Indiana Department of Administration, the parties may agree to forego the process described in subdivision C. relating to submission of the dispute to the Commissioner. This paragraph shall not be construed to abrogate provisions of Ind. Code 4-6-2-11 in situations where dispute

resolution efforts lead to a compromise of claims in favor of the State as described in that statute. In particular, releases or settlement agreements involving releases of legal claims or potential legal claims of the state should be processed consistent with Ind. Code 4-6-2-11, which requires approval of the Governor and Attorney General.

- F. This paragraph shall not be construed to abrogate provisions of Ind. Code 4-6-2-11 in situations where dispute resolution efforts lead to a compromise of claims in favor of the State as described in that statute. In particular, releases or settlement agreements involving releases of legal claims or potential legal claims of the state should be processed consistent with Ind. Code 4-6-2-11, which requires approval of the Governor and Attorney General.

**23. Drug-Free Workplace Certification.** As required by Executive Order No. 90-5 dated April 12, 1990, issued by the Governor of Indiana, the Contractor hereby covenants and agrees to make a good faith effort to provide and maintain a drug-free workplace. The Contractor will give written notice to the State within ten (10) days after receiving actual notice that the Contractor, or an employee of the Contractor in the State of Indiana, has been convicted of a criminal drug violation occurring in the workplace. False certification or violation of this certification may result in sanctions including, but not limited to, suspension of contract payments, termination of this Contract and/or debarment of contracting opportunities with the State for up to three (3) years.

In addition to the provisions of the above paragraph, if the total amount set forth in this Contract is in excess of \$25,000.00, the Contractor certifies and agrees that it will provide a drug-free workplace by:

- A. Publishing and providing to all of its employees a statement notifying them that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
- B. Establishing a drug-free awareness program to inform its employees of (1) the dangers of drug abuse in the workplace; (2) the Contractor's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;
- C. Notifying all employees in the statement required by subparagraph (A) above that as a condition of continued employment, the employee will (1) abide by the terms of the statement; and (2) notify the Contractor of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- D. Notifying the State in writing within ten (10) days after receiving notice from an employee under subdivision (C)(2) above, or otherwise receiving actual notice of such conviction;
- E. Within thirty (30) days after receiving notice under subdivision (C)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) taking appropriate personnel action against the employee, up to and including termination; or (2) requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and

- F. Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (A) through (E) above.

**24. Employment Eligibility Verification.** As required by IC §22-5-1.7, the Contractor swears or affirms under the penalties of perjury that:

- A. The Contractor does not knowingly employ an unauthorized alien.
- B. The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC §22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.
- C. The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.
- D. The Contractor shall require his/her/its subcontractors who perform work under this Contract to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.

The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

**25. Employment Option.** If the State determines that it would be in the State's best interest to hire an employee of the Contractor, the Contractor will release the selected employee from any non-competition agreements that may be in effect. This release will be at no cost to the State or the employee.

**26. Force Majeure.** In the event that either party is unable to perform any of its obligations under this Contract or to enjoy any of its benefits because of natural disaster or decrees of governmental bodies not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Contract shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so affected may, by giving written notice, terminate this Contract.

**27. Funding Cancellation.** When the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this Contract, this Contract shall be canceled. A determination by the Director of State Budget Agency that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

**28. Governing Law.** This Contract shall be governed, construed, and enforced in accordance with the laws of the State of Indiana, without regard to its conflict of laws rules. Suit, if any, must be brought in the State of Indiana.

**29. HIPAA Compliance.** If this Contract involves services, activities or products subject to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Contractor covenants that it will appropriately safeguard Protected Health Information (defined in 45 CFR 160.103), and agrees that it is subject to, and shall comply with, the provisions of 45 CFR 164 Subpart E regarding use and disclosure of Protected Health Information.

**30. Indemnification.** The Contractor agrees to indemnify, defend, and hold harmless the State, its agents, officials, and employees from all claims and suits including court costs, attorney's fees, and other expenses caused by any act or omission of the Contractor and/or its subcontractors, if any, in the performance of this Contract. The State shall not provide such indemnification to the Contractor.

**31. Independent Contractor; Workers' Compensation Insurance.** The Contractor is performing as an independent entity under this Contract. No part of this Contract shall be construed to represent the creation of an employment, agency, partnership or joint venture agreement between the parties. Neither party will assume liability for any injury (including death) to any persons, or damage to any property, arising out of the acts or omissions of the agents, employees or subcontractors of the other party. The Contractor shall provide all necessary unemployment and workers' compensation insurance for the Contractor's employees, and shall provide the State with a Certificate of Insurance evidencing such coverage prior to starting work under this Contract.

**32. Information Technology Enterprise Architecture Requirements.** If the Contractor provides any information technology related products or services to the State, the Contractor shall comply with all IOT standards, policies and guidelines, which are online at <http://iot.in.gov/architecture/>. The Contractor specifically agrees that all hardware, software and services provided to or purchased by the State shall be compatible with the principles and goals contained in the electronic and information technology accessibility standards adopted under Section 508 of the Federal Rehabilitation Act of 1973 (29 U.S.C. 794d) and IC §4-13.1-3. Any deviation from these architecture requirements must be approved in writing by IOT in advance. The State may terminate this Contract for default if the Contractor fails to cure a breach of this provision within a reasonable time.

### **33. Insurance**

- A. The Contractor and their subcontractors ( if any) shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which may in any manner arise out of or result from Contractor's performance under this Contract:
1. Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than \$700,000 per person and \$5,000,000 per occurrence unless additional coverage is required by the State. The State is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.
  2. Automobile liability for owned, non-owned and hired autos with minimum liability limits of \$700,000 per person and \$5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.

3. The Contractor shall secure the appropriate Surety or Fidelity Bond(s) as required by the state department served or by applicable statute.
  4. The Contractor and their subcontractors shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the services provided under this Contract involve work outside of Indiana.
- B. The Contractor's insurance coverage must meet the following additional requirements:
1. The insurer must have a certificate of authority or other appropriate authorization to operate in the state in which the policy was issued.
  2. Any deductible or self-insured retention amount or other similar obligation under the insurance policies shall be the sole obligation of the Contractor.
  3. The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract.
  4. The insurance required in this Contract, through a policy or endorsement(s), shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.
  5. The Contractor waives and agrees to require their insurer to waive their rights of subrogation against the State of Indiana.
- C. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.

**34. Key Person(s).**

- A. If both parties have designated that certain individual(s) are essential to the services offered, the parties agree that should such individual(s) leave their employment during the term of this Contract for whatever reason, the State shall have the right to terminate this Contract upon thirty (30) days' prior written notice.
- B. In the event that the Contractor is an individual, that individual shall be considered a key person and, as such, essential to this Contract. Substitution of another for the Contractor shall not be permitted without express written consent of the State.

Nothing in Sections A and B, above shall be construed to prevent the Contractor from using the services of others to perform tasks ancillary to those tasks which directly require the expertise of the key person.

Examples of such ancillary tasks include secretarial, clerical, and common labor duties. The Contractor shall, at all times, remain responsible for the performance of all necessary tasks, whether performed by a key person or others.

Key person(s) to this Contract is/are:

**35. Merger & Modification.** This Contract constitutes the entire agreement between the parties. No understandings, agreements, or representations, oral or written, not specified within this Contract will be valid provisions of this Contract. This Contract may not be modified, supplemented, or amended, except by written agreement signed by all necessary parties.

**36. Minority and Women’s Business Enterprises Compliance.** Award of this Contract was based, in part, on the Minority and/or Women’s Business Enterprise (“MBE” and/or “WBE”) participation plan. The following certified MBE or WBE subcontractors will be participating in this Contract:

<u>MBE/WBE</u>	<u>PHONE</u>	<u>COMPANY NAME</u>	<u>SCOPE OF PRODUCTS and/or SERVICES</u>	<u>UTILIZATION DATE</u>	<u>PERCENT</u>
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*Terms for participation are as provided in the Contractor’s Proposal to the State’s request for participation, which are described and captured in the Contract Documents.*

A copy of each subcontractor agreement must be submitted to IDOA’s MBE/WBE Division within thirty (30) days of the effective date of this Contract. Failure to provide a copy of any subcontractor agreement will be deemed a violation of the rules governing MBE/WBE procurement, and may result in sanctions allowable under 25 IAC 5-7-8. Failure to provide any subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA’s MBE/WBE Division before changing the participation plan submitted in connection with this Contract.

The Contractor shall report payments made to MBE/WBE Division subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as “Pay Audit.” MBE/WBE Division subcontractor payments shall also be reported to the Division as reasonably requested and in a format to be determined by Division.

**37. Nondiscrimination.** Pursuant to the Indiana Civil Rights Law, specifically including IC §22-9-1-10, and in keeping with the purposes of the federal Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act, the Contractor covenants that it shall not discriminate against any employee or applicant for employment relating to this Contract with respect to the hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of the employee’s or applicant’s race, color, national origin, religion, sex, age, disability, ancestry, status as a veteran, or any other characteristic protected by federal, state, or local law (“Protected Characteristics”). Contractor certifies compliance with applicable federal laws, regulations, and executive orders prohibiting discrimination based on the Protected Characteristics in the provision of services. Breach of this paragraph may be regarded as a material breach of this Contract, but nothing in this paragraph shall be construed to imply or establish an employment relationship between the State and any applicant or employee of the Contractor or any subcontractor.

The State is a recipient of federal funds, and therefore, where applicable, Contractor and any subcontractors shall comply with requisite affirmative action requirements, including reporting, pursuant to 41 CFR Chapter 60, as amended, and Section 202 of Executive Order 11246 as amended by Executive Order 13672.



**38. Notice to Parties.** Whenever any notice, statement or other communication is required under this Contract, it shall be sent to the following addresses, unless otherwise specifically advised.

- A. Notices to the State shall be sent to: Public Works Divisions, Director  
Indiana Department of Administration  
402 W Washington St Room W467  
Indianapolis, IN 46204
- B. Notices to the Contractor shall be sent to: **[INSERT CONTRACTOR NAME]**  
**[INSERT CONTRACTOR ADDRESS]**
- C. As required by IC 4-13-2-14.8, payments to the Contractor shall be made via electronic funds transfer in accordance with instructions filed by the Contractor with the Indiana Auditor of State.

**39. Order of Precedence; Incorporation by Reference.** Any inconsistency or ambiguity in this Contract shall be resolved by giving precedence in the following order: (1) this Contract, (2) the Project Bid Package, (3) attachments prepared by the State; (4) Contractor's Proposal; and (5) attachments prepared by the Contractor. All of the foregoing are incorporated fully by reference. All attachments, and all documents referred to in this paragraph are hereby incorporated fully by reference.

**40. Ownership of Documents and Materials.**

A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials (the "Materials") not developed or licensed by the Contractor prior to execution of this Contract, but specifically developed under this Contract shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.

B. Use of the Materials, other than related to contract performance by the Contractor, without the prior written consent of the State, is prohibited. During the performance of this Contract, the Contractor shall be responsible for any loss of or damage to the Materials developed for or supplied by the State and used to develop or assist in the services provided while the Materials are in the possession of the Contractor. Any loss or damage thereto shall be restored at the Contractor's expense. The Contractor shall provide the State full, immediate, and unrestricted access to the Materials and to Contractor's work product during the term of this Contract.

**41. Payments.**

- A. All payments shall be made 35 days in arrears in conformance with State fiscal policies and procedures and, as required by IC §4-13-2-14.8, the direct deposit by electronic funds transfer to the financial institution designated by the Contractor in writing unless a specific waiver has been obtained from the Indiana Auditor of State. No payments will be made in advance of receipt of the goods or services that are the subject of this Contract except as permitted by IC §4-13-2-20.

- B. The State Budget Agency and the Contractor acknowledge that Contractor is being paid in advance for the maintenance of equipment and / or software. Pursuant to IC §4-13-2-20(b)(14), Contractor agrees that if it fails to perform the maintenance required under this Contract, upon receipt of written notice from the State, it shall promptly refund the consideration paid, pro-rated through the date of non-performance.

**42. Penalties/Interest/Attorney's Fees.** The State will in good faith perform its required obligations hereunder and does not agree to pay any penalties, liquidated damages, interest or attorney's fees, except as permitted by Indiana law, in part, IC §5-17-5, IC §34-54-8, IC §34-13-1 and IC § 34-52-2-3.

Notwithstanding the provisions contained in IC §5-17-5, any liability resulting from the State's failure to make prompt payment shall be based solely on the amount of funding originating from the State and shall not be based on funding from federal or other sources.

**43. Progress Reports.** The Contractor shall submit progress reports to the State upon request. The report shall be oral, unless the State, upon receipt of the oral report, should deem it necessary to have it in written form. The progress reports shall serve the purpose of assuring the State that work is progressing in line with the schedule, and that completion can be reasonably assured on the scheduled date.

**44. Public Record.** The Contractor acknowledges that the State will not treat this Contract as containing confidential information, and will post this Contract on its website as required by Executive Order 05-07. Use by the public of the information contained in this Contract shall not be considered an act of the State.

**45. Renewal Option.** This Contract may be renewed under the same terms and conditions, subject to the approval of the Commissioner of the Department of Administration and the State Budget Director in compliance with IC §5-22-17-4. The term of the renewed contract may not be longer than the term of the original contract.

**46. Severability.** The invalidity of any section, subsection, clause or provision of this Contract shall not affect the validity of the remaining sections, subsections, clauses or provisions of this Contract.

**47. Substantial Performance.** This Contract shall be deemed to be substantially performed only when fully performed according to its terms and conditions and any written amendments or supplements.

**48. Taxes.** The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract.

**49. Termination for Convenience.** This Contract may be terminated, in whole or in part, by the State, which shall include and is not limited to the Indiana Department of Administration and the State Budget Agency whenever, for any reason, the State determines that such termination is in its best interest. Termination of services shall be effected by delivery to the Contractor of a Termination Notice at least thirty (30) days prior to the termination effective date, specifying the extent to which performance of services under such termination becomes effective. The Contractor shall be compensated for services properly rendered prior to the effective date of termination. The State will not be liable for services performed after the effective date of termination. The Contractor shall be compensated for services herein provided but in no case shall total payment made to the Contractor exceed the original contract price or shall any price increase be allowed on individual line items if canceled only in part prior to the original termination date. For the purposes of this paragraph, the parties stipulate and agree that the Indiana Department of Administration shall be deemed to be a party to this agreement with authority to terminate

the same for convenience when such termination is determined by the Commissioner of IDOA to be in the best interests of the State.

**50. Termination for Default.**

- A. With the provision of thirty (30) days notice to the Contractor, the State may terminate this Contract in whole or in part if the Contractor fails to:
  - 1. Correct or cure any breach of this Contract; the time to correct or cure the breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the parties;
  - 2. Deliver the supplies or perform the services within the time specified in this Contract or any extension;
  - 3. Make progress so as to endanger performance of this Contract; or
  - 4. Perform any of the other provisions of this Contract.
  
- B. If the State terminates this Contract in whole or in part, it may acquire, under the terms and in the manner the State considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the State for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.
  
- C. The State shall pay the contract price for completed supplies delivered and services accepted. The Contractor and the State shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The State may withhold from these amounts any sum the State determines to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders.
  
- D. The rights and remedies of the State in this clause are in addition to any other rights and remedies provided by law or equity or under this Contract.

**51. Travel.** No expenses for travel will be reimbursed unless specifically permitted under the scope of services or consideration provisions. Expenditures made by the Contractor for travel will be reimbursed at the current rate paid by the State and in accordance with the State Travel Policies and Procedures as specified in the current Financial Management Circular. Out-of-state travel requests must be reviewed by the State for availability of funds and for appropriateness per Circular guidelines.

**52. Indiana Veteran’s Business Enterprise Compliance.** Award of this Contract was based, in part, on the Indiana Veteran’s Business Enterprise (“IVBE”) participation plan. The following IVBE subcontractors will be participating in this Contract:

VBE	PHONE	COMPANY NAME	SCOPE OF PRODUCTS and/or SERVICES	UTILIZATION	DATE	PERCENT
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N/A

A copy of each subcontractor agreement must be submitted to IDOA within thirty (30) days of the effective date of this Contract. Failure to provide any subcontractor agreement may also be considered a material breach of this Contract. The Contractor must obtain approval from IDOA’s MBE/WBE Division before changing the participation plan submitted in connection with this Contract.

The Contractor shall report payments made to IVBE subcontractors under this Contract on a monthly basis. Monthly reports shall be made using the online audit tool, commonly referred to as "Pay Audit." IVBE subcontractor payments shall also be reported to IDOA as reasonably requested and in a format to be determined by IDOA.

**53. Waiver of Rights.** No right conferred on either party under this Contract shall be deemed waived, and no breach of this Contract excused, unless such waiver is in writing and signed by the party claimed to have waived such right. Neither the State's review, approval or acceptance of, nor payment for, the services required under this Contract shall be construed to operate as a waiver of any rights under this Contract or of any cause of action arising out of the performance of this Contract, and the Contractor shall be and remain liable to the State in accordance with applicable law for all damages to the State caused by the Contractor's negligent performance of any of the services furnished under this Contract.

**54. Work Standards.** The Contractor shall execute its responsibilities by following and applying at all times the highest professional and technical guidelines and standards. If the State becomes dissatisfied with the work product of or the working relationship with those individuals assigned to work on this Contract, the State may request in writing the replacement of any or all such individuals, and the Contractor shall grant such request.

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**Non-Collusion and Acceptance**

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. **Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.**

**IN WITNESS WHEREOF**, the Contractor and the State have, through their duly authorized representatives, entered into this Contract for Public Works Project Number **XXXXXX**. The parties, having read and understood the foregoing terms of this Contract, do by their respective signatures dated below agree to the terms thereof.

**XXXXXXXXXX**  
[Contractor]

**Department of Administration**  
**Public Works Division**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

By: \_\_\_\_\_  
Director, DAPW  
*For IDOA Commissioner if less than \$1,000,000*

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Approved by:**  
Department of Administration

**Approved by:**  
State Budget Agency

By: \_\_\_\_\_  
Jessica Robertson, Commissioner

By: \_\_\_\_\_  
Brian E. Bailey, Director

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Approved as to Form and Legality:**  
*Form approval has been granted by the Office  
of the Attorney General pursuant to  
IC 4-13-2-14.3(e) on August 15, 2016.  
FA 16-28*

This Instrument was prepared by: **[INSERT NAME]** on **XX/XX/XXXX**

Legal counsel: \_\_\_\_\_ (initials)

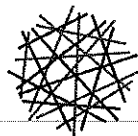


Proposal Manual for:  
**Indiana Department of Natural Resources**  
**Clark, Indiana**  
**Charlestown State Park**

**Project No. ENG#2003724395**

January 21, 2020

Documents Prepared By:



**HWC**  
**ENGINEERING**

303 Scribner Drive, Suite 201  
New Albany, Indiana 47150  
Ph: 812-913-6420

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**Project ENG#2003724395**  
**Contract for: Bank Stabilization**

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Appendix A – Geotechnical Report

25 Pages

LIST OF DRAWINGS

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**DIVISION 01**  
**GENERAL REQUIREMENTS**

## SECTION 01 10 00 - SUMMARY

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

- Description
- Bid
- Site Access Prior to Bidding
- Use of Contract Documents
- Commencement and Completion of Work
- Builder's Risk Insurance
- Submission of Post Bid Information
- Measurement and Payment – Lump Sum
- Working Hours
- Progress Meetings
- Existing Site Conditions
- Construction and Storage Area
- Protection of Facilities and Premises
- Roadway Protection
- Substitutions
- Archaeological and Historical Artifacts
- Salvage Rights
- Regulatory Requirements
- Digital File Transfer Agreement

#### 1.2 DESCRIPTION

- A. This project consists of the stabilization of the river bank along the parking lot at the overlooks at Charlestown State Park. The project is located at Charlestown State Park, at Charlestown, Clark County.
- B. The Contractor shall perform all work required to complete the project in accordance with the contract documents.

#### 1.3 BID

- A. The Base Bid shall include all work and requirements indicated by the Bidding Documents.
- B. The Contractor shall not be allowed extra compensation by reason of any matter or thing concerning which the Contractor could have fully informed himself prior to bidding. No verbal agreement, understanding or conversation with an agent or employee of the Owner, either before or after the execution of this contract, shall affect or modify the terms or obligations herein contained.

#### 1.4 SITE ACCESS PRIOR TO BIDDING

- A. Bidders may obtain access to the construction site for on-site inspection prior to bidding at the pre-bid meeting as indicated in the Notice to Bidders.

On-site Charlestown State Park Staff:

CONTACT: Lucas Green, Property Manager

812-590-8460

#### 1.5 USE OF CONTRACT DOCUMENTS

- A. The Contractor shall examine all Specifications and Drawings for the Work, including those that may pertain to Work Contractor does not normally perform with its own forces.
- B. The Contractor shall use all of the Project Drawings and Specifications:
  - 1. For a complete understanding of the Project.
  - 2. To determine the type of construction and systems required.
  - 3. For coordination with other contractors.
  - 4. To determine what other work may be involved in various parts or phases.
  - 5. To anticipate and notify others when work by others will be required.
  - 6. And all other relevant matters related to the project.
- C. Contractor is also bound by all requirements of the Contract Documents which are applicable to, pertain to, or affect its work, as may be shown or inferred by the entire set of Project Drawings and Specifications.

#### 1.6 COMMENCEMENT AND COMPLETION OF WORK

- A. The Contractor shall start the project within ten (10) days after the date of the execution of the Contract, except that no earthwork or work below the ordinary high water mark will begin until after all regulatory permits are approved.
- B. Work shall not commence until all labor, materials and equipment are available so Work can continue without interruption or delay.
- C. All work required by the Contract Documents shall be completed by **December 31, 2020**.
- D. This project, or portion thereof, will not be ready for substantial completion review until test and performance evaluations are completed, all items are installed, and area is clear of construction rubbish and debris.

#### 1.7 BUILDER'S RISK INSURANCE

- A: The Builders Risk insurance requirements as specified in the General Conditions (11.2.5) are waived for this project.

#### 1.8 SUBMISSION OF POST-BID INFORMATION

- A. The Contractor shall submit the following information within ten (10) days of receipt of Notice to Proceed:
  - B. Designation of the work to be performed by the Contractor with his own forces.
  - C. A list of Subcontractors.
  - D. A list of manufacturers and suppliers.
  - E. A Progress schedule for the work in relation to the entire Project. The Progress schedule shall be revised and updated at least monthly.
  - F. A Schedule of Values. This schedule, when approved by the Owner shall be used as a basis for the Contractor's Applications for Progress and Final Payments.

#### 1.9 MEASUREMENT OF PAYMENT- LUMP SUM

- A. Payment for Lump Sum projects will be based on the accepted schedule of values for the project. No separate measurement for payment will be performed for Lump Sum Work. All Work described in the Specifications and/or shown on the Drawings shall be included in the Lump Sum Bid.

#### 1.10 WORKING HOURS

- A. Contractor shall perform all construction activity between sunrise and sunset and shall not be performed on Saturdays, Sundays, or during the period beginning at 12:00 noon on the last weekday (Monday through Friday) proceeding and continuing until Sunrise on the day following New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas, unless previous arrangements are made with the Owner.
- B. All work performed at other times shall be only by approval from the Owner, confirmed in writing, and shall not constitute a change in the contract amount.

#### 1.11 PROGRESS MEETINGS

- A. Progress meetings will be held throughout progress of the Work at intervals agreed to by Owner, Engineer, and Contractor.

#### 1.12 EXISTING SITE CONDITIONS

- A. Data on the drawings pertaining to present conditions, dimensions, type of construction, obstructions on or near site, location of utilities, etc. have been obtained from sources believed reliable, but accuracy of such data is not guaranteed and is furnished solely for accommodation of the Contractor.
- B. Before starting excavations, Contractor shall locate existing underground utilities in all areas of the work. IUPPS does not locate private utilities on DNR properties. Contractor is responsible for engaging a private utility locator to mark utilities within the project area.

#### 1.13 CONSTRUCTION AND STORAGE AREA

- A. The Contractor shall confine the construction operations and storage of materials within the project construction work limits.
- B. Except for permanent site improvements provided under the Contract, Contractor shall restore property disturbed during the Work to the conditions which previously existed.
- C. Parking and Deliveries:
- D. Contractor is responsible for control of traffic by vehicles and persons within the limits of its operations.
- E. Parking for employees, subcontractors, and agents of Contractor shall be in areas subject to approval of Owner.
- F. Access to the site for delivery of construction material of equipment shall be subject to approval of Owner

#### 1.14 PROTECTION OF FACILITIES AND PREMISES

- A. The Contractor shall be responsible for the protection of all facilities during the entire period of service. Any damages to the existing facilities, roads, laws, driveways, or other State-owned property caused by the contractor shall be repaired by the Contractor at his/her expense and in a manner and schedule approved by the Owner.

Summary

- B. The Contractor shall power wash any mechanical equipment or vehicle to be used on the job site to remove all mud and debris prior to unloading on the site. This is necessary to prevent contamination by invasive species seeds that may be attached to the equipment.

#### 1.15 ROADWAY PROTECTION

- A. The Contractor shall, at his expense, be responsible to repair any and all damage to the property's roads and drainage structures caused by his equipment and/or personnel.
- B. The ingress and egress to the project site shall be approved by the Designer.
- C. The CONTRACTOR shall, at its expense, be responsible to repair, **to pre-construction conditions**, any and all damage to the property's roads and drainage structures, caused by his equipment and/or personnel.
- D. Preconstruction Video Taping:

Prior to mobilization at the site, the CONTRACTOR shall furnish to the OWNER and ENGINEER a high resolution color audio-video DVD recording of all planned construction areas, including but not limited to roads and visible utilities. The purpose of the video taping is to document existing conditions and to provide a fair measure of required restoration. Care should be taken to record all existing conditions which exhibit deterioration, imperfections, structural failures or situations that would be considered substandard. The DVDs shall include an audio soundtrack to provide a detailed description of location being viewed referenced to Contract Drawings (i.e., campsite number, etc.). The direction of camera view, date, time, temperature and the environmental conditions at time of taping shall be provided. Taping shall not be performed during inclement weather or when the ground is covered partially or totally with snow, ice, leaves, etc. Submit one copy of the video taping to the OWNER and the ENGINEER accompanied with a detailed log of the contents of each DVD. The log should include location descriptions to facilitate the quick location of information contained the DVDs. Upon final acceptance, the DVDs will become permanent property of the OWNER. Costs for the preconstruction video taping shall be included in the CONTRACTOR's lump sum bid.

#### 1.16 SUBSTITUTIONS

- A. Substitutions shall be made in accordance with the requirements of Article 7 of the General Conditions.

#### 1.17 ARCHAEOLOGICAL AND HISTORICAL ARTIFACTS

- A. If any objects are uncovered during construction which could possibly be of historic archeological importance, this shall be immediately report to Owner. Work at that spot shall not proceed further until Owner has evaluated the object and the area where it was found and approved continuation of the work.
- B. If any construction time is lost due to such objects being found, an equal number of calendar days will be added to the project completion time given in the specifications

#### 1.18 SALVAGE RIGHTS

- A. Unless stated otherwise in these specifications or on the plans, all equipment and materials removed as part of this project and not being reused shall become the property of the Contractor and removed from the site.

#### 1.19 REGULATORY REQUIREMENTS

- A. All work including site, safety, equipment, materials, and fabricated items provided under the Contract shall comply with the provisions of the "Occupational Safety and Health Act".
- B. Contractor shall comply with roadway weight restrictions including seasonal weight restrictions.
- C. The following permits will be obtained by the Owner: Construction in a Floodway, 404/401 Clean Water Act, Rule 5 Erosion Control. Permits being obtained by Owner shall be provided when approved. Contractor shall comply with all provisions of the permits. Contractor shall obtain all other permits required for the Work.
- D. Trees greater than 5 inches dbh (diameter at breast height) cannot be cut from April 1 through September 30.
- E. Work in the waterway from April 1 through June 30 is not allowed unless approved by the Owner in writing.

#### 1.20 DIGITAL FILE TRANSFER AGREEMENT

- A. Auto-Cad files related to the project can be obtained from the Engineer, HWC Engineering. HWC requires an Electronic Document Transfer Agreement to be signed before sharing electronic CAD files. Upon execution of the transfer agreement, HWC will share the CAD file with participating contractors.

HWC Contact: Daniel Warren, PE, Project Engineer  
[dwarren@hwcengineering.com](mailto:dwarren@hwcengineering.com)

812-913-6419

END OF SECTION

## SECTION 01 40 00 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Quality control.
- B. Tolerances.
- C. References.
- D. Labeling.

#### 1.2 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Perform Work using persons qualified to produce required and specified quality.
- D. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

#### 1.3 TOLERANCES

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

#### 1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date for receiving Bids or date of Owner-Contractor Agreement when there are no Bids except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.
- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.



### 1.5 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
  - 1. Model number.
  - 2. Serial number.
  - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION

## SECTION 01 60 00 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.

#### 1.2 PRODUCTS

- A. At minimum, comply with specified requirements and reference standards.
- B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.
- C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise. Confirm that manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.
- D. Do not use materials and equipment removed from existing premises except as specifically permitted by Contract Documents.
- E. Furnish interchangeable components from same manufacturer for components being replaced.

#### 1.3 PRODUCT DELIVERY REQUIREMENTS

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

#### 1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products according to manufacturer's instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.
- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Provide off-Site storage and protection when Site does not permit on-Site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

PART 2 - PRODUCTS – Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION

**DIVISION 05**

**METALS**

## SECTION 05 50 00 - METAL FABRICATIONS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
1. Shop-fabricated metal items.
  2. Fabricated architectural details.

#### 1.2 REFERENCE STANDARDS

- A. ASTM International:
1. ASTM A36 - Standard Specification for Carbon Structural Steel. ASTM A53- Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products. ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware. ASTM A193 - Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications. ASTM A240 - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
  2. ASTM A269 - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
  3. ASTM A276 - Standard Specification for Stainless Steel Bars and Shapes.
  4. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
  5. ASTM A312 - Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
  6. ASTM A354 - Standard Specification for Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners.
  7. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
  8. ASTM A501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
  9. ASTM A554 - Standard Specification for Welded Stainless Steel Mechanical Tubing.
  10. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts. ASTM A572 - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  11. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
  12. ASTM A709 - Standard Specification for Structural Steel Bridges.
  13. ASTM A780 - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings. ASTM A992 - Standard Specification for Structural Steel Shapes. ASTM B26 - Standard Specification for Aluminum-Alloy Sand Castings. ASTM B85 - Standard Specification for Aluminum-Alloy Die Castings. ASTM B177 - Standard Guide for Engineering Chromium Electroplating. ASTM B209 - Standard Specification for Aluminum

and Aluminum-Alloy Sheet and Plate. ASTM B210 - Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes. ASTM B211 - Standard Specification for Aluminum and Aluminum-Alloy Rolled or Cold Finished Bar, Rod, and Wire. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

14. ASTM B695 - Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel.
  15. ASTM F436 - Standard Specification for Hardened Steel Washers.
  16. ASTM F593 – Standard Specifications for Stainless Steel Bolts, Hex Cap Screws, and Studs
  17. ASTM F1554 - Standard Specification for Anchor Bolts, Steel, 36, 55, and 105 ksi Yield Strength.
- B. SSPC: The Society for Protective Coatings:
1. SSPC - Steel Structures Painting Manual.
  2. SSPC Paint 15 - Steel Joist Shop Primer/Metal Building Primer.
  3. SSPC Paint 20 - Zinc-Rich Coating (Type I - Inorganic and Type II - Organic).
  4. SSPC SP 1 - Solvent Cleaning.
  5. SSPC SP 10 - Near-White Blast Cleaning.

### 1.3 SUBMITTALS

- A. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.

### 1.4 QUALITY ASSURANCE

- A. Finish joints according to NOMMA Guideline 1.

### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept metal fabrications on-Site in labeled shipments. Inspect for damage.
- C. Protect metal fabrications from damage by exposure to weather or by ground contact.

### 1.6 EXISTING CONDITIONS

- A. Field Measurements: Verify field measurements prior to fabrication. Indicate field measurements on Shop Drawings.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Steel:
1. Structural W Shapes: ASTM A992.
  2. Structural Shapes: ASTM A36.
  3. Channels and Angles: ASTM A36.
  4. Steel Plate: ASTM A709.
  5. Hollow Structural Sections: ASTM A500, Grade B.
  6. Steel Pipe: ASTM A53, Grade B, Schedule 40.
  7. Sheet Steel: ASTM A653, Grade 33 Structural Quality.

8. Bolts: ASTM F593; Group 1, Allow 304
  9. Nuts: ASTM A563; heavy-hex type.
  10. Washers: ASTM F436; Type 1.
  11. Welding Materials: AWS D1.1; type required for materials being welded.
- B. Stainless Steel:
1. Bars and Shapes: ASTM A276; Type 302.
  2. Tubing: ASTM A269; Type 304.
  3. Pipe: ASTM A312, seamless; Type 304.
  4. Plate, Sheet, and Strip: ASTM A240; Type 302.
  5. Bolts, Nuts, and Washers: ASTM F593, Group 1, Allow 304
  6. Welding Materials: AWS D1.6; type required for materials being welded.
- C. Bolts, Nuts, and Washers for Equipment and Piping:
1. Carbon Steel:
    - a. Structural Connections: ASTM A307, Grade A, hot-dip galvanized.
    - b. Anchor Bolts: ASTM A307, Grade A, hot-dip galvanized.
    - c. Pipe and Equipment Flange Bolts: ASTM A193, Grade B-7.
  2. Stainless Steel: Type 316 stainless steel, Class 2; ASTM A193 for bolts; ASTM A194 for nuts.

## 2.2 FABRICATION

- A. Fit and shop-assemble items in largest practical sections for delivery to Site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small, uniform radius.
- D. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
- E. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
- F. Fabrication Tolerances:
  1. Squareness: 1/8-inch maximum difference in diagonal measurements.
  2. Maximum Offset between Faces: 1/16 inch.
  3. Maximum Misalignment of Adjacent Members: 1/16 inch.
  4. Maximum Bow: 1/8 inch in 48 inches.
  5. Maximum Deviation from Plane: 1/16 inch in 48 inches.

## 2.3 FINISHES

- A. Steel:
1. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
  2. Do not prime surfaces in direct contact with concrete or where field welding is required.
  3. Prime-paint items with one coat except where galvanizing is specified.
  4. Galvanizing: ASTM A123; hot-dip galvanize after fabrication.
  5. Galvanizing for Fasteners, Connectors, and Anchors:
    - a. Hot-Dip Galvanizing: ASTM A153.
    - b. Mechanical Galvanizing: ASTM B695; Class 50 minimum.
  6. Sheet Steel: Galvanized.
  7. Bolts: Hot-dip galvanized.
  8. Nuts: Hot-dip galvanized.

9. Washers: Hot-dip galvanized.
  10. Shop Primer: SSPC Paint 15, Type 1, red oxide.
  11. Touchup Primer: Match shop primer.
- B. Stainless Steel:
1. Satin-Polished Finish: Number 4, satin directional polish parallel with long dimension of finished face.
  2. Mirror-Polished Finish: Number 8, mirror polish with preliminary directional polish lines removed.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive Work.

### 3.2 PREPARATION

- A. Clean and strip primed steel items to bare metal where Site welding is required.
- B. Supply steel items required to be cast into concrete or embedded in masonry with setting templates to appropriate sections.

### 3.3 INSTALLATION

- A. Install items plumb and level, accurately fitted, and free from distortion or defects.
- B. Make provisions for erection stresses. Install temporary bracing to maintain alignment until permanent bracing and attachments are installed.
- C. Field-weld components indicated on Shop Drawings.
- D. Perform field welding according to AWS D1.1.
- E. Obtain approval of Architect/Engineer prior to Site cutting or making adjustments not scheduled.

### 3.4 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Requirements for tolerances.
- B. Maximum Variation from Plumb: 1/4 inch per story or for every 12 feet in height, whichever is greater, non-cumulative.
- C. Maximum Variation from Level: 1/16 inch in 3 feet and 1/4 inch in 10 feet.
- D. Maximum Offset from Alignment: 1/4 inch.
- E. Maximum Out-of-Position: 1/4 inch.

### 3.5 FIELD QUALITY CONTROL

- A. Welding: Inspect welds according to AWS D1.1.
- B. Replace damaged or improperly functioning hardware.
- C. After erection, touch up welds, abrasions, and damaged finishes with prime paint or galvanizing repair paint to match shop finishes.
- D. Touch up factory-applied finishes according to manufacturer-recommended procedures.

### 3.6 ADJUSTING

- A. Adjust operating hardware and lubricate as necessary for smooth operation.

END OF SECTION

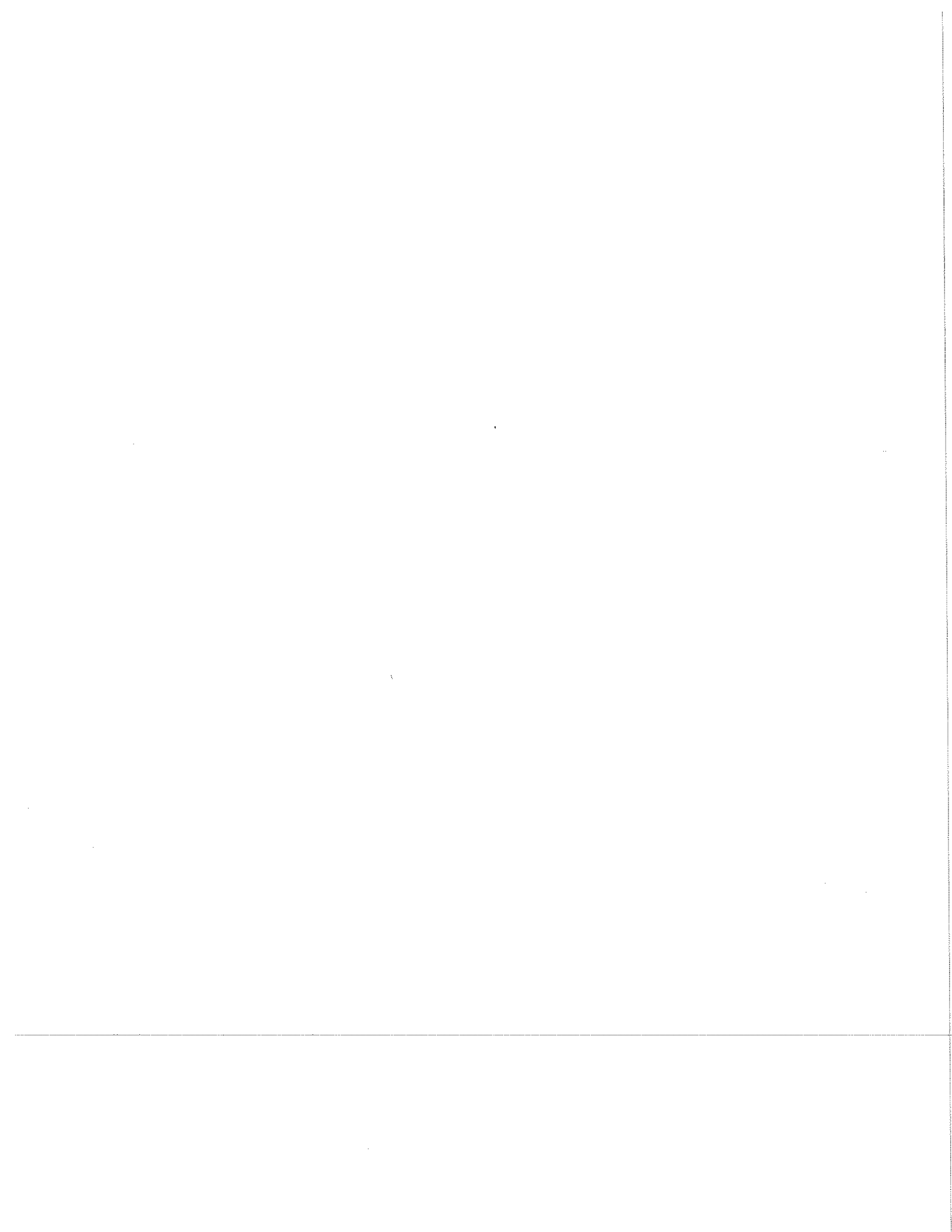


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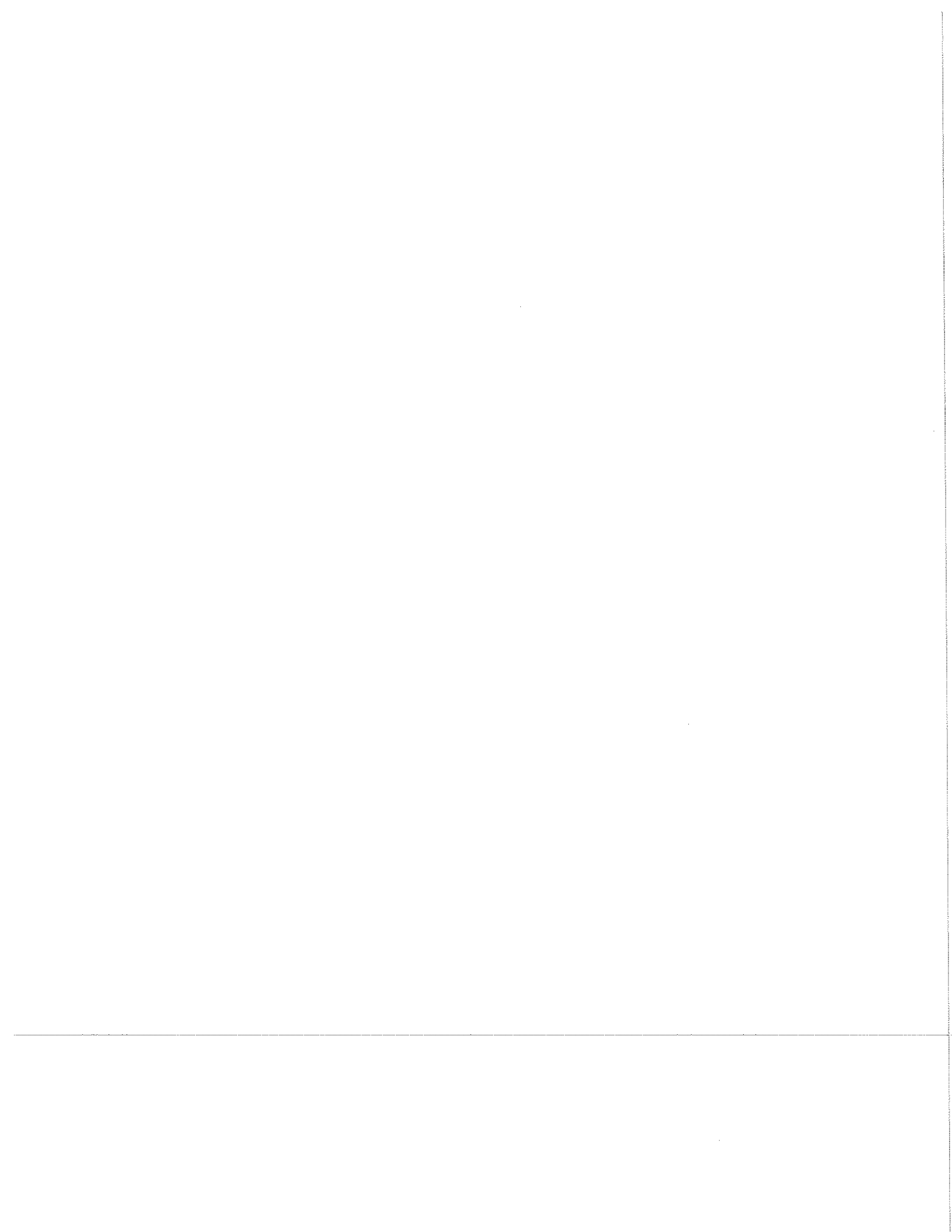
**DIVISION 07**

**THERMAL AND MOISTURE PROTECTION**









## SECTION 07 90 00 - JOINT PROTECTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes sealants and joint backing and accessories.

#### 1.2 REFERENCES

- A. ASTM International:
  - 1. ASTM C834 - Standard Specification for Latex Sealants.
  - 2. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications.
  - 3. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
  - 4. ASTM C1193 - Standard Guide for Use of Joint Sealants.
  - 5. ASTM D1056 - Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber.
  - 6. ASTM D1667 - Standard Specification for Flexible Cellular Materials-Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).
  - 7. ASTM D2628 - Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements.
- B. California Department of Health Services:
  - 1. CA/DHS/EHLB/R-174 - Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.
- C. South Coast Air Quality Management District:
  - 1. SCAQMD Rule 1168-January 7, 2005 - Adhesive and Sealant Applications.

#### 1.3 SUBMITTALS

- A. Products Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
- B. Manufacturer's Installation Instructions: Submit special procedures, surface preparation, and perimeter conditions requiring special attention.

#### 1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Applicator: Company specializing in performing Work of this section with minimum three years documented experience.

#### 1.5 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements.
- B. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

#### 1.6 COORDINATION

- A. Coordinate Work with sections referencing this section.

## PART 2 - PRODUCTS

### 2.1 JOINT SEALERS

#### A. Products Description:

1. General Purpose Traffic Bearing Sealant: Polyurethane; ASTM C920, Grade P, Class 25, Use T; single or multi- component.
  - a. Type: MasterSeal NP2 manufactured by BASF.
  - b. Color: Standard colors matching finished surfaces.
  - c. Elongation Capacity: 25 percent
  - d. Service temperature Range -40 to 180 degrees F
  - e. Shore A Hardness Range 20 to 35
  - f. Applications: Use for:
    - 1) Exterior pedestrian traffic bearing joints.
    - 2) Control, expansion, and soft joints in masonry.
    - 3) Joints between concrete and other materials.
    - 4) Joints between metal frames and other materials.
    - 5) Other exterior nontraffic joints for which no other sealant is indicated.
2. General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C834, single component, paintable.
  - a. Type: Latex 834 manufactured by Tremco.
  - b. Color: Standard colors matching finished surfaces.
  - c. Applications: Use for interior wall and ceiling control joints, joints between door and window frames and wall surfaces, and other interior joints for which no other type of sealant is indicated.
3. Bathtub/Tile Sealant: White silicone; ASTM C920, Uses M and A; single component, mildew resistant.
  - a. Type: 786 manufactured by Dow Corning.
  - b. Elongation Capacity: 25 percent
  - c. Service temperature Range -35 to 140 degrees F
  - d. Applications: Use for joints between plumbing fixtures and floor and wall surfaces, and joints between kitchen and toilet room counter tops and wall surfaces.

### 2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D1056; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

### 3.2 PREPARATION

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.
- D. Protect elements surrounding Work of this section from damage or disfiguration.

### 3.3 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
- B. Perform acoustical sealant application work in accordance with ASTM C919.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- G. Tool joints concave.
- H. Precompressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.
- I. Compression Gaskets: Avoid joints except at ends, corners, and intersections; seal joints with adhesive; install with face 1/8 to 1/4 inch below adjoining surface.

### 3.4 CLEANING

- A. Clean adjacent soiled surfaces.

### 3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Protect sealants until cured.

END OF SECTION



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**DIVISION 31**

**EARTHWORK**

## SECTION 31 05 13 - SOILS FOR EARTHWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Subsoil materials.

#### 1.2 REFERENCES

- A. Indiana Department of Transportation Standard Specifications: latest edition.
- B. Section 32 05 13 – Soils for Exterior Improvements: Topsoil
- C. Geotechnical Report – Appendix A

#### 1.3 SUBMITTALS

- A. Materials Source: Submit name of imported materials source.
- B. Manufacturer's Certificate: Certify Products meet or exceed Indiana Department of Transportation Standard Specifications, at time of construction.

#### 1.4 QUALITY ASSURANCE

- A. Furnish each subsoil material from single source throughout the Work.
- B. Perform Work in accordance with Indiana Department of Transportation Standard Specifications, latest edition.

### PART 2 - PRODUCTS

#### 2.1 SUBSOIL MATERIALS

- A. Subsoil Type S1: Excavated and re-used material, graded, free of lumps larger than 3 inches, rocks larger than 2 inches, and debris; conforming to ASTM D2487.
- B. Subsoil Type S2: Imported material, graded, free of lumps larger than 3 inches, rocks larger than 2 inches, and debris; conforming to ASTM D2487

#### 2.2 SOURCE QUALITY CONTROL

- A. Testing and Analysis of Subsoil Material: Perform in accordance with Indiana Department of Transportation Standard Specifications, at time of construction.
- B. When tests indicate materials do not meet specified requirements, change material and retest.
- C. Furnish materials of each type from same source throughout the Work.

### PART 3 - EXECUTION

#### 3.1 EXCAVATION

- A. Excavate subsoil from areas designated. Strip topsoil to full depth of topsoil in designated areas.
- B. Stockpile excavated material meeting requirements for subsoil materials.
- C. Remove excess excavated materials and subsoil not intended for reuse, from site.
- D. Remove excavated materials not meeting requirements for subsoil materials from site.

3.2 STOCKPILING

- A. Stockpile materials on site at locations indicated designated by Engineer.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate differing materials with dividers or stockpile apart to prevent mixing.
- D. Stockpile topsoil 8 feet high maximum.
- E. Prevent intermixing of soil types or contamination.
- F. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
- G. Stockpile hazardous materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

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

3.4 SOIL TYPE SCHEDULE

SOIL TYPE	DESCRIPTION	USE
S1	Natural Subsoil	Earthwork, unless recommended otherwise in geotechnical report.
S2	Imported Soil	Earthwork

END OF SECTION

## SECTION 31 05 16 - AGGREGATES FOR EARTHWORK

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Coarse aggregate materials.
  - 2. Fine aggregate materials.

#### 1.2 SUBMITTALS

- A. Materials Source: Submit name of imported materials supplies. Provide materials from same source throughout the work. Change of source requires Engineer approval.
- B. Manufacturer's Certificate: Certify products meet or exceed specified design requirements

#### 1.3 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the Work.
- B. The Contractor shall employ a Testing Agency and the Testing Agency shall:
  - 1. Perform the following tests during progress of the work:
    - a. Gradation Test: Verify samples from supply source meets requirements of Indiana Department of Transportation for the type of material specified.
    - b. In place density of Subgrades: Verify in place density of subgrade prior to placement of fill at locations per direction of Owner/Engineer.
    - c. In place density of compacted fill and backfill: Verify density of fill at locations per direction of Engineer.

### PART 2 - PRODUCTS

#### 2.1 COARSE AGGREGATE MATERIALS

- A. Coarse Aggregate CA1: Class 1 RipRap Conforming to INDOT Standard Specifications.
- B. Course Aggregate CA2: Class 2 RipRap Conforming to INDOT Standard Specifications.
- C. Coarse Aggregate CA3: #2 Crushed Limestone Conforming to INDOT Standard Specifications.
- D. Coarse Aggregate CA4: #53 Crushed Limestone Conforming to INDOT Standard Specifications.

#### 2.2 FINE AGGREGATE MATERIALS

- A. Fine Aggregate FA1: "B" Borrow or acceptable Structural Fill conforming to Geotechnical Report provided within the Contract Documents. Materials used shall conform to Indiana Department of Transportation Standard Specifications.

#### 2.3 SOURCE QUALITY CONTROL

- A. Coarse Aggregate Material - Testing and Analysis: Perform in accordance with INDOT Standard Specifications
- B. Fine Aggregate Material - Testing and Analysis: Perform in accordance with INDOT Standard Specifications.
- C. When tests indicate materials do not meet specified requirements, change material and retest.
- D. The Contractor shall employ a Testing Agency and the Testing Agency shall

1. Perform the following tests during progress of the work:
  - a. Gradation Test: Verify samples from supply source meets requirements of Indiana Department of Transportation for the type of material specified
  - b. In place density of Subgrades: Verify in place density of subgrade prior to placement of fill at locations per direction of Owner/Engineer
  - c. In place density of compacted fill and backfill: Verify density of fill at locations per direction of Engineer

## PART 3 - EXECUTION

### 3.1 EXCAVATION

- A. Excavate aggregate materials from on-site locations indicated or as designated by Engineer as specified in Section 31 22 13.
- B. Stockpile excavated material meeting requirements for coarse aggregate materials and fine aggregate materials.
- C. Remove excess excavated materials, coarse aggregate materials and fine aggregate materials not intended for reuse, from site.
- D. Remove excavated materials not meeting requirements for coarse aggregate materials and fine aggregate materials from site.

### 3.2 STOCKPILING

- A. Stockpile materials on site at locations indicated or as designated by Engineer.
- B. Stockpile in sufficient quantities or arrange for the delivery of materials as needed to meet project schedule and requirements. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.
- C. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
- D. Stockpile unsuitable materials on impervious material and cover to prevent erosion and leaching, until disposed of.

### 3.3 STOCKPILE CLEANUP

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

### 3.4 AGGREGATE PLACEMENT

- A. Proof roll subgrade with roller as per Indiana Department of Transportation Standard Specifications.
- B. Spread aggregate over prepared substrate to a total compacted thickness as shown on the drawings
- C. Place aggregate in maximum layers per INDOT Specifications and roller compact
- D. Level and contour surfaces to elevations and gradients indicated
- E. Use mechanical tamping equipment in areas inaccessible to compaction equipment

### 3.5 TOLERANCES

- A. Flatness: Maximum variation of 2 inch measured with 10 foot (3 m) straight edge
- B. Scheduled Compacted Thickness: Within 2 inch
- C. Variation from True Elevation: Within 2 inch

3.6 FIELD QUALITY CONTROL

- A. Compaction testing will be performed in accordance with INDOT Standard Specifications.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to the Owner.

3.7 SOIL TYPE SCHEDULE

SOIL TYPE	DESCRIPTION	USE
CA1	Class 1 RipRap	Embankment Stabilization Cover
CA2	Class 2 RipRap	Embankment Stabilization Cover
CA3	#2 Crushed Limestone	Embankment Stabilization Subbase
CA4	#53 Crushed Limestone	Embankment Stabilization Subbase
FA1	"B" Borrow	Structural Backfill

END OF SECTION

## SECTION 31 10 00 - SITE CLEARING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Removing surface debris.
  - 2. Removing designated paving, curbs, and site concrete.
  - 3. Removing designated trees, shrubs, and other plant life.
  - 4. Removing abandoned utilities.
  - 5. Excavating topsoil.

#### 1.2 PROJECT CONDITIONS

- A. See Special Provisions and Bid Items for distribution of work performed under this Section.
- B. The Contractor may perform his own soils investigation to satisfy himself as to soil types and ground water conditions in the project area. No pleas of ignorance will be accepted by the Owner as to differing soil type or ground water conditions. Documentation of effort to determine soil conditions by the Contractor prior to bidding the project is recommended. No extra compensation for differing soil conditions will be considered by the Owner unless it is determined that the soil conditions materially differ from what is anticipated and adequate pre-bid Contractor effort was made.
- C. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations in a manner acceptable to the Engineer

### PART 2 - PRODUCTS - NOT USED

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify existing plant life designated to remain is tagged or identified.
- B. Identify area for placing removed materials.

#### 3.2 PREPARATION

- A. Call Local Utility Line Information service
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Arrange and pay for disconnecting, removing, capping, and plugging utility services. Notify affected utility companies in advance and obtain approval before starting this work.
- C. Place markers to indicate location of disconnected services. Identify service lines and capping locations on Project Record Documents.

#### 3.3 PROTECTION

- A. Locate, identify, and protect utilities indicated to remain, from damage.
- B. Protection of Existing Trees and Vegetation: Protect existing trees and other vegetation indicated to remain in place against unnecessary cutting, breaking or skinning of roots,

skinning or bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to be left standing.

- C. Protect bench marks, survey control points, and existing structures from damage or displacement.

#### 3.4 CLEARING

- A. Furnish equipment, tools and labor to remove brush, trees, stumps and other materials which will interfere with construction operations.
- B. Completely remove trees and shrubs within marked areas or where indicated on plans.
- C. Clear undergrowth and deadwood, without disturbing subsoil.
- D. Apply herbicide to remaining stumps to inhibit growth.

#### 3.5 REMOVAL

- A. Remove debris, rock, and extracted plant life from site.
- B. Remove paving, curbs, and site concrete.
- C. Neatly saw cut edges at right angle to surface.
- D. Remove abandoned utilities. Indicated removal termination point for underground utilities on Record Documents.
- E. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- F. Do not burn or bury materials on site. Leave site in clean condition.

#### 3.6 TOPSOIL EXCAVATION

- A. Strip topsoil to whatever depths encountered in a manner to prevent intermingling with underlying subsoil or other objectionable material. Remove heavy growths of grass from areas before stripping.
- B. Do not excavate wet topsoil.
- C. Stockpile topsoil in storage piles in areas indicated or directed. Construct storage piles to provide free drainage of surface water. Cover storage piles, if required, to prevent wind erosion until disposal.
- D. Remove excess topsoil not intended for reuse, from site.

END OF SECTION



## SECTION 31 23 16 - EXCAVATION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Soil densification.

#### 1.2 SUBMITTALS

- A. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property; include structural calculations to support plan.

#### 1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with Indiana Department of Transportation Standard Specifications

#### 1.4 QUALIFICATIONS

- A. Prepare excavation protection plan under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of Indiana.

### PART 2 - PRODUCTS

Not Used.

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Call Local Utility Line Information service
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum.
- C. Notify utility companies to remove or relocate utilities.
- D. Protect utilities indicated to remain from damage.
- E. Protect plant life, lawns, and other features remaining as portion of final landscaping.
- F. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

#### 3.2 EXCAVATION

- A. Excavate subsoil to accommodate construction operations.
- B. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- C. Trim excavation. Remove loose matter.
- D. Remove lumped subsoil, boulders, and rock. Remove larger material as specified in Section 31 23 23.
- E. Notify Engineer of unexpected subsurface conditions.
- F. Correct areas over excavated with structural fill.

- G. Remove excess and unsuitable material from site.
- H. Repair or replace items indicated to remain damaged by excavation.

### 3.3 PROTECTION

- A. Prevent displacement or loose soil from falling into excavation; maintain soil stability.
- B. Protect structures, utilities and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth operations.

END OF SECTION

## SECTION 31 23 23 - FILL

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
1. Fill for over-excavation.

#### 1.2 REFERENCES

- A. Indiana Department of Transportation Standard Specifications:  
B. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.
- C. ASTM International:
1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  2. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
  3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  4. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
  5. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
  6. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

#### 1.3 SUBMITTALS

- A. Materials Source: Submit name of imported fill materials suppliers.  
B. Manufacturer's Certificate: Certify Products meet or exceed Indiana Department of Transportation Standard Specifications:

#### 1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with Indiana Department of Transportation Standard Specifications:

### PART 2 - PRODUCTS

#### 2.1 SUSTAINABILITY CHARACTERISTICS

#### 2.2 FILL MATERIALS

- A. Subsoil Fill: Per Section 31 05 13 Soils for Earthwork.  
B. Structural Fill: Per Section 31 05 16 Aggregates for Earthwork.  
C. Granular Fill: Per Section 31 05 16 Aggregates for Earthwork.  
D. Concrete: Structural concrete as specified in Section 03 30 00.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Compact subgrade to density requirements for subsequent backfill materials.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with structural fill and compact to density equal to or greater than requirements for subsequent fill material.
- C. Scarify subgrade surface and air dry satisfactory soil material that is too wet.
- D. Proof roll to identify soft spots; fill and compact to density equal to or greater than requirements for subsequent fill material.

### 3.2 BACKFILLING

- A. Backfill areas to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- C. Place geotextile fabric if required per Construction Documents prior to placing next lift of fill.
- D. Place fill material in continuous layers and compact.
- E. Employ placement method that does not disturb or damage other work.
- F. Maintain optimum moisture content of backfill materials to attain required compaction density.
- G. Make gradual grade changes. Blend slope into level areas.
- H. Remove surplus backfill materials from site.
- I. Leave fill material stockpile areas free of excess fill materials.

### 3.3 TOLERANCES

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Top Surface of General Backfilling: Plus or minus 1/2 inch from required elevations.

### 3.4 FIELD QUALITY CONTROL

- A. Perform laboratory material tests in accordance with ASTM D698.
- B. Perform in place compaction tests in accordance with the following:
  - 1. Density Tests: ASTM D2922.
  - 2. Moisture Tests: ASTM D3017.
- C. When tests indicate Work does not meet specified requirements, remove Work, replace and ret

### 3.5 SCHEDULE

- A. Section 31 05 16 – Aggregates for Earthwork.

END OF SECTION

## SECTION 312323.33 - FLOWABLE FILL

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Flowable fill for:
  - a. Structure backfill.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

##### A. Flowable Fill:

1. Basis of Measurement: By cubic yard.
2. Basis of Payment: Includes furnishing flowable fill and installing where required.

#### 1.3 DEFINITIONS

- ##### A. Non-excavatable Flowable Fill: Lean cement concrete fill used where future excavation is not anticipated, such as fill below structure foundations, slabs, sidewalks and filling abandoned utilities. Referred to by INDOT as Non-removable Flowable Backfill, Standard Specification, latest edition, Section 213.

#### 1.4 REFERENCE STANDARDS

##### A. ASTM International:

1. ASTM C33 - Standard Specification for Concrete Aggregates.
2. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
3. ASTM C150 - Standard Specification for Portland Cement.
4. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
5. ASTM C403/C403M - Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance.
6. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
7. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
8. ASTM C1017/C1017M - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
9. ASTM C1040 - Standard Test Methods for Density of Unhardened and Hardened Concrete in Place By Nuclear Methods.
10. ASTM D4832 - Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.

## 1.5 SUBMITTALS

- A. Manufacturer's Certificate: Certify that products meet or exceed INDOT Standard Specifications, latest edition.
- B. Field Quality-Control Submittals:
  - 1. Mix Design:
    - a. Furnish flowable fill mix design for each specified strength.
    - b. Furnish separate mix designs when admixtures are required for the following:
      - 1) Flowable fill Work during hot and cold weather.
      - 2) Air entrained flowable fill Work.
    - c. Identify design mix ingredients, proportions, properties, admixtures, and tests.
  - 2. Furnish test results to certify flowable fill mix design properties meet or exceed specified requirements.
- C. Delivery Tickets:
  - 1. Furnish duplicate delivery tickets indicating actual materials delivered to Project Site.
- D. Qualifications Statements:
  - 1. Submit qualifications for supplier.

## 1.6 QUALITY ASSURANCE

- A. Perform Work according to INDOT Standard Specifications, latest edition.
- B. Maintain one (1) copy of each standard affecting the Work of this Section on Site.

## 1.7 QUALIFICATIONS

- A. Supplier:
  - 1. Product source approved by INDOT Standard Specifications, latest edition.

## 1.8 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 – Product Requirements specifies ambient condition control facilities for product storage and installation.
- B. Minimum Conditions: Do not install flowable fill during inclement weather or when ambient temperature is less than 40 degrees F.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements before installing flowable fill to establish quantities required to complete the Work.

PART 2 - PRODUCTS

2.1 FLOWABLE FILL

- A. Furnish materials according to INDOT Standard Specifications, latest edition.
- B. Flowable Fill: non-excavatable type.

2.2 MATERIALS

- A. Portland Cement: ASTM C150, according to INDOT Standard Specifications, latest edition.
- B. Fine Aggregates: products sourced according to INDOT Standard Specifications, latest edition.
- C. Water: Clean and not detrimental to concrete.

2.3 ADMIXTURES

- A. Manufacturers:
  - 1. Furnish materials according to INDOT Standard Specifications, latest edition.
- B. Air Entrainment: ASTM C260.
- C. Chemical Admixture: ASTM C494/C494M.
- D. Fly Ash: ASTM C618 Class C or F obtained from residue of electric generating plant using ground or powdered coal.
- E. Plasticizing: ASTM C1017/C1017M

2.4 MIXES

- A. Mix and deliver flowable fill according to INDOT Standard Specifications, latest edition.
- B. Flowable Fill Design Mix:
  - 1. Cement Content:
    - a. Non-Excavatable: 100 to 150 lb/cu yd.
  - 2. Fly Ash Content:
    - a. Non-Excavatable: 150-600 pcf.

3. Water Content:
    - a. Non-Excavatable: As specified.
  4. Air Entrainment:
    - a. Non-Excavatable: 5 to 15 percent.
  5. 28-Day Compressive Strength:
    - a. Non-Excavatable: Minimum 125 psi.
  6. Unit Mass (Wet):
    - a. Non-Excavatable: 100 to 125 pcf.
  7. Temperature, Minimum, at Point of Delivery:
    - a. Non-Excavatable: 50 degrees F.
- C. Provide water content in design mix to produce self-leveling, flowable fill material at time of placement.
- D. Design mix air entrainment and unit mass are for laboratory design mix and source quality control only.

## 2.5 SOURCE QUALITY CONTROL

- A. Test and analyze properties of flowable fill design mix and certify results for the following:
1. Design mix proportions by weight of each material.
  2. Aggregate: ASTM C33 for material properties and gradation.
  3. Properties of plastic flowable fill design mix including:
    - a. Temperature.
    - b. Slump.
    - c. Air entrainment.
    - d. Wet unit mass.
    - e. Yield.
    - f. Cement factor.
  4. Properties of hardened flowable fill design mix including:
    - a. Compressive strength at 1 day, 7 days, and 28 days. Report compressive strength of each specimen and average specimen compressive strength.
    - b. Unit mass for each specimen and average specimen unit mass at time of compressive strength testing.
- B. Prepare delivery tickets containing the following information:
1. Project designation.
  2. Date.
  3. Time.
  4. Class and quantity of flowable fill.
  5. Actual batch proportions.



6. Free moisture content of aggregate.
7. Quantity of water withheld.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify excavation is dry.

#### 3.2 PREPARATION

- A. Protect structures from damage caused by hydraulic pressure of flowable fill before fill hardens.

#### 3.3 INSTALLATION - FILL, BEDDING, AND BACKFILL

- A. Place flowable fill by chute, pumping or other methods approved by Engineer.
  1. When required, place flowable fill under water using tremie procedure.
  2. Do not place flowable fill through flowing water.
- B. Place flowable fill to elevations indicated on Drawings without vibration or other means of compaction.

#### 3.4 CLEANING

- A. Remove spilled and excess flowable fill from Project Site.
- B. Restore facilities and Site areas damaged or contaminated by flowable fill installation to existing condition before installation.

END OF SECTION

## SECTION 31 25 00 - EROSION AND SEDIMENTATION CONTROLS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Erosion and Sedimentation Control activities
  - 2. Temporary Seeding.
  - 3. Dust Control.

#### 1.2 REFERENCES

- A. Indiana Department of Transportation Standard Specifications, latest edition.
- B. Indiana Storm Water Quality Manual, latest edition.
- C. IDEM Soil Erosion and Sedimentation Control regulations.
- D. County Soil and Water Conservation Districts.

#### 1.3 SUBMITTALS

- A. Product Data: Submit data for erosion and sedimentation control techniques and construction.
- B. Materials Source: Submit name of all products and suppliers utilized in erosion and sedimentation control activities.
- C. Manufacturer's Certificate: Certify Products meet or exceed Indiana Department of Transportation Standard Specifications.

#### 1.4 GUIDELINES

- A. The Contractor shall include in his bid costs for the installation of all necessary erosion control items for the project per INDOT Standard Specifications. It is the Contractor's responsibility that all design criteria, standards and specifications are met and that all land disturbing activities are in accordance with the erosion/sediment control plan.
- B. The Contractor shall retain existing vegetation on the construction site wherever possible. If existing vegetation must be cleared, retain and protect it until the area must be disturbed.
- C. The Contractor shall maintain a buffer strip of existing vegetation around the perimeter of the site to reduce off-site erosion and sedimentation, if available.
- D. The Contractor shall minimize the extent and duration that bare soil is exposed to erosion by wind and water. Use staged clearing and grading to reduce the amount of disturbed area to the absolute minimum needed for immediate construction activities
- E. The Contractor shall keep sediment on the construction site as much as possible. Retain sediment from unavoidable erosion on-site by trapping it with sediment basins or filtering it out of runoff with vegetative or man-made barriers. The Contractor shall install any needed sediment traps, basins and/or man-made barriers before construction activity begins.
- F. The Contractor shall divert off-site runoff away from disturbed areas, if possible. The installation of these measures shall take place prior to clearing and grading to reduce the potential for erosion.
- G. The Contractor shall stabilize disturbed areas as soon as possible. Stabilizing measures, such as seeding temporary or permanent vegetation, sodding, mulching, sediment basins, erosion control blankets, or other protective practices shall be installed within seven days after the land has been disturbed.
- H. The Contractor shall keep velocity of runoff leaving the site low
- I. The Contractor shall install drain inlet protection for the existing storm system and as soon as the proposed storm sewer system is functional

- J. The Contractor shall assign someone the responsibility for routine, end-of-day inspection/maintenance checks of all erosion and sediment control measures. All measures shall be inspected for damage after each storm event. Damaged measures shall be repaired immediately.
- K. The Contractor shall remove the interim measure when all areas protected are stabilized. The Contractor shall then establish permanent stabilization protection before the entire site may be considered permanently stabilized.
- L. The Contractor shall be responsible for the maintenance, repair, and/or replacement of all required control measures with all disturbed areas being stabilized to the satisfaction of the local SWCD, County Surveyor, Owner, or Engineer.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with INDOT Standard Specifications, Indiana Storm Water Quality Manual, IDEM Soil Erosion and Sedimentation Control regulations and Local SWCD requirements.

PART 2 - MEASURES

2.1 FILTER TUBE/FILTER SOCK

- A. Install Per manufacturer recommendations.
- B. Ensure installation meets Section 31 25 00 REFERENCES requirements.

2.2 EROSION CONTROL BLANKET

- A. Install Per manufacturer recommendations.
- B. Ensure installation meets Section 31 25 00 REFERENCES requirements.

2.3 TEMPORARY SEEDING

- A. Requirements
  - 1. Site and Seedbed Preparation
  - 2. Plant Species

Seed Species	Rate / Acre	Planting Depth	Optimum Dates
Wheat or Rye	150 pounds	1 to 1.5 inches	9/15 to 10/30
Spring Oats	100 pounds	1 inch	3/1 to 4/15
Annual Ryegrass	40 pounds	¼ inch	3/1 to 5/1 8/1 to 9/1
German Millet	40 pounds	1 to 2 inches	5/1 to 6/1
Sudangrass	35 pounds	1 to 2 inches	5/1 to 7/30

- 3. Mulch
  - a. Clean grain straw, hay, wood fiber, etc., to protect seedbed and encourage growth.
  - b. From November 1 to March 1, mulching alone shall be used to stabilize disturbed areas.
- 4. Seeding Frequency. Seed as often as possible following construction activity. Daily seeding of rough graded areas when the soil is loose and moist is usually most effective

#### 2.4 DUST CONTROL

- A. Road Surfaces: Apply calcium chloride, as needed, at a rate that will keep surface moist
- B. Street Cleaning: Brush, sweep or scoop street. Do not flush unless flow can be directed into an inlet, sediment trap or basin.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify compacted stabilized soil is acceptable and ready to support all imposed loads.
- B. Verify gradients and elevations of base or foundation for other work are correct.

#### 3.2 TEMPORARY SEEDING

- A. Site Preparation
  - 1. Install practices needed to control erosion, sedimentation, and water runoff, such as temporary and permanent diversions, sediment traps or basins, silt fences, and straw bale dams
  - 2. Grade the site as specified in the construction plans
- B. Seedbed Preparation
  - 1. Fertilize by applying 18 pounds / 1000 square feet of 12-12-12 analysis, or equivalent, fertilizer
  - 2. Work the fertilizer into the soil 2-4 inches deep with a disk or rake operated across the slope
- C. Seeding
  - 1. Select a seeding mixture and rate from Section 2.2, plant at depth and on dates shown.
  - 2. Apply seed uniformly with a drill or cultipacker-seeder or by broadcasting and cover to the depth shown in Section 2.2.
  - 3. If drilling or broadcasting, firm the seedbed with a roller or cultipacker.
  - 4. Mulch seeded areas to increase seeding success. Anchor all mulch by crimping or tackifying. Use netting or erosion control blankets if required for stabilizing and anchoring temporary seeding.

#### 3.3 DUST CONTROL

- A. Apply as needed to prevent wind-borne dust, which could create a health and/or visibility hazard downwind, from leaving the construction area.

#### 3.4 SITE STABILIZATION

- A. Incorporate erosion control devices indicated on the Drawings into the Project at the earliest practicable time.
- B. Construct, stabilize and activate erosion controls before site disturbance within tributary areas of those controls.
- C. Stabilize any disturbed area of affected erosion control devices on which activity has ceased and which will remain exposed for more than 20 days.
  - 1. During non-germinating periods, apply mulch at recommended rates.
  - 2. Stabilize disturbed areas which are either at finished grade or will not be disturbed within one year in accordance with Section 32 92 19 permanent seeding specifications.
- D. Stabilize diversion channels, sediment traps, and stockpiles immediately.

### 3.5 FIELD QUALITY CONTROL

- A. Inspect erosion control devices on a weekly basis and after each rainfall event. Make necessary repairs to ensure erosion and sediment controls are in good working order.
- B. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.

### 3.6 CLEANING

- A. When sediment accumulation in sedimentation structures has reached a point one-third depth of sediment structure or device, remove and dispose of sediment.
- B. Do not damage structure or device during cleaning operations.
- C. Do not permit sediment to erode into construction or site areas or natural waterways.
- D. Clean channels when depth of sediment reaches approximately one half channel depth.

END OF SECTION

**DIVISION 32**  
**EXTERIOR IMPROVEMENTS**

## SECTION 32 05 13 - SOILS FOR EXTERIOR IMPROVEMENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Topsoil materials.
- B. Related Sections:
  - 1. Section 31 05 13 - Soils for Earthwork.
  - 2. Section 31 23 23 - Fill.
  - 3. Section 32 92 19 - Seeding and Soil Supplements.
  - 4. Section 32 93 00 - Plants.

#### 1.2 REFERENCES

- A. American Association of State Highway and Transportation Officials:
  - 1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.
- B. ASTM International:
  - 1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  - 2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

#### 1.3 SUBMITTALS

- A. Materials Source: Submit name of imported materials source.

#### 1.4 QUALITY ASSURANCE

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

### PART 2 - PRODUCTS

#### 2.1 TOPSOIL MATERIALS

- A. Topsoil Type TS1: Conforming to Indiana Department of Transportation Standard Specifications, latest edition.

#### 2.2 SOURCE QUALITY CONTROL

- A. Testing and Analysis of Subsoil Material: Perform in accordance with ASTM D698.
- B. Testing and Analysis of Topsoil Material: Analyze to determine percentage of nitrogen, phosphorus, potash, soluble salt, organic matter, and pH.
- C. When tests indicate materials do not meet specified requirements, change material and retest.
- D. Furnish materials of each type from same source throughout the Work.

PART 3 - EXECUTION

3.1 EXCAVATION

- A. Excavate subsoil and topsoil from areas designated. Strip topsoil to full depth of topsoil in designated areas.
- B. Stockpile excavated material meeting requirements for subsoil materials and topsoil materials.
- C. Remove excess excavated materials not intended for reuse, from site.
- D. Remove excavated materials not meeting requirements for subsoil materials and topsoil materials from site.

3.2 STOCKPILING

- A. Stockpile materials on site at locations designated by Landscape Architect/Engineer.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate differing materials with dividers or stockpile apart to prevent mixing.
- D. Stockpile topsoil 8 feet high maximum.
- E. Prevent intermixing of soil types or contamination.
- F. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
- G. Stockpile unsuitable materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

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

3.4 SOIL TYPE SCHEDULE

SOIL TYPE	DESCRIPTION	USES
TS1	Basic INDOT Standard	Topsoil for Turf Areas

END OF SECTION



## SECTION 32 91 13 - SOIL PREPARATION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Preparation of subsoil.
  - 2. Placing topsoil.
- B. Related Sections:
  - 1. Section 32 05 13 - Soils for Exterior Improvements: Topsoil material.
  - 2. Section 32 92 19 - Seeding
  - 3. Section 32 93 00 - Plants.

#### 1.2 SUBMITTALS

- A. Submit minimum 10 oz. sample of topsoil proposed. Forward sample to approved testing laboratory in sealed containers to prevent contamination.
- B. Test Reports: Indicate topsoil nutrient and pH levels with recommended soil supplements and application rates.

#### 1.3 COORDINATION

- A. Coordinate with installation of underground sprinkler system piping and watering heads.
- B. Coordinate with other on-site utility work.

### PART 2 - PRODUCTS

#### 2.1 SOIL MATERIALS

- A. Topsoil: As specified in Section 32 05 13 - Soils for Exterior Improvements.

#### 2.2 SOURCE QUALITY CONTROL

- A. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.
- B. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.
- C. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify prepared soil base is ready to receive the Work of this section.

#### 3.2 PREPARATION OF SUBSOIL

- A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

- B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated sub-soil.
- C. Scarify subsoil to depth of 4 inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.
- D. Break up clods, pulverizing the top two inches of subgrade.
- E. Contour subgrade for positive drainage, and to required crossfall.
- F. Limit additional compaction to soils by controlling traffic.

### 3.3 PLACING TOPSOIL

- A. Spread topsoil to minimum depth of 6 inches over area to be seeded. Rake until smooth.
- B. Place topsoil during dry weather and on dry unfrozen subgrade.
- C. Remove vegetable matter and foreign non-organic material from topsoil while spreading. Foreign non-organic material includes: stones larger than 1 inch in any dimension, sticks, roots, rubbish, and other extraneous matter. Legally dispose of the foreign non-organic materials off the owner's property.
- D. Grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage.
- E. Install edging at periphery of seeded areas in straight lines to consistent depth.

END OF SECTION

## SECTION 32 92 19 - SEEDING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Fertilizing.
  - 2. Seeding.
  - 3. Hydroseeding.
  - 4. Mulching.
  - 5. Maintenance.
- B. Related Sections:
  - 1. Section 32 05 13 - Soils for Exterior Improvements: Topsoil material.
  - 2. Section 32 91 13 - Soil Preparation
  - 3. Section 32 93 00 - Plants.

#### 1.2 REFERENCES

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

#### 1.3 DEFINITIONS

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

#### 1.4 SUBMITTALS

- A. Product Data: Submit data for seed mix, fertilizer, mulch, hydroseeding, and other accessories.
- B. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer.

#### 1.6 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

#### 1.7 QUALIFICATIONS

- A. Seed Supplier: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.
- B. Installer: Company specializing in performing work of this section with minimum 3 years documented experience or approved by manufacturer.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

### 1.9 MAINTENANCE SERVICE

- A. Maintain seeded areas immediately after placement until grass is well established and exhibits vigorous growing condition for three cuttings.

## PART 2 - PRODUCTS

### 2.1 SEED MIXTURE

- A. Seed Mixture: Seed mixture shall conform to the plan set.

### 2.2 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- B. Fertilizer: Commercial grade; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil to the following proportions: Nitrogen 10 percent, phosphoric acid 10 percent, and soluble potash 10 percent.
- C. Lime: ASTM C602, Class T agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.
- D. Water: Clean, fresh and free of substances or matter capable of inhibiting vigorous growth of grass.
- E. Erosion Fabric: Jute matting, open weave.
- F. Stakes: Softwood lumber, chisel pointed.
- G. String: Inorganic fiber.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify prepared soil base is ready to receive the Work of this section.

### 3.2 FERTILIZING

- A. Apply lime at application rate recommended by manufacturer's instructions. Work lime into top 6 inches of soil.
- B. Apply fertilizer at application rate recommended by manufacturer's instructions.
- C. Apply after smooth raking of topsoil and prior to roller compaction.
- D. Do not apply fertilizer at same time or with same machine used to apply seed.
- E. Mix fertilizer thoroughly into upper 2 inches of topsoil.
- F. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

### 3.3 SEEDING

- A. Apply seed at rate of 8 lbs. per 1000 sq. ft., or per manufacturer's recommendations, evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.
- C. Planting Season: when temperatures are between 65-80 degrees Fahrenheit, or at the direction of Engineer.
- D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- E. Immediately following seeding, apply mulch to thickness of 1/8 inches. Maintain clear of shrubs and trees.

- F. Apply water with fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

#### 3.4 HYDROSEEDING

- A. Apply fertilizer, mulch and seeded slurry with hydraulic seeder at rate of 90 lbs. per 1000 sq. ft. evenly in one pass.
- B. After application, apply water with fine spray immediately after each area has been hydroseeded. Saturate to 4 inches of soil and maintain moisture levels two to four inches.

#### 3.5 SEED PROTECTION

- A. Identify seeded areas with stakes and string around area periphery. Set string height to 18 inches. Space stakes at 72 inches.
- B. Cover seeded slopes where grade is 4 inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.
- C. Lay fabric smoothly on surface, bury top end of each section in 6-inch-deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches. Backfill trench and rake smooth, level with adjacent soil.
- D. Secure outside edges and overlaps at 36-inch intervals with stakes.
- E. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- F. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

#### 3.6 MAINTENANCE

- A. Mow grass at regular intervals to maintain at maximum height of 2-1/2 inches. Do not cut more than 1/3 of grass blade at each mowing. Perform first mowing when seedlings are 40 percent higher than desired height.
- B. Neatly trim edges and hand clip where necessary.
- C. Immediately remove clippings after mowing and trimming. Do not let clippings lay in clumps.
- D. Water to prevent grass and soil from drying out.
- E. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.
- F. Immediately reseed areas showing bare spots.
- G. Repair washouts or gullies.
- H. Protect seeded areas with warning signs during maintenance period.

#### 3.7 SCHEDULE

- A. All areas disturbed by construction shall be planted by grass seed, unless otherwise noted as sod, and maintained until growth is established according to requirements given herein.

END OF SECTION

## SECTION 32 93 00 – PLANTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Preparation of subsoil and topsoil.
  - 2. Topsoil bedding.
  - 3. Trees, Shrubs, Perennials, and ground cover.
  - 4. Mulch.
  - 5. Fertilizer.
  - 6. Pruning.
  - 7. Maintenance.
- B. Related Sections:
  - 1. Section 32 92 19 - Seeding.

#### 1.2 REFERENCES

- A. American National Standards Institute:
  - 1. ANSI A300 - Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices.
  - 2. ANSI Z60.1 - Nursery Stock.

#### 1.3 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.
- B. Plants: Shade and flowering trees, deciduous shrubs, coniferous evergreens, broadleaf evergreens, herbaceous perennials, ornamental grasses, and ground covers specified in this Section, and described in ANSI Z60.1.

#### 1.4 SUBMITTALS

- A. Product Data: Submit list of plant material sources, data for fertilizer and other accessories.
- B. Certification: Submit certificates of inspection as required by governmental authorities. Submit manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials.
- C. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year. Submit before expiration of required maintenance periods.
- D. Planting Schedule: Indicate anticipated planting dates for exterior plants for approval by Landscape Engineer.
- E. Material Resources Certificates: Submit certificates of material source and origin for products.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Include pruning objectives, types and methods; types, application frequency, and recommended coverage of fertilizer.

#### 1.6 QUALITY ASSURANCE

- A. Tree Pruning: ANSI A300 Pruning Standards for Woody Plants.

- B. Soil – Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.
- C. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; sodium absorption ratio; deleterious material; pH; and mineral and plant-nutrient content of topsoil.
  - 1. Report suitability of topsoil for plant growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.
  - 2. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1.
  - 3. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks in their normal position. Do not prune to obtain required sizes.
  - 4. Observation: Engineer may observe plant material either at the place of growth or at the site before planting for compliance with requirements for genus, species, variety, size, and quality. Engineer retains the right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during the progress of work. Contractor is required to remove rejected trees or shrubs immediately from the Project site.

#### 1.7 QUALIFICATIONS

- A. Nursery: Company with an Indiana Nursery Dealer’s License and specializing in growing and cultivating plants with five years documented experience.
- B. Installer: Company specializing in installing and planting plants whose work has resulted in successful establishment of exterior plants, and with Five years documented experience.
  - 1. Installer’s Field Supervision: Require Installer to maintain an experienced fulltime supervisor on Project site when the installation of exterior plants are in progress.
- C. Tree Pruner: Company specializing in performing work of this section with minimum three years documented experience.
- D. Maintenance Services: Performed by installer.

#### 1.8 PRE-INSTALLATION MEETINGS

- A. Notify Engineer with proposed date of plant installation a minimum 7 days in advance of installing plant material on the Project site.
- B. Convene on Project site the day of commencing work of this section.
- C. No materials shall be installed without approval of Engineer.

#### 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.
- C. Protect and maintain plant life until planted.
- D. Deliver plant life materials immediately prior to placement. Keep plants moist.
- E. Plant material damaged as a result of delivery, storage or handling will be rejected.

#### 1.10 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements: Environmental conditions affecting products on site.

- B. Do not install plant life when ambient temperatures may drop below 35 degrees Fahrenheit or rise above 90 degrees Fahrenheit.
- C. Do not install plant life when wind velocity exceeds 30 mph.

#### 1.11 COORDINATION

- A. Install plant material after finish grades are established and before planting lawns, unless otherwise acceptable to Engineer.
- B. Install plant life after and coordinate with installation of underground irrigation system piping and watering heads specified in Section 32 84 00.
- C. Install plant life during growing season, specifically between March 15<sup>th</sup> and September 30<sup>th</sup>. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.

#### 1.12 WARRANTY

- A. Furnish one-year manufacturer warranty for trees, plants, and ground cover against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond Contractor's control.
  - 1. Warranty Period for plant material shall be One year from date of Substantial Completion.
  - 2. Replace exterior plants that are greater than or equal to 25 percent dead or in an unhealthy condition at the end of warranty period.

#### 1.13 MAINTENANCE SERVICE

- A. Maintain plant life immediately after placement. Continue maintenance until termination of maintenance period.
- B. Maintenance Period: Maintain plant life during construction, prior to Date of Substantial Completion. Upon Date of Substantial Completion Owner accepts maintenance of plants.
- C. Maintenance includes:
  - 1. Cultivation and weeding plant beds and tree pits.
  - 2. Applying herbicides for weed control. Remedy damage resulting from use of herbicides.
  - 3. Remedy damage from use of insecticides.
  - 4. Irrigating sufficient to saturate root system.
  - 5. Pruning, including removal of dead or broken branches.
  - 6. Disease control.
  - 7. Maintaining wrapping, guys, turnbuckles, and stakes. Adjust turnbuckles to keep guy wires tight. Repair or replace accessories when required.
  - 8. Replacement of mulch.

## PART 2 - PRODUCTS

### 2.1 TREES, SHRUBS, PERENNIALS, AND GROUND COVER

- A. Planting Stock:
  - 1. Species: In accordance with Standardized Plant Names, official code of American Joint Committee on Horticulture Nomenclature.
  - 2. Identification: Label individual plants or each bundle of plants when tied in bundles.
  - 3. Plants: No. 1 Grade conforming to "American Standard for Nursery Stock" of American Association of Nurserymen (AAN); well-branched, vigorous and balanced root and top



growth; free from disease, injurious insects, mechanical wounds, broken branches, decay and other defects.

4. Trees: Furnish with reasonably straight trunks, well balanced tops, and single leader.
  5. Deciduous plants: Furnish in dormant state, except those specified as container grown.
- B. Trees, Shrubs, Perennials, and Ground Cover: Species and size identifiable in plant schedule, grown in climatic conditions similar to those in locality of the Work.

## 2.2 SOIL MATERIALS

- A. Topsoil: As specified in Section 32 05 13 Soils for Exterior Improvements.

## 2.3 SOIL AMENDMENT MATERIALS

- A. When soil tests indicate soil amendment, apply soil conditioners or fertilizers to amend soil to specified conditions.
1. Tree Fertilizer: Containing fifty percent of elements derived from organic sources; of proportion necessary to eliminate deficiencies of topsoil, as indicated in analysis.
- B. Peat Moss: Shredded, loose, sphagnum moss; free of lumps, roots, inorganic material or acidic materials; minimum of 85 percent organic material measured by oven dry weight, pH range of 4 to 5; moisture content of 30 percent.
- C. Bone Meal: Raw, finely ground, commercial grade, minimum of 3 percent nitrogen and 20 percent phosphorous.
- D. Lime: Ground limestone, dolomite type, minimum 95 percent carbonates.
- E. Water: Clean, fresh, and free of substances or matter capable of inhibiting vigorous growth of plants.

## 2.4 MULCH MATERIALS

- A. Mulching Material: Composted, shredded hardwood bark, dark brown in color.

## 2.5 ACCESSORIES

- A. Wrapping Materials: Burlap.
- B. Stakes: Softwood lumber, pointed end.
- C. Cable, Wire, Eye Bolts and Turnbuckles: Non-corrosive, of sufficient strength to withstand wind pressure and resulting movement of plant life.
- D. Plant Protectors: Rubber sleeves over cable to protect plant stems, trunks, and branches.

## 2.6 PLANT SOIL MIX

- A. Plant Soil Mix: Uniform mixture of 1 part peat and 3 parts topsoil by volume.

## 2.7 SOURCE QUALITY CONTROL

- A. Test and analyze imported topsoil.
- B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt, organic matter, and pH value.
- C. Provide recommendation for fertilizer and soil amendment application rates for specified planting as result of testing.
- D. Testing is not required when recent tests are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify prepared subsoil are ready to receive work.
- B. Saturate soil with water to test drainage.

### 3.2 PREPARATION OF SUBSOIL

- A. Prepare subsoil to eliminate uneven areas. Maintain profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated subsoil.
- C. Scarify subsoil to depth of 4 inches where plants are to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil.
- D. Dig pits and beds three times wider than plant root system.

### 3.3 PLACING TOPSOIL

- A. Spread topsoil to minimum depth of 6 inches over area to be planted. Rake smooth.
- B. Place topsoil during dry weather and on dry unfrozen subgrade.
- C. Remove vegetable matter and foreign non-organic material from topsoil while spreading.
- D. Grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage.
- E. Install topsoil into pits and beds intended for plant root balls, to minimum thickness of 6 inches.

### 3.4 FERTILIZING

- A. Apply starter fertilizer at the rate recommended per manufacturer's instructions.
- B. Apply after initial raking of topsoil.
- C. Mix thoroughly into upper 2 inches of topsoil.
- D. Lightly water soil to aid dissipation of fertilizer.

### 3.5 PLANTING

- A. Place plants for best appearance for review and final orientation by Engineer.
- B. Set plants vertical.
- C. Remove non-biodegradable root containers.
- D. Set plants in pits or beds, partly filled with prepared plant mix, at minimum depth as indicated on Drawings under each plant. Remove burlap, ropes, and wires, from top half of root ball.
- E. Place bare root plant materials so roots lie in natural position. Backfill soil mixture in 6 inch layers. Maintain plant life in vertical position.
- F. Saturate soil with water when pit or bed is half full of topsoil and again when full.

### 3.6 PLANT RELOCATION AND RE-PLANTING

- A. Relocate plants as indicated or directed by Engineer.
- B. Ball or pot removed plants when temporary relocation is required.
- C. Replant plants in pits or beds, partly filled with prepared topsoil mixture, at minimum depth as indicated on Drawings under each plant. Remove burlap, ropes, and wires, from top half of root ball.
- D. Place bare root plant materials so roots lie in natural position. Backfill soil mixture in 6-inch layers. Maintain plant materials in vertical position.
- E. Saturate soil with water when pit or bed is half full of topsoil and again when full.

3.7 PLANT SUPPORT

- A. Brace plants vertically with plant protector wrapped guy wires and stakes to the following:

Tree Caliper	Tree Support Method
1 inch	1 stake with one tie
1 - 2 inches	2 stakes with two ties
2 - 4 inches	3 guy wires with eye bolts and turn buckles
Over 4 inches	4 guy wires with eye bolts and turn buckles

3.8 TREE PRUNING

- A. When pruning trees is permitted and directed by Engineer, lightly prune trees in accordance with ANSI A300 Maintenance Pruning Type: Crown Cleaning.

3.9 FIELD QUALITY CONTROL

- A. Plants will be rejected when ball of earth surrounding roots has been disturbed or damaged prior to or during planting.

END OF SECTION

**APPENDIX A**  
**GEOTECHNICAL REPORT**

Report of Geotechnical Engineering Investigation  
**Charlestown State Park Boat Ramp Improvements**  
**12500 Indiana 62**  
**Charlestown, Indiana**  
Patriot Project No. 19-0186-05G

**Prepared For:**

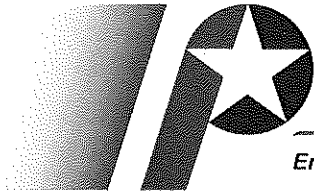
HWC Engineering  
303 Scribner Drive  
Suite 201  
New Albany, Indiana 47150  
Attn: D. Paul Lincks, PE

**Prepared By:**

Patriot Engineering and Environmental, Inc.  
300 Production Court  
Louisville, Kentucky 40299

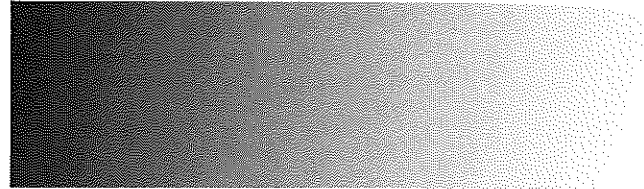
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July 26, 2019



**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*



March 22, 2019  
Revised July 26, 2019

HWC Engineering  
303 Scribner Drive  
Suite 201  
New Albany, Indiana 47150

Attention: D. Paul Lincks, PE      Via email: [plincks@hwcengineering.com](mailto:plincks@hwcengineering.com)

Re:    Report of Geotechnical Engineering Investigation  
      **Charlestown State Park Bank Stabilization**  
      **12500 Indiana 62**  
      **Charlestown, Indiana 47111**  
      Patriot Project No. 19-0186-05G

Dear Paul:

Attached is the report of our subsurface investigation for the above referenced project. This investigation was completed in general accordance with our Proposal No. P19-0099-05G dated January 18, 2019.

This report includes detailed and graphic logs of five (5) soil borings drilled at the project site. Also included in the report are the results of laboratory tests performed on samples obtained from the site, and geotechnical recommendations pertinent to the site development.

We appreciate the opportunity to perform this geotechnical engineering investigation and are looking forward to working with you during the construction phase of the project. If you have any questions regarding this report or if we may be of any additional assistance regarding any geotechnical aspect of the project, please do not hesitate to contact our office.

Respectfully submitted,  
**Patriot Engineering and Environmental, Inc.**

Andrew T. Jones, GIT  
Staff Geologist

Ronald W. Spivey, PE  
Principal/Senior Engineer



300 PRODUCTION COURT, LOUISVILLE, KENTUCKY 40299  
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INDIANA - BLOOMINGTON, EVANSVILLE, FORT WAYNE, INDIANAPOLIS, LAFAYETTE, TERRE HAUTE  
KENTUCKY - LOUISVILLE, OHIO - CINCINNATI, DAYTON, TENNESSEE - NASHVILLE

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### APPENDICES

Appendix A:	Site Vicinity Map (Figure No. 1) Boring Location Map (Figure No. 2) Boring Logs Boring Log Key Unified Soil Classification System (USCS)
Appendix B:	General Qualifications Standard Clause for Unanticipated Subsurface Conditions

## **REPORT OF GEOTECHNICAL ENGINEERING INVESTIGATION**

**Charlestown State Park Bank Stabilization  
12500 Indiana 62  
Charlestown, Indiana  
Patriot Project No.: 19-0186-05G**

### **1.0 INTRODUCTION**

#### **1.1 General**

The proposed project includes the placement of free draining fill protected by Articulated Concrete Block Mats (ACBM's) on the Ohio River bank at the river overlook at the Charlestown State Park boat dock in Charlestown, Indiana. The results of our geotechnical engineering investigation for the project are presented in this report.

#### **1.2 Purpose and Scope**

The purpose of this investigation was to determine the general near surface and subsurface conditions within the project area and to develop the geotechnical engineering recommendations necessary for the design and construction of the proposed ACBM structure. This was achieved by drilling soil borings, and by conducting laboratory tests on samples taken from the borings within the project area. This report contains the results of our findings, an engineering interpretation of these results with respect to the available project information, and recommendations to aid in the design and construction of the bank stabilization.

### **2.0 PROJECT INFORMATION**

The proposed project includes the placement of ACBM's on the Ohio River bank at the river overlook at the Charlestown State Park boat dock in Charlestown, Indiana. Preliminary plans indicate benching the existing riverbank in order to place a free draining crushed stone fill. The open cell ACBM's will be placed over the top of the crushed stone to allow flood water to run over the bank without causing erosion of the bank material. Free draining fill will be used to allow receding water to escape as river level drops. A previous investigation was performed in 2003 by another consultant that lapped over this project.



## 3.0 SITE AND SUBSURFACE CONDITIONS

### 3.1 Site Conditions

The project site consists of approximately 850 feet of riverbank area located at the public boat ramp in Charlestown State Park in Charlestown, Indiana. The site is bound to the north by Charlestown State Park, to the south and west by River Ridge Commerce Center, and to the east by the Ohio River. The area surrounding the Park primarily consists of wooded tracts, with few abandoned Indiana Army Ammunition Plant buildings and rail lines. The topography of the project area is relatively flat, with little grade change observed within project limits. The surrounding terrain is somewhat varied, with the exception of the nearby Ohio River Flood Protection System levee. The site drains east into the Ohio River.

### 3.2 Site Geology

A review of the United States Geological Survey published map (Charlestown) and the interactive "IndianaMap" provided by the Indiana Geological Survey (IGS) indicates that the site resides in the Charlestown Hills Physiographic Region, specifically in the Southern Hills and Lowlands Region of the Ohio River Basin. Specifically, the underlying bedrock consists of the Maquoketa Group. The Maquoketa Group is of Ordovician age and described as bluish-gray limestone with minor dolomite, shale, and sandstone. Based upon information provided by the IGS IndianaMap, the project site is in an area of low karst potential. No sinkholes are documented by the State of Indiana within the project area. The soils in this area are formed primarily of alluvial material deposited by the seasonal flooding of the Ohio River. Bedrock was not encountered during this investigation.

### 3.3 Subsurface Conditions

Our interpretation of the subsurface conditions is based upon five (5) soil borings drilled at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix A. **Because of river flood conditions the borings were moved approximately 25 feet west of their planned location to avoid flood water.** The following discussion is general; for more specific information, please refer to the boring logs presented in Appendix A. It should be noted that the dashed stratification lines shown on the soil boring logs indicate approximate transitions between soil types. In-situ

stratification changes could occur gradually or at different depths. All depths discussed below refer to depths below the existing ground surface.

### **Existing Ground Surface**

At the boring locations the project area is covered by asphaltic pavement, measuring four (4) inches thick in borings B-1 and B-5, and three (3) inches thick in borings B-2, B-3, and B-4. This asphalt is underlain by a crushed stone base course measuring approximately 10 inches thick in borings B-1, B-2, B-3, and B-4; and approximately nine (9) inches in boring B-5.

### **Stratum One – Silty Clay (CL)**

Silty clay (CL) described as various shades of brown or gray; slightly moist to saturated; and soft to very stiff were encountered between the existing ground cover and 23.5 feet in borings B-1, B-2, B-3, B-4, and B-5. Grainsize distribution is presented in Appendix A.

Standard Penetration Test N-values (blow count) in these materials ranged from three (3) to 23 blows per foot (bpf). Pocket Penetrometer values for these materials were ranged from less than 0.25 to 4.5 tons per square foot (tsf). Natural water contents for these materials ranged from 19 to 29 percent.

### **Stratum Two – Silt (ML)**

Silt (ML) described as dark gray, saturated, and soft were encountered between 23.5 feet and 28.5 feet in borings B-1, B-2, B-3, B-4, and B-5.

Standard Penetration Test N-values (blow count) in this material ranged from four (4) to five (5) bpf. Pocket Penetrometer values for this material ranged from less than 0.25 to 0.25 tsf. Natural water contents for this material ranged from 28 to 37 percent. Grainsize distribution is presented in Appendix A.

### **Stratum Three – Gravel (GP)**

Poorly-graded gravel described as yellowish brown, saturated, and loose to medium dense were encountered between 28.5 feet and boring termination depth of 30.0 feet in borings B-1, B-2, B-3, B-4, and B-5. Grainsize distribution is presented in Appendix A.

Standard Penetration Test N-values (blow count) in this material ranged from seven (7) to 21 bpf. Natural water contents for this material ranged from 12 to 14 percent.

### **General Conditions**

It should be noted that none of the borings encountered auger refusal; all borings met planned termination depth of 30.0 feet (approximately 10 feet below the proposed toe of the bank stabilization slope).

### **3.4 Groundwater Conditions**

Groundwater was encountered during and upon completion of drilling in all of the test borings. The table below summarizes this information.

**Table 1: Groundwater Depths**

<b>Test Location</b>	<b>During Boring, feet</b>	<b>After Boring, feet</b>
B-1	20.0	15.0
B-2	18.0	13.0
B-3	18.0	15.0
B-4	23.5	12.0
B-5	24.0	15.0

The term groundwater pertains to any water that percolates through the soil found on site. This includes any overland flow that permeates through a given depth of soil, perched water, and water that occurs below the "water table", a zone that remains saturated and water-bearing year-round.

It should be recognized that fluctuations in the groundwater level should be expected over time due to variations in rainfall and other environmental or physical factors especially the river level. The true static groundwater level can only be determined through observations made in cased holes over a long period of time, the installation of which was beyond the scope of this investigation.

## **4.0 DESIGN RECOMMENDATIONS**

### **4.1 Basis**

Our recommendations are based on data presented in this report, which include soil borings, laboratory testing and our experience with similar projects. Subsurface variations

that may not be indicated by a dispersive exploratory boring program can exist on any site. If such variations or unexpected conditions are encountered during construction, or if the project information is incorrect or changed, we should be informed immediately since the validity of our recommendations may be affected.

It should be understood that Patriot's scope of services included characterization and preparation of design recommendations for the proposed bank stabilization. Proposed pavement areas were not subject to investigation and were therefore not considered in this report.

#### 4.2 Articulated Concrete Block Mats

The use of ACBM's have been selected for use by the owner. The near surface medium stiff to very stiff low plasticity clay (CL) encountered during our investigation is generally suitable for support of the proposed drainage fill and ACBM's if properly prepared.

The shallow soils encountered during construction especially nearing the water's edge, depending on the weather and river level, may be wet and/or soft. If soft areas are encountered during construction, the areas should be undercut and replaced with approved compacted structural fill as outlined in Section 5.0 of this report. If construction is performed during a wet, cold, or a high river level period, the contractor will need to exercise care during the grading and fill placement activities in order to achieve the necessary subgrade soil support for the ACBM system. (See Section 5.0, *Construction Considerations*). The natural base soil for the structural fill and ACBM system will need to be firm and dry.

Based upon the furnished preliminary documents from the Client, the riverbank area will be benched and backfilled with compacted native silty clay to regrade the natural slope s not exceeding a maximum slope ratio of 2:1. Patriot understands the lack of available area, but **highly recommends** a finished slope no less than 2.5:1; ideally 3:1. Benching and compacting should develop a compacted layer approximately three (3) feet in thickness. The regraded slope should be covered with an anchored nonwoven Geotextile such as Mirafi 140 (or equivalent) followed by a well anchored Tensar Geogrid such as a Biaxial Type 1. After placement of approximately eight (8) to twelve (12) inches of free draining Size #2 crushed stone, the stone should be covered with a top layer of Geotextile same as the bottom layer. Enveloping the stone with the Geotextile inhibit natural soil and

river silt from filling the open portion of the rock. The geogrid layer will help grip the rock on the slope if adequately anchored. The enveloped stone should then be blanketed and anchored with the ACBM in accordance with the manufacturer specifications as defined in the "ArmorFlex 50'S" specification sheet.

Our recommendations are based on the assumption that the ACBM will be placed in areas that will be constructed on sufficiently compacted natural soils, or on structural fill overlying the same.

## 5.0 CONSTRUCTION CONSIDERATIONS

### 5.1 Site Preparation

All areas that will support ACBM or newly placed structural fill must be properly prepared. All loose surficial soil or other unsuitable materials must be removed. Unsuitable materials include existing pavements and stone base, highly plastic expansive clay, frozen soil, relatively soft material, relatively wet soils, deleterious material, or soils that exhibit a high organic content.

The current exploration was not able to determine topsoil thickness. Based on older borings we expect topsoil thickness to range from five (5) to seven (7) inches in the general work area. The topsoil thickness measured at the former boring locations may or may not be representative of the overall average topsoil thickness at the site. Therefore, it is possible that the actual stripping depth could significantly vary from this data. The data presented should be viewed only as a guide to the minimum stripping depth that will be required to remove organic material at the surface. Additional field exploration by *Patriot* would be required to provide an accurate estimate of the stripping depth.

***Prior to the placement of new structural fill, the exposed sloped subgrade must be benched in a manner to allow compacting equipment to work on near flat surfaces. Work surfaces should be evaluated by a Patriot representative; which will include observing the reaction of the soil under the load of the grading equipment.*** Any area found to rut, pump, or deflect excessively should be compacted in-place or, if necessary, undercut and replaced with structural fill, compacted as specified below.

Care must be exercised during grading and fill placement operations. ***The combination of heavy construction equipment traffic and excess surface moisture can cause pumping and deterioration of the near surface soils. The severity of this potential problem depends to a great extent on the weather conditions prevailing during construction.*** The contractor must exercise discretion when selecting equipment sizes and also make a concerted effort to control construction traffic and surface water while the subgrade soils are exposed. We recommend that heavy construction equipment (i.e., dump trucks, scrapers, etc.) be rerouted away from the building area. If such problems do arise, the operations in the affected area should be halted and the *Patriot* representative contacted to evaluate the condition.

## 5.2 Structural Fill and Fill Placement Control

Structural fill, defined as any fill which will support ACBM, should be clean and free of organic material, debris, deleterious materials and soil. Samples of the proposed fill materials should be tested prior to initiating the earthwork and backfilling operations to determine the classification, the natural and optimum moisture contents and maximum dry density and overall suitability as a structural fill. ***Structural fill should have a liquid limit less than 40, plasticity index less than 20, a maximum dry density of no less than 95 pounds per cubic foot (pcf), and an organic content of no greater than four (4) percent.***

In regards to the suitability of on-site soils for use as structural fill, the on-site silty clays (CL) are generally considered suitable, although will likely need to be dried to achieve optimum.

All structural fill beneath ACBM should be compacted to at least 95 percent (%) of its maximum Standard Proctor dry density (ASTM D-698). Fill placement control and field density (compaction) testing should be conducted by a *Patriot* representative during construction. Fill placement inspection should involve full-time observation of newly placed materials during fill and/or backfill operations to control lift thickness, material quality and compaction effort. Field density testing should be performed in accordance with ASTM D-2922, nuclear gauge method, or ASTM D-1556, sand-cone method. The frequency of testing should produce a minimum of one (1) density test result per 2,500 square feet, per material-lift (with a minimum of 2 tests per lift), and as necessary to adequately represent the area and compaction effort.

To achieve the recommended compaction of the structural fill, we suggest that the fill be placed and compacted in layers not exceeding eight inches in loose thickness. A Patriot soils engineer or his representative should monitor all fill placements. "Flooding" or "Jetting" of excavations with water to achieve compaction is considered unacceptable.

### 5.3 Groundwater Considerations

Groundwater was encountered during and upon completion in all of the test borings. Groundwater readings can be observed in Table One in Section 3.4 *Groundwater Conditions*. Groundwater levels are expected to fluctuate relative the fluctuations of the river level.

Perched groundwater inflow into shallow benching terraces may be encountered and should be adequately controlled by conventional methods such as gravity drainage and/or pumping from sumps. More significant inflow could be expected as benching approaches the river level.

## 6.0 INVESTIGATIONAL PROCEDURES

### 6.1 Field Work

A total of five (5) soil borings were drilled for this project on February 19 and 20, 2019, at the approximate locations shown on the Boring Location Map in Appendix A. **Because of river flood conditions the borings were moved approximately 25 feet west of their planned location to avoid flood water.** All of the borings were drilled in the parking lot area to termination depth. The borings were located in the field and were staked by a *Patriot* representative by measuring from fixed features. Latitude and longitude coordinates were obtained with a hand-held GPS unit with a relative accuracy of +/- 20 feet and may be observed on the individual boring logs.

The borings were advanced using 3 ¼ inch hollow-stem augers. Samples were recovered in the undisturbed material below the bottom of the auger using the standard drive sample technique in accordance with ASTM D 1586. A two (2) inch outside diameter by 1<sup>3</sup>/<sub>8</sub> inch inside diameter split-spoon sampler was driven a total of 18 inches with the number of blows of a 140-pound hammer falling 30 inches recorded for each 6 inches of penetration. The sum of blows for the final 12 inches of penetration is the Standard Penetration Test result commonly referred to as the N-value (or blow-count). Split-spoon samples were recovered at 2.5 feet intervals, beginning at a depth of one (1) foot below the existing

surface grade, extending to a depth of 10 feet, and at five (5) feet intervals thereafter to the termination of the boring. Water levels were monitored at each borehole location during drilling and upon completion. The boreholes were backfilled with auger cuttings and the asphalt patched.

Upon completion of the boring program, all of the samples retrieved during drilling were returned to *Patriot's* soil testing laboratory where they were visually examined and classified. A laboratory-generated log of each boring was prepared based upon the driller's field log, laboratory test results, and our visual examination. Test boring logs and a description of the classification system are included in Appendix A in this report. Indicated on each log are: the primary strata encountered, the depth of each stratum change, the depth of each sample, the Standard Penetration Test results, groundwater conditions, and selected laboratory test data. The laboratory logs were prepared for each boring giving the appropriate sample data and the textural description and classification.

## 6.2 Laboratory Testing

Representative samples recovered in the borings were selected for testing in the laboratory to evaluate their physical properties and engineering characteristics. Laboratory analyses included:

- Natural moisture content determinations (ASTM D 2216)
- an estimate of the unconfined compressive strength ( $q_u$ ) of the cohesive soil samples utilizing a calibrated hand penetrometer ( $q_p$ ).
- Grainsize distribution

The results of all laboratory tests are shown on the boring logs.



**APPENDIX A**

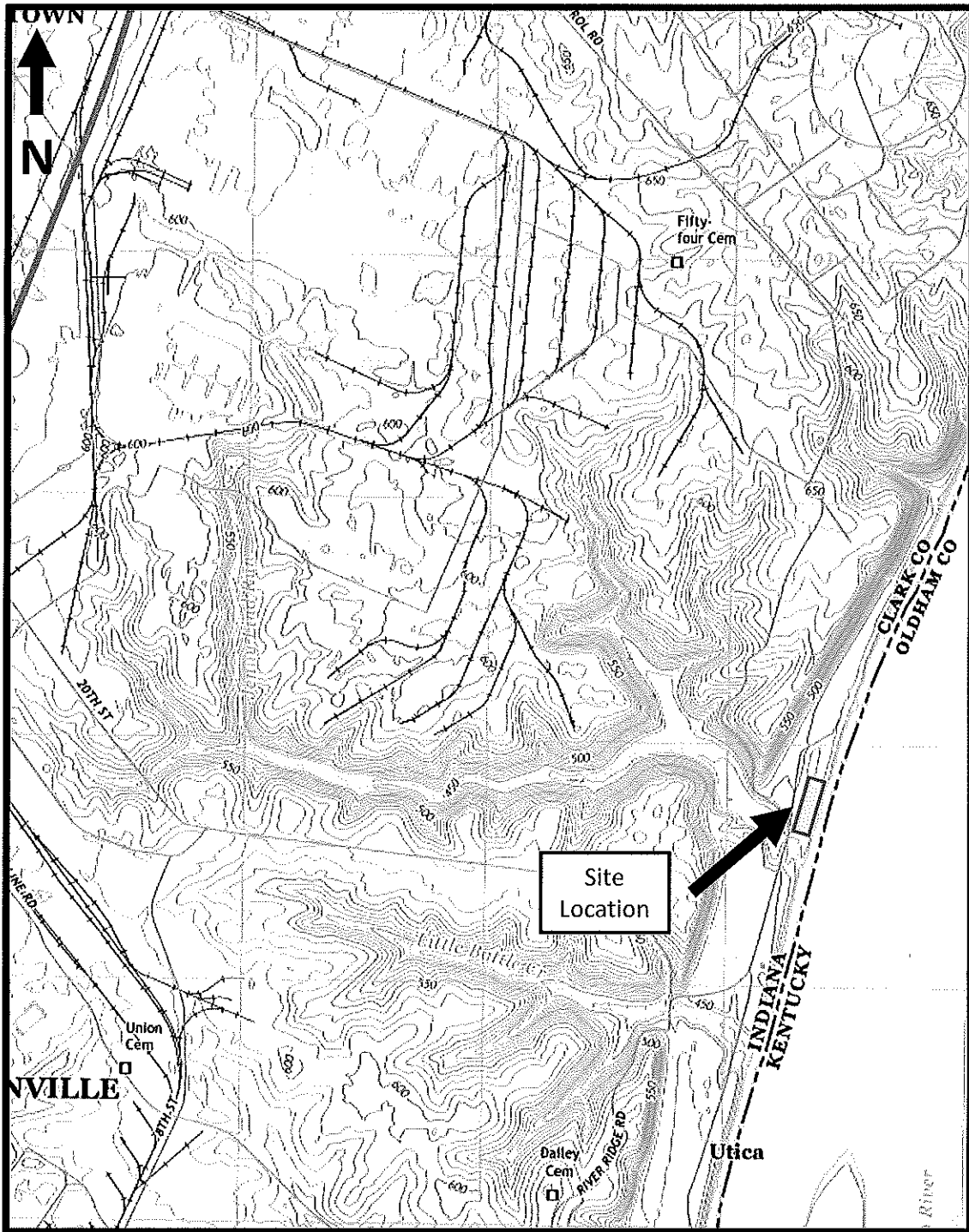
**Site Vicinity Map**

**Boring Location Plan**

**Boring Logs**

**Boring Log Key**

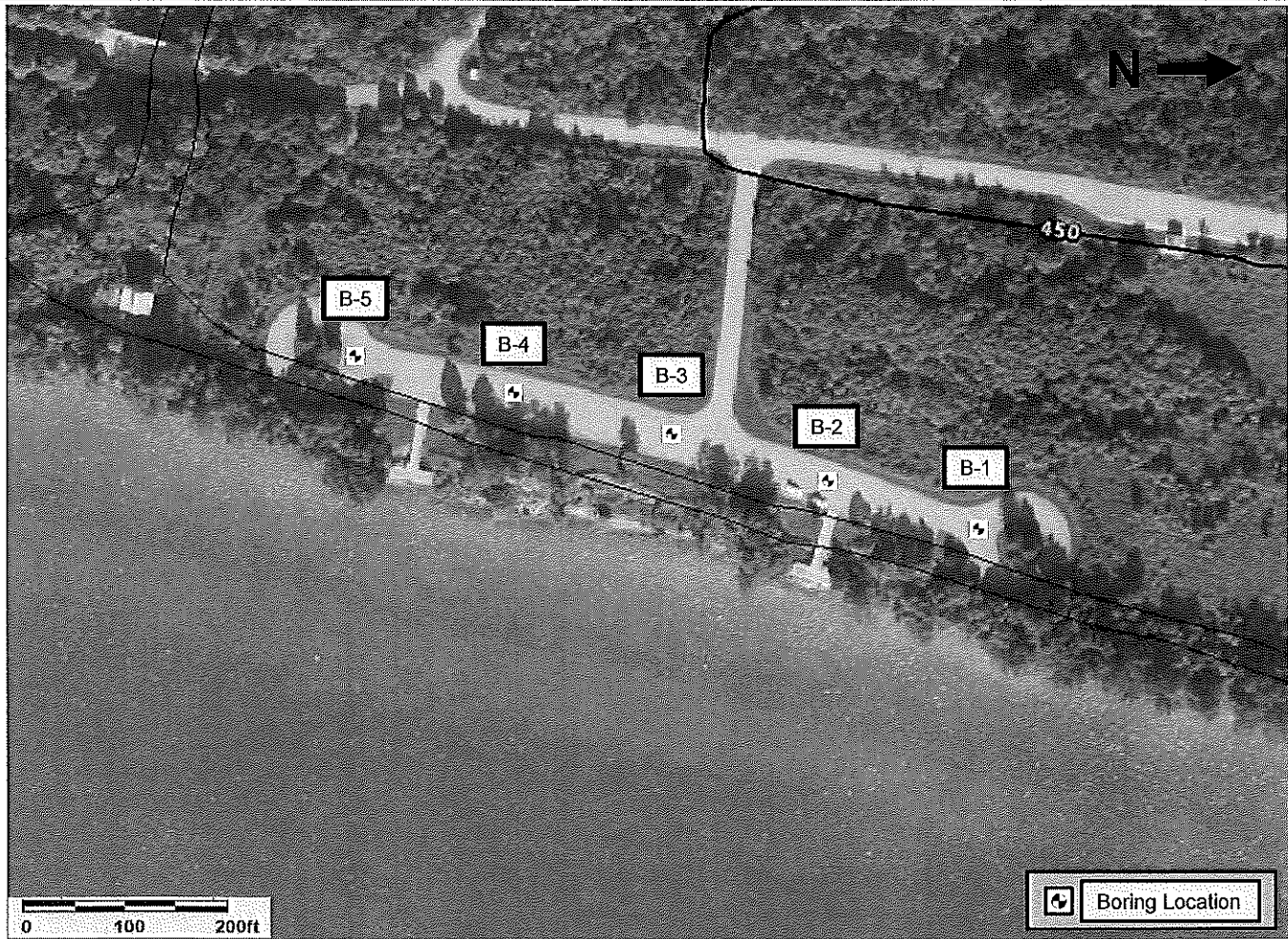
**Unified Soils Classification (USCS)**



**PATRIOT ENGINEERING**  
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 Louisville, Kentucky 40299  
 (502) 581-5852 FAX: (502) 581-9258

Project: Charlestown State Park  
 Boat Ramp Improvements  
 12500 Indiana 62  
 Charlestown, Indiana  
 Project Number: 19-0186-05G  
 Date: February 22, 2019

Figure One  
 Site Vicinity Map  
 Andrew T. Jones, GIT  
 2019



**PATRIOT ENGINEERING**  
and Environmental, Inc.  
Louisville, Kentucky 40299

**Soil Boring Location Map**  
Charlestown State Park Boat Ramp improvements  
12500 Indiana 62  
Charlestown, Indiana

Project No.: 19-0186-05G

Figure: 2



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Louisville, KY Dayton, Cincinnati, OH Nashville, TN

**LOG OF BORING B-1**

(Page 1 of 1)

Charlestown State Park  
Boat Ramp Improvements  
Charlestown, Indiana

Client Name : HWC Engineering  
Project Number : 19-0186-05G  
Logged By : A. Jones  
Start Date : 2/20/19  
Drilling Method : HSA

Driller : R. Mathes  
Sampling : Splitspoon  
Drill Rig : Mobile B-53  
Elevation : -

Depth in Feet	Water Level	USCS	GRAPHIC	DESCRIPTION	Sample	Rec %	SPT Results	qp tsf	w in.	REMARKS
				ASPHALT (4") CRUSHED STONE (10") SILTY CLAY, brown (7.5YR 4/2), medium stiff to stiff, moist, with trace crushed stone.	1	94	6-6-17	0.75	26	Drilling Coordinates: 38.39807° N 85.63279° W  No recovery from 13.5 to 15.0 feet. Groundwater was observed at 15.0 feet upon completion of drilling.  Groundwater was encountered at 20.0 feet during drilling.
		CL			2	6	4-5-6	-	-	
				SILTY CLAY, dark yellowish brown (10YR 4/4), medium stiff to stiff, moist.	3	-	5-6-6	0.5	24	
					4	100	3-3-4	0.75	24	
		CL			5	0	3-2-3	-	-	
	▽				6	67	3-3-3	<0.25	26	
	▽	CL		SILTY CLAY, dark yellowish brown (10YR 4/6), soft, saturated.	7	94	3-2-2	<0.25	28	
				SILT, dark gray (5Y 4/1), soft, saturated.	8	94	9-10-11	-	12	
		ML								
				GRAVEL, Poorly Graded, yellowish brown (10YR 5/6), medium dense, saturated.						
		GP								
Boring terminated at 30.0 feet.										



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Louisville, KY Dayton, Cincinnati, OH Nashville, TN

**LOG OF BORING B-2**

(Page 1 of 1)

Charlestown State Park  
Boat Ramp Improvements  
Charlestown, Indiana

Client Name : HWC Engineering  
Project Number : 19-0186-05G  
Logged By : A. Jones  
Start Date : 2/20/19  
Drilling Method : HSA

Driller : R. Mathes  
Sampling : Splitspoon  
Drill Rig : Mobile B-53  
Elevation : -

Depth in Feet	Water Level	USCS	GRAPHIC	Water Levels		Sample	Rec %	SPT Results	qp tsf	w in.	REMARKS
				▼ During Drilling	▽ After Completion						
DESCRIPTION											
0				ASPHALT (3")							Drilling Coordinates: 38.39765° N 85.63295° W  Groundwater was observed at 13.0 feet upon completion of drilling.  Groundwater was encountered at 18.0 feet during drilling.
				CRUSHED STONE (10")		1	100	5-6-7	3.5	20	
				SILTY CLAY, dark yellowish brown (10YR 4/4), stiff to very stiff, slightly moist.		2	94	4-5-5	2.5	21	
5		CL				3	100	3-4-4	1.5	22	
						4	94	3-3-4	1.5	25	
10						5	100	2-2-3	0.5	28	
	▽	CL		SILTY CLAY, dark yellowish brown (10YR 4/6), medium stiff, moist.		6	100	2-1-2	0.25	28	
15						7	94	2-2-2	<0.25	35	
						8	94	7-9-10	-	13	
20		CL		SILTY CLAY, yellowish brown (10YR 5/4), soft, saturated.							
25		ML		SILT, dark gray (5Y 4/1), soft, saturated.							
30		GP		GRAVEL, Poorly Graded, yellowish brown (10YR 5/6), medium dense, saturated.							
Boring terminated at 30.0 feet.											



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Louisville, KY Dayton, Cincinnati, OH Nashville, TN

**LOG OF BORING B-3**

(Page 1 of 1)

Charlestown State Park  
Boat Ramp Improvements  
Charlestown, Indiana

Client Name : HWC Engineering  
Project Number : 19-0186-05G  
Logged By : A. Jones  
Start Date : 2/20/19  
Drilling Method : HSA

Driller : R. Mathes  
Sampler : Splitspoon  
Drill Rig : Mobile B-53  
Elevation : -

Depth in Feet	Water Level	USCS	GRAPHIC	Water Levels		Sample	Rec %	SPT Results	qp tsf	w in.	REMARKS
				▼ During Drilling	▽ After Completion						
				DESCRIPTION							
0				ASPHALT (3")							Drilling Coordinates: 38.39722° N 85.63311° W  Groundwater was observed at 15.0 feet upon completion of drilling.  Groundwater was encountered at 18.0 feet during drilling.
				CRUSHED STONE (10")							
		CL		SILTY CLAY, brown (10YR 4/3), stiff to very stiff, slightly moist.		1	100	4-4-7	4.5	21	
		CL		SILTY CLAY, dark yellowish brown (10YR 4/4), stiff to very stiff, slightly moist.		2	94	3-4-5	2.5	21	
5		CL		SILTY CLAY, brown (10YR 4/3), stiff to soft, slightly moist.		3	100	3-4-4	1.75	21	
						4	100	4-4-5	1.5	23	
		CL				5	94	2-2-3	0.75	26	
15	▽					6	94	2-3-3	0.25	28	
	▼					7	100	2-2-3	<0.25	37	
25		ML		SILT, dark gray (5Y 4/1), soft, saturated.							
		GP		GRAVEL, Poorly Graded, yellowish brown (10YR 5/6), medium dense, saturated.		8	94	6-9-10	-	12	
30				Boring terminated at 30.0 feet.							



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Fort Wayne, Lafayette, Bloomington  
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

**LOG OF BORING B-4**

(Page 1 of 1)

Charlestown State Park  
Boat Ramp Improvements  
Charlestown, Indiana

Client Name : HWC Engineering  
Project Number : 19-0186-05G  
Logged By : A. Jones  
Start Date : 2/19/19  
Drilling Method : HSA

Driller : R. Mathes  
Sampling : Splitspoon  
Drill Rig : Mobile B-53  
Elevation : -

Depth in Feet	Water Level	USCS	GRAPHIC	Water Levels			Sample	Rec %	SPT Results	qp tsf	w in.	REMARKS
				▼ During Drilling	▽ After Completion	◆ After 24 Hours						
				DESCRIPTION								
0				ASPHALT (3")								Drilling Coordinates: 38.39678° N 85.63327° W  Groundwater was observed at 12.0 feet upon completion of drilling.  Groundwater was encountered at 23.5 feet during drilling.
				CRUSHED STONE (10")			1	94	3-4-6	2.5	22	
		CL		SILTY CLAY, dark gray (2.5Y 4/1), stiff, slightly moist.								
		CL		SILTY CLAY, brown (7.5YR 4/4), stiff to very stiff, slightly moist.			2	100	4-4-5	4.0	20	
5		CL		SILTY CLAY, dark yellowish brown (10YR 4/4), stiff to medium stiff, slightly moist.			3	100	3-4-5	2.5	21	
							4	100	4-5-6	1.25	22	
	▽											
		CL					5	100	3-3-4	0.5	28	
15												
							6	100	3-3-4	0.5	28	
20												
	▼											
				SILT, dark gray (5Y 4/1), soft, saturated.			7	100	2-2-2	0.25	30	
25		ML										
		GP		GRAVEL, Poorly Graded, yellowish brown (10YR 5/8), loose, saturated.			8	94	3-4-5	-	14	
30				Boring terminated at 30.0 feet.								



**PATRIOT ENGINEERING**  
and Environmental Inc.

Indianapolis, Terre Haute, Evansville,  
Fort Wayne, Lafayette, Bloomington  
Louisville, KY Dayton, Cincinnati, OH Nashville, TN

**LOG OF BORING B-5**

(Page 1 of 1)

Charlestown State Park  
Boat Ramp Improvements  
Charlestown, Indiana

Client Name : HWC Engineering  
Project Number : 19-0186-05G  
Logged By : A. Jones  
Start Date : 2/19/19  
Drilling Method : HSA

Driller : R. Mathes  
Sampling : Splitspoon  
Drill Rig : Mobile B-53  
Elevation : -

Depth in Feet	Water Level	USCS	GRAPHIC	Water Levels		Sample	Rec %	SPT Results	qp tsf	w in.	REMARKS
				▼ During Drilling	▽ After Completion						
				DESCRIPTION							
0				ASPHALT (4")							Drilling Coordinates: 38.39636° N 85.63340° W  Groundwater was observed at 15.0 feet upon completion of drilling.  Groundwater was encountered at 23.5 feet during drilling.
				CRUSHED STONE (10")							
		CL		SILTY CLAY, dark grayish brown (10YR 4/2) to brown (10YR 4/3), stiff to very stiff, slightly moist.		1	100	3-4-5	3.0	22	
5		CL				2	100	4-4-5	3.0	19	
		CL		SILTY CLAY, dark yellowish brown (10YR 4/4), stiff to medium stiff, slightly moist.		3	100	3-4-6	2.5	21	
		CL				4	100	4-4-6	2.0	23	
15	▽	CL				5	100	2-2-4	0.5	25	
		CL		SILTY CLAY, brown (7.5YR 4/4), soft, moist.		6	100	1-2-2	<0.25	29	
		ML		SILT, dark gray (5Y 4/1), soft, saturated.		7	100	2-2-2	0.25	35	
	▼	GP		GRAVEL, Poorly Graded, yellowish brown (10YR 5/8), loose, saturated.		8	89	6-3-4	-	12	
30				Boring terminated at 30.0 feet.							





## BORING LOG KEY

### UNIFIED SOIL CLASSIFICATION SYSTEM FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

#### NON COHESIVE SOILS (Silt, Sand, Gravel and Combinations)

Density		Grain Size Terminology		
		<u>Soil Fraction</u>	<u>Particle Size</u>	<u>US Standard Sieve Size</u>
Very Loose	-4 blows/ft. or less	Boulders	Larger than 12"	Larger than 12"
Loose	-5 to 10 blows/ft.	Cobbles	3" to 12"	3" to 12"
Medium Dense	-11 to 30 blows/ft.	Gravel: Coarse	¾" to 3"	¾" to 3"
Dense	-31 to 50 blows/ft.	Small	4.76mm to ¾"	#4 to ¾"
Very Dense	-51 blows/ft. or more	Sand: Coarse	2.00mm to 4.76mm	#10 to #4
		Medium	0.42mm to 2.00mm	#40 to #10
		Fine	0.074mm to 0.42mm	#200 to #40
		Silt	0.005mm to 0.074 mm	Smaller than #200
		Clay	Smaller than 0.005mm	Smaller than #200

#### RELATIVE PROPORTIONS FOR SOILS

<u>Descriptive Term</u>	<u>Percent</u>
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

#### COHESIVE SOILS

(Clay, Silt and Combinations)

<u>Consistency</u>	<u>Unconfined Compressive Strength (tons/sq. ft.)</u>	<u>Field Identification (Approx.) SPT Blows/ft.</u>
Very Soft	Less than 0.25	0 - 2
Soft	0.25 - < 0.5	3 - 4
Medium Stiff	0.5 - < 1.0	5 - 8
Stiff	1.0 - < 2.0	9 - 15
Very Stiff	2.0 - < 4.0	16 - 30
Hard	Over 4.0	> 30

**Classification** on logs are made by visual inspection.

**Standard Penetration Test** - Driving a 2.0" O.D., 1<sup>3/8</sup>" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary for Patriot to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8 + 9 = 17 blows/ft.).

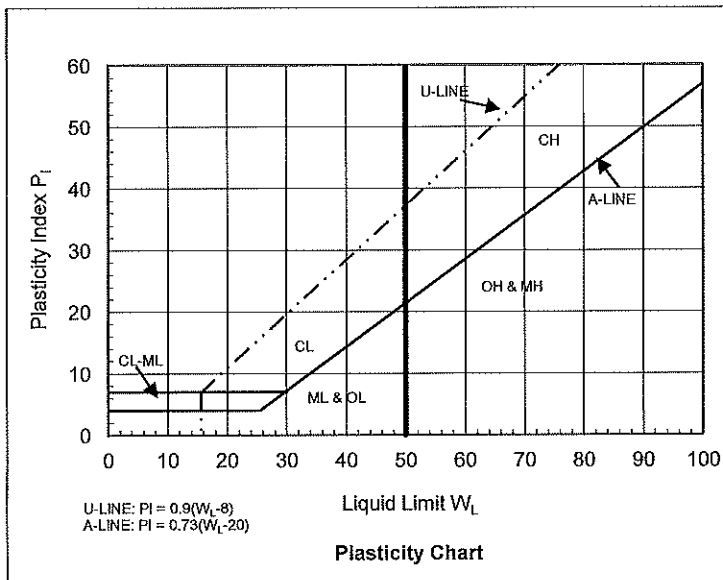
**Strata Changes** - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (——) represents an actually observed change, a dashed line (- - - -) represents an estimated change.

**Groundwater** observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

**Groundwater symbols:** ▼-observed groundwater elevation, encountered during drilling; ▽-observed groundwater elevation upon completion of boring.

# Unified Soil Classification

Major Divisions		Group Symbol	Typical Names	Classification Criteria for Coarse-Grained Soils					
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u \geq 4$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{D_{30}^2}{D_{10} D_{60}}$		
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW ( $C_u < 4$ or $1 > C_c > 3$ )				
		Gravels with fines (appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $P_l < 4$	Above A line with $4 < P_l < 7$ are borderline cases requiring use of dual symbols			
			GC					Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above A line or $P_l > 7$
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines	$C_u \geq 6$ $1 \leq C_c \leq 3$			$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ( $C_u < 6$ or $1 > C_c > 3$ )				
		Sands with fines (appreciable amount of fines)	SM	Silty sands, sand-silt mixtures	Atterberg limits below A line or $P_l < 4$	Limits plotting in hatched zone with $4 \leq P_l \leq 7$ are borderline cases requiring use of dual symbols			
			SC					Clayey sands, sand-clay mixtures	Atterberg limits above A line with $P_l > 7$
Fine-grained soils (more than half of material is smaller than No. 200)	Silt and clays (liquid limit $< 50$ )	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	<ol style="list-style-type: none"> <li>Determine percentages of sand and gravel from grain size curve.</li> <li>Depending on percentages of fines (fraction smaller than 200 sieve size), coarse-grained soils are classified as follows:                      Less than 5% - GW, GP, SW, SP                      More than 12% - GM, GC, SM, SC                      5-12% - Borderline cases requiring dual symbols</li> </ol>					
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays						
		OL	Organic silts and organic silty clays of low plasticity						
	Silt and clays (liquid limit $> 50$ )	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts						
		CH	Inorganic clays or high plasticity, fat clays						
		OH	Organic clays of medium to high plasticity, organic silts						
	Highly organic soils	PT	Peat and other highly organic soils						



**APPENDIX B**

**General Qualifications**

**and**

**Standard Clause for Unanticipated Subsurface Conditions**

**GENERAL QUALIFICATIONS**  
**of Patriot Engineering's Geotechnical Engineering Investigation**

This report has been prepared at the request of our client for his use on this project. Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report or on the test borings logs regarding vegetation types, odors or staining of soils, or other unusual conditions observed are strictly for the information of our client and the owner.

This report may not contain sufficient information for purposes of other parties or other uses. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the field and laboratory data presented in this report. Should there be any significant differences in structural arrangement, loading or location of the structure, our analysis should be reviewed.

The recommendations provided herein were developed from the information obtained in the test borings, which depict subsurface conditions only at specific locations. The analysis, conclusions, and recommendations contained in our report are based on site conditions as they existed at the time of our exploration. Subsurface conditions at other locations may differ from those occurring at the specific drill sites. The nature and extent of variations between borings may not become evident until the time of construction. If, after performing on-site observations during construction and noting the characteristics of any variation, substantially different subsurface conditions from those encountered during our explorations are observed or appear to be present beneath excavations we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary.

If there is a substantial lapse of time between the submission of our report and the start of work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse.

We urge that Patriot be retained to review those portions of the plans and specifications that pertain to earthwork and foundations to determine whether they are consistent with our recommendations. In addition, we are available to observe construction, particularly the compaction of structural backfill and preparation of the foundations, and such other field observations as may be necessary.

In order to fairly consider changed or unexpected conditions that might arise during construction, we recommend the following verbiage (Standard Clause for Unanticipated Subsurface Conditions) be included in the project contract.

## **STANDARD CLAUSE FOR UNANTICIPATED SUBSURFACE CONDITIONS**

"The owner has had a subsurface exploration performed by a soils consultant, the results of which are contained in the consultant's report. The consultant's report presents his conclusions on the subsurface conditions based on his interpretation of the data obtained in the exploration. The contractor acknowledges that he has reviewed the consultant's report and any addenda thereto, and that his bid for earthwork operations is based on the subsurface conditions as described in that report. It is recognized that a subsurface exploration may not disclose all conditions as they actually exist and further, conditions may change, particularly groundwater conditions, between the time of a subsurface exploration and the time of earthwork operations. In recognition of these facts, this clause is entered in the contract to provide a means of equitable additional compensation for the contractor if adverse unanticipated conditions are encountered and to provide a means of rebate to the owner if the conditions are more favorable than anticipated.

At any time during construction operations that the contractor encounters conditions that are different than those anticipated by the soils consultant's report, he shall immediately (within 24 hours) bring this fact to the owner's attention. If the owner's representative on the construction site observes subsurface conditions which are different than those anticipated by the consultant's report, he shall immediately (within 24 hours) bring this fact to the contractor's attention. Once a fact of unanticipated conditions has been brought to the attention of either the owner or the contractor, and the consultant has concurred, immediate negotiations will be undertaken between the owner and the contractor to arrive at a change in contract price for additional work or reduction in work because of the unanticipated conditions. The contract agrees that the following unit prices would apply for additional or reduced work under the contract. For changed conditions for which unit prices are not provided, the additional work shall be paid for on a time and materials basis."

Another example of a changed conditions clause can be found in paper No. 4035 by Robert F. Borg, published in ASCE Construction Division Journal, No. CO2, September 1964, page 37.

